

Infrastructure and Public Facilities

4.1 Introduction

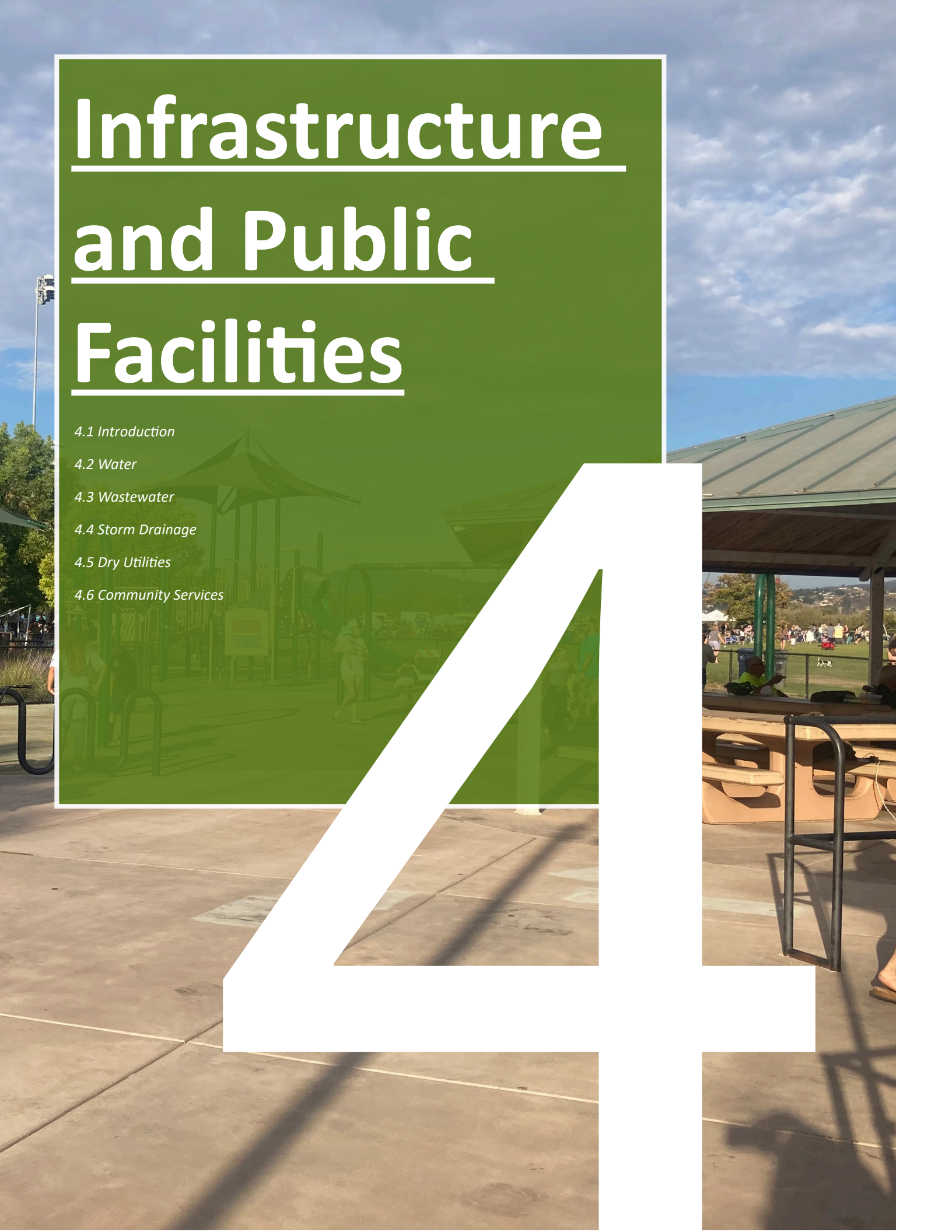
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4.1 Introduction

Infrastructure and public facilities are essential to the success of the Town Center Specific Plan. This chapter describes existing and proposed infrastructure such as water, wastewater, storm drainage, and dry utilities; and the public services and associated facilities that support the Specific Plan area (refer to [Figure 4-1](#) for the location of facilities that service the area).

4.2 Water

Water Supply

The Padre Dam Municipal Water District (PDMWD) provides potable water and non-potable water (recycled water) services to the City of Santee. PDMWD imports all of its drinking water supply from the San Diego County Water Authority (SDCWA) via three connections along Mission Gorge Road near Mission Trails Park (connection No. 4), at Lake Jennings Treatment Plant (connection No. 6), and connection No.7 (secondary connection). The PDMWD is also a public agency and implements a five-year budget and five-year strategic business plan to evaluate infrastructure improvements.

The Specific Plan area is serviced by both potable and non-potable water. Potable water is drinking water that comes from surface water and groundwater sources and is treated to levels that meet state and federal standards for consumption. Non-potable water (recycled water) that is not of drinking quality but is treated for other purposes, such as landscape irrigation.

Potable Water

The Specific Plan area contains a low-water level elevation of 605.5 feet above mean sea level and a high-water level elevation of 629 feet above mean sea level. PDMWD has pump stations agency-wide, but the potable water system is entirely a gravity-based system that services the Specific Plan area. The water system is generally a closed loop system.

The city relies upon the PDMWD 2020 Urban Water Management Plan (prepared by Carollo Engineers), a Water Shortage Contingency Plan (prepared by the PDMWD), and the 2015 Addendum to the 2015 Urban Water Management Plan (prepared by Carollo Engineers). These plans and policy documents are used by PDWMD for meeting long range water supply needs for the County of San Diego.

Pipelines are constructed of both polyvinyl chloride (PVC) and asphalt concrete pipe (ACP) and range in diameter from 6 to 10 inches to 18 inches with 10-inch and 12-inch diameter mains being a predominant pipe size. A series of 10-to-12-inch diameter main pipelines are found through commercial sites, and along Mission Gorge Road is a 36-inch diameter, steel transmission pipeline (El Capitan Pipeline) and a 20-inch diameter concrete cylindrical pipe (CCP).

Fire water is served through the hydrants located throughout the project area. Fire flow calculations and determinations are not determined by PMWD. Fire flow information is determined for each project based on demand and need for the developments, as described in the most current version of the PMWD Master Plan. Hydrants are located on each major

street in the study area, however additional fire hydrants will be required as redevelopment and new development occurs within the Specific Plan area to meet fire hydrants spacing and Fire Department requirements for fire protection/fire flow.

The adopted five-year budget identifies city-wide projects funded by the PDMWD. Annual, typical water main maintenance, valve replacement projects, and general water maintenance projects are done annually as needed for the system.

Non-Potable Water

Non-potable, or recycled water, is predominant in the Specific Plan area. Recycled water pipelines are predominantly located outside the San Diego River area and lie beneath major streets; however, there are pipelines that cross local streets and on private property serving irrigation needs. Pipelines are generally constructed of PVC and range in diameter from 6 inches to 12 inches.

The adopted five-year budget does not identify proposed recycled water improvements in the Specific Plan area other than typical energy efficiency-based projects.

4.3 Wastewater

The Padre Dam Municipal Water District (PDMWD) provides wastewater collection, disposal, and operation/maintenance services to the City of Santee which is a part of their western service area. According to the PDMWD website, the District typically averages a wastewater collection of 40% to be sent to their Water Recycling Facility where it is treated and becomes part of the local recycled water supply. The remaining 60% travels from Padre Dam wastewater system into the City of San Diego Metropolitan Wastewater System where it is treated at the Point Loma facility. Currently under construction is the East County Advanced Water Purification project which will expand the wastewater treatment plant north of Santee Lakes that will accept flows from Padre Dam and could treat up to nearly 15.5 MGD of wastewater.

As with most agencies, the PDMWD maintains a Sewer System Management Plan (SSMP), as updated in 2019. The SSMP contains general sewer system information and the methods of handling general maintenance, sewer spills, and general emergency response. As such, a solid and complete maintenance program is integral to the success of the longevity and performance of the wastewater system. The maintenance program should be implemented and monitored along with capital improvement projects for upgrades in collaboration with PDMWD.

A 27-inch diameter County of San Diego Interceptor transmission sewer pipeline (per the County of San Diego 2011 Master Plan) bisects and traverses roughly in an east-west direction within the southern one-half of the Specific Plan Area. The County of San Diego discourages proposed sewer connections to this type of pipeline for planned, new developments and existing development (i.e., transmission pipelines are not appropriate for usage over distribution pipelines). Sewer connections to this pipeline for planned, new developments and existing developments within Santee are discouraged, as the interceptor distribution line is intended to serve different areas of the County.

Wastewater Conveyance and Capacity

Wastewater conveyance and capacity are paramount to the success of the development and build-out of the Town Center Specific Plan Update. For this update and complemented and validated by conversations with the Padre Municipal Water District (PMWD) engineering staff, pipeline conveyance in the planned areas pose more of the existing challenge than a deficiency in capacity. The San Diego River that bifurcates the specific plan area also poses a unique challenge for conveyance facilities to connect with downstream sewer pipelines which could lead to a few localized pump/lift stations where planned development abuts the river including site layout/configuration coupled with other existing topographical (elevations) features and grading schematics. Based on the recommendations of the Town Center Specific Plan, a pipeline diameter of 10 inches would likely be required for build-out in select areas where sewer conveyance facilities are minimal

and/or not available. The pipe sizing will also depend on final site configurations, grading, and the actual demand of the development. This pipe sizing could increase as required by the development.

Based on the recommendations of the Town Center Specific Plan, a pipeline diameter of 10 inches would be required for build-out in select areas where sewer conveyance facilities are minimal to missing. The pipe sizing will also depend on final site configurations, grading, and the actual demand of the development. This pipe sizing could increase as required by the development.

Planned Wastewater Improvements

The Mission Gorge Sewer upgrade project proposed to be built as part of a capital improvement project by the PMWD on Mission Gorge Road between Riverview Parkway and 4th Street as discussed in this section is planned to be built by 2027. This project will upgrade the existing 8-inch and 10-inch diameter pipeline to a 15-inch diameter pipeline which will be of value to the planned build-out of the retail, office, institutional, entertainment, and residential developments within the southeast quadrant of the specific plan area.

- ▶ The Town Center plan calls out for this 10-inch diameter pipeline to be built within Town Center Parkway and Riverview Parkway to serve the build out within the central portion of the specific plan area south of the river, and the 10-inch diameter pipeline is planned within Riverwalk Drive and Park Center Drive up to Mast Boulevard within the northern portion of the planned build out north of the river. There is a 15-inch diameter sewer line that splits the areas with potential for new residential development within the Mast Boulevard Residential Neighborhood north of the San Diego River, however, site grading and site layout will determine whether that sewer line is available for use from both a conveyance and capacity standpoint.
- ▶ As part of the PMWD Master Plan (2022) evaluation, various lift stations located throughout their western service area

sewer collection system were evaluated for upgrades to their existing mechanical and/or electrical equipment. These lift stations have older and outdated equipment that requires replacement to current standards. These lift stations include Mission Creek, Woodside Avenue, High Rise Way, and Sky Ranch Lift stations. Of these four lift stations, the Mission Creek Lift Station is within the limits of the Town Center Specific Plan area near Cuyamaca Street and the San Diego River.

Development Considerations

Some of the smaller development projects at the extreme southwest corner and northeast corners of the planned project areas will require pipelines along their project frontages. For example, new development within the Mast Boulevard Residential Neighborhood, east of Park Center Dr, north of the Edgemoor Skilled Nursing Facility will require at least a 10-inch diameter sewer within Park Center Drive to serve the project. Similarly, the new development within the Town Center Commercial neighborhood, west Town Center Parkway, south of the Walmart center, would need sewer facilities in the private drive to serve this project. Lastly, consideration for site grades in coordination with the site design should be evaluated closely to allow for proper typical gravity-based flow for sewer pipelines to avoid or minimize the presence of lift stations which can get costly and be a long-term maintenance consideration. Although the County has plans to improve the 27-inch diameter interceptor transmission sewer pipeline (described earlier in the “Wastewater and Capacity” section of this document, The County of San Diego discourages proposed sewer connections to this type of pipeline for planned, new developments and existing development (i.e., transmission pipelines are not appropriate for usage over distribution pipelines). The County does have plans to upgrade segments of this pipeline to a 36-diameter pipeline, however, the County performs these improvements as part of their overall wastewater conveyance upgrades County-wide” outside the Specific Plan area.

4.4 Storm Drainage

Stormwater is transported by overland flow from the various residential, commercial, institutional, open space/park properties and roadways and collected by catch basins and inlets to be ultimately directed below ground within underground storm drainage pipelines.

The Specific Plan area provides a network of underground pipelines below minor and major roadways such as Cuyamaca Street, Town Center Parkway, Mission Gorge Road, Riverview Parkway, Magnolia Avenue, Cottonwood Avenue, Mast Boulevard and underneath local residential roadways such as Leavesly Trail, Verde Vista Lane, Little Leaf Lane, and Star Magnolia Lane. Some commercial properties contain on-site, underground storm drainage pipelines that connect to other systems downstream.

Some of these pipelines are privately owned and maintained and range between 18 to 24 inches in diameter for low flows and 30 to 48 inches in diameter for larger flow capabilities. Ultimate discharge is the San Diego River which bisects the Specific Plan area.

The current adopted Five-Year Capital Improvement Program (CIP) identifies a major storm drainage pipeline project including replacing a corrugated metal storm drain pipeline with a larger diameter reinforced concrete pipe beneath Mission Gorge Road between Cuyamaca Street and Cottonwood Avenue.

4.4.1 Flood Hazards/Flood Zones

The majority of the Specific Plan zoned properties are located in Zone X per FEMA's flood zone designations, where Flood Zone X is defined as an area of minimal flood hazards and not affected by a 500-year storm event. However, the central portion of the Specific Plan area, generally following the San Diego River, is within the Special Flood Hazard Area Zone AE, which is designated as a Regulatory Floodway.

North of San Diego River

The southern one-half of the Park Open Space Area, localized western portion of the Residential TC-R-14

and all of the Residential TC-R-7 areas located north of the San Diego River, are located within Flood Zone AE.

South of San Diego River

Between Cuyamaca Street and Magnolia Avenue, the northern portions of the Commercial, Residential, and Institutional zoned properties abutting the river are within Zone AE and all of the Park/Open Space/Floodway zoned property north of Riverview Parkway is located within Zone AE as well, while the balance of these properties lie within Zone X. To the west of Cuyamaca Street, the majority of the Commercial, Office/Commercial, and Dual-Zoned Residential TC-R-22 or Office/Commercial is located in Zone X but within an area of a 1% annual chance of a flood with a average depth of less than one foot or with drainage areas of less than one-square mile.

4.5 Dry Utilities

The Specific Plan area contains dry utilities including telephone, TV, internet, electric, and natural gas that service the community.

4.5.1 Telecommunications

Crown Castle provides telecommunications services in the Specific Plan area. This carrier is expected to meet current and future demands of land uses.

4.5.2 Cable Service

AT&T and Cox Communications provide cable in the Specific Plan area. These carriers are expected to meet current and future demands of land uses.

4.5.3 Energy (Electricity and Natural Gas)

San Diego Gas & Electric (SDG&E) provides electricity and natural gas services in the Specific Plan area. Existing transmission and distribution are adequate to meet and the current and future demands of the proposed land uses including new extensions meant to service the build out of the Town Center. The Public Utilities Commission of the State of California outlines the regulations for SDG&E.

Santee Municipal Code Chapter 9.08 “Overhead and Underground Utilities” and Chapter 11.24 “Construction and Improvement Standards” set forth the provisions for the establishment of Underground Utility Districts and undergrounding of existing utilities. Provisions in Section 11.24.100 also allow the City Council to defer the undergrounding requirement, however, the applicant must enter into an agreement with the City to accept the establishment of an undergrounding utility district UUD at some future date. UUD No. 7 is located along Cuyamaca Street between Mission Creek Drive and Bingham Street and UUD No. 8 is located along Mast Boulevard. Both UUDs are just outside the northwest quadrant of the Specific Plan area. Additional districts may be established should the City Council deem it necessary as the project area builds out.

4.6 Community Services

4.6.1 Library

The County of San Diego operates the Santee Library, which services the Town Center Specific Plan area along with the rest of the City of Santee. The Santee Library is located at 9225 Carlton Hills Boulevard, Suite 17, in Santee. The Santee Library is located within Carlton Oaks Plaza, located at the intersection between Carlton Hills Boulevard and Carlton Oaks Drive. The library is found near the northwest corner of Mast Park, less than half a mile from the Specific Plan area.

The Santee Library offers services for all ages, such as providing a cool zone program for seniors, persons with disabilities, and those with health concerns that could be complicated by the effects of heat. The library offers story time for toddlers and preschoolers, and after-school programs for grades 1 through 5. Services, such as Wi-Fi and a 3D printer, are also available to residents to support their education and access to information.

The County of San Diego Library is supported by a non-profit group called the Friends of the Library. The Friends of the Library help support and provide positive advocacy for all local branches of the overall County-wide library organization named Library Friends of San Diego County, or LFSDC, by providing

financial support, accepting donations, purchasing equipment and sponsoring various library programs.

4.6.2 Schools

The Santee School District provides preschool, elementary and middle school education services throughout nine schools that serve approximately 6,400 students in Santee. The Specific Plan area is served by the Santee School District at two schools in proximity to its boundaries, Rio Seco Elementary School and Hill Creek Elementary School.

- ▶ Rio Seco Elementary School
9545 Cuyamaca Street, Santee, CA 92071
- ▶ Hill Creek Elementary School
9665 Jeremy Street, Santee, CA 92071

Grossmont Union High School District provides high school education services across 10 high schools located in El Cajon, Lakeside, Spring Valley, and Santee. Two high schools found in Santee serve the Specific Plan area: Santana High School and West Hills High School.

- ▶ Santana High School
9915 Magnolia Ave, Santee, CA 92071
- ▶ West Hills High School
8756 Mast Blvd, Santee, CA 92071

4.6.3 Police

The San Diego County Sheriff’s Department provides law enforcement services to the City of Santee. The Santee Sheriff’s Station provides a full range of law enforcement services, which include patrol, traffic, investigations, parking enforcement, emergency services, crime prevention programs, crime analysis, and narcotics enforcement. The Santee Sheriff’s Station is located at 8811 Cuyamaca Street, Santee, CA 92071, within 800 feet south of the southern boundary of the Specific Plan area, Mission Gorge Road. Additionally, the Community Safety Center at Trolley Square provides on-site law enforcement services within the Town Center Specific Plan area, at the Santee Town Center trolley station.

4.6.4 Fire/Emergency Services

The City of Santee is serviced by its own municipal Fire Department, which was established after the city incorporated in 1980. The Fire Department consists of two fire stations and a Fire Administration Building organized into three divisions consisting of administrative, emergency services, and fire prevention. Fire Station No. 4 is located at 8950 Cottonwood Avenue within the Town Center Specific Plan Area. Redevelopment and size expansion of Fire Station No.4 is anticipated as part of this Specific Plan. Heartland Fire and Rescue Station No. 5 is located at 9130 Carlton Oaks Drive, located approximately two miles to the west from Fire Station No. 4. Additional Fire Department organizational services are located within Santee City Hall located at 10601 Magnolia Avenue.

The City of Santee Emergency Operations Plan identifies City Hall and two fire stations as part of initiating city-wide emergency services. Also, in partnership and collaboration with the entire San Diego region, the San Diego Regional Association of Governments administer a Cities Emergency Operations Center (EOC) and Emergency Management Centers (EMC) in the region.

4.6.5 Parks and Recreation

The Town Center Community Park is located within the northern area of the Town Center Specific Plan, north of the San Diego River, and south of Mast Boulevard. The Town Center Community Park includes the YMCA and Santee Aquatics Center, Sportsplex USA, Town Center Community Park East (550 Park Center Drive) and West (9409 Cuyamaca Street) and Riture Community Center currently under design.

Nearby:

- ▶ Mast Park
- ▶ Walker Preserve Trail

The Community Services Department contains the Parks and Recreation Division and Public Services Division that operates and maintains parks and recreational facilities’ structures and infrastructure, social and recreational programs, classes, special events, and activities such as summer concerts and community clean up days.

4.6.6 Solid Waste

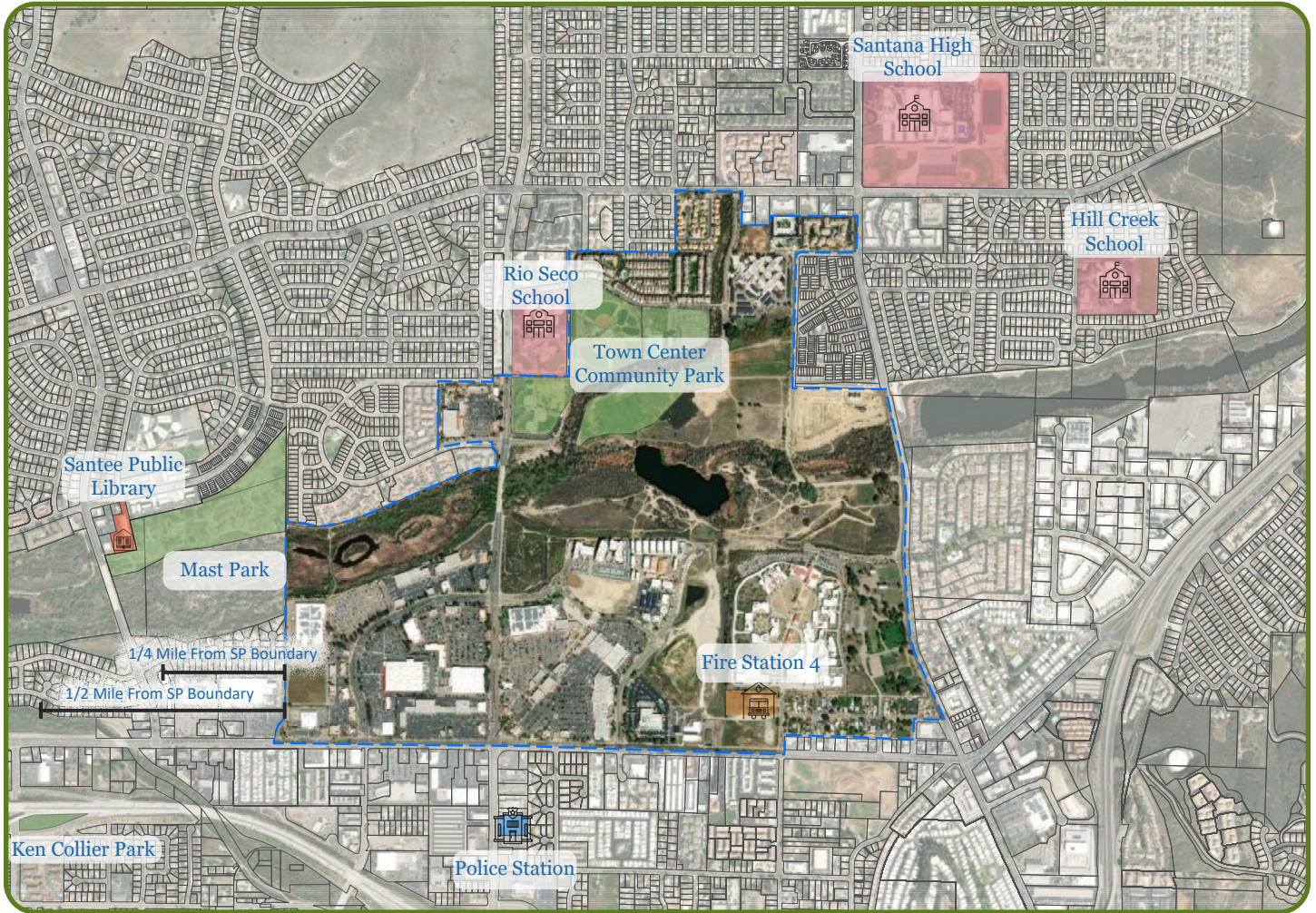
Solid waste services within the Specific Plan area are provided by Waste Management, Inc., (a private hauler) which is under an exclusive franchise agreement with the City of Santee. Waste Management, Inc. provides commercial and residential trash hauling, as well as industrial solid waste and recycling collection and disposal services.

The City of Santee Municipal Code Chapter 9 requires that Santee residents, businesses and multi-family apartment complexes separate all recyclable materials from other solid waste. The State of California regulations require all California businesses to participate in Mandatory Commercial Organics Recycling (AB 1826) and Mandatory Commercial Recycling (AB 341). In addition, as of January 1, 2022, California’s Short-Lived Climate Pollutant Reduction Strategy (SB 1383) requires local collection agencies to further reduce organic waste methane emissions which result from organic waste deposited at landfills. This organic waste includes food waste, green waste, and paper products that decompose and release methane gas into the atmosphere.

Organic waste is required to be deposited in green containers and recyclable materials are deposited in blue containers. Although Sycamore Landfill’s capacity is adequate to handle wastewater project build out, these further reductions in waste diversions will effectively reduce the waste that gets deposited into the landfill as a secondary outcome from the law and ordinance.

The Specific Plan area will not require any physical changes or new/altered facilities to ensure adequate service to the Specific Plan area, as detailed further in the environmental documentation. However, the City through development projects or within public lots may consider the inclusion of trash compacters.

Figure 4-1: Public Facilities Map



 Public School

 Fire Station

 Library

 Police Station

 Park