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INFRASTRUCTURE & PUBLIC FACILITIES

This chapter describes the infrastructure systems that will support the private development and public improvements described in the previous chapters. The chapter identifies how infrastructure facilities such as sewer, water, telecommunications, and electricity will be provided. Important public services such as police, fire, and education are also included in this chapter.

This chapter is organized into the following sections:

- 8.1 Utility Infrastructure
- 8.2 Recreation and Parks
- 8.3 Public Safety
- 8.4 Educational, Library, and Cultural Facilities

The Specific Plan establishes the following goals for infrastructure and public facilities:

- **Goal 1:** Provide mechanisms to adequately construct, maintain and upgrade as appropriate, public infrastructure and facilities.
- **Goal 2:** Provide funding for public services and utilities in the plan area.
- **Goal 3:** Ensure adequate water supply and sewer capacity is provided, maintained and upgraded as needed, to be available to serve existing and new development in the plan area.
- **Goal 4:** Ensure adequate electrical, gas and communication infrastructure is provided, maintained and upgraded as needed, to be able to serve existing and new development in the plan area.
- **Goal 5:** Manage, maintain, and improve stormwater drainage and capacity in the plan area.
- **Goal 6:** Provide fire and police services that ensure the safety of the plan area community.
- **Goal 7:** Provide quality recreation and parks, cultural, and educational facilities and activities within the plan area.

8.1 UTILITY INFRASTRUCTURE

8.1.A WATER SYSTEM

The West Basin Municipal Water District (WBMWD) serves as the water service wholesaler, and the City of Manhattan Beach serves as the water service provider in the project area. The water system infrastructure in the project area includes a grid of distribution mains that range in size from 4 to 12 inches in diameter.

According to the City of Manhattan Beach Water Master Plan (WMP), adopted in 2010, the system supply is adequate to meet the project area's average and maximum day demands. Due to the existing buildout of the project area, any incremental increases in water demand is expected to be offset by more stringent conservations efforts. Therefore, no significant increase in demand is expected.

The WMP identifies one capital improvement project in the project area: the installation of a fire hydrant at the corner of 12th Street and Manhattan Avenue. The WMP also indicates that much of the city's distribution system, including many of the pipes located in the project area, has exceeded its useful life. Approximately 67 percent of the citywide system was constructed before 1960, and 72 percent of the system was constructed from unlined cast iron pipes. The unlined cast iron pipes are expected to be heavily tuberculated, reducing the available flow area and pressures. The WMP indicates that an aggressive annual replacement program is needed to address the aging infrastructure. Any development project in the project area should be accompanied by the necessary pipeline replacement. In addition, any project that increases the production, storage, pressure, and/or capacity in upstream infrastructure should be considered beneficial to the project area.

8.1.B WASTEWATER SYSTEM

The City serves as the wastewater provider in the project area. As such, the City is responsible for operation and maintenance of the collection system. Wastewater from individual services flows into the City's collection system. Regional trunk sewers then collect the wastewater generated in the City and transport it to Los Angeles County Sanitation District's Joint Water Pollution Control Plant for treatment in the City of Carson.

In 2010, the City of Manhattan Beach completed a Wastewater Master Plan (WWMP) to evaluate the existing sewer system and identify capital improvement projects required to meet existing and future wastewater capacity needs. The WWMP identifies system deficiencies in the project area that are "severe" or "major." Because the district is developed, the improvements required to address the deficiencies will be more difficult and expensive to address than if the area was undeveloped. The WWMP does not anticipate that the system's capacity requirements will need to increase substantially to support any additional development within the district.

The WWMP identifies 18 capital improvement projects to address the system's deficiencies in the project area. The projects will address four major sewer collection system deficiencies, one manhole deficiency, one pump station/forcemain deficiency, and a number of sewer reach deficiencies. In total, the projects will cost \$1,838,040 in 2010 dollars.

8.1.C STORMWATER SYSTEM

The City provides storm drainage collection in the project area and is responsible for operation and maintenance of the collection system. The system includes open channels, closed conduits, catch basins, laterals, manholes, and other associated facilities, and was mostly constructed after 1960. The system's distribution network comprises cast iron, reinforced and nonreinforced concrete, asbestos cement, corrugated metal, PVC, steel, and vitrified clay pipes, ranging in diameter from 2 to 72 inches. Other agencies, such as the Cities of Hermosa Beach and Redondo Beach and the Los Angeles County Flood Control District, along with some privately owned facilities, maintain facilities in the project area.

In 1996, the City completed a Storm Drain Master Plan (SDMP) to analyze the hydrology of the city’s major drainage areas and hydraulic capacity of the city’s storm drain system, and provide the necessary capacity improvement projects to replace capacity-deficient pipes and reduce the risk of flooding in sumps. The SDMP determined that the Los Angeles County facilities, located downstream from the City of Manhattan Beach facilities, were significantly undersized. The SDMP concluded that the City should not replace the system’s capacity-deficient pipes until the Los Angeles County facilities are replaced.

In 2013, the City completed a Storm Drain Assessment (SDA) to determine the structural and operational condition of the system, and recommended repair and replacement projects, along with cost estimates, over a 10-year planning horizon to improve the function of the system’s highest-risk storm drains. Aside from the undersized Los Angeles County facilities, the SDA identified the system’s most applicable risk factors as deteriorating pipes, breaks or separated joints, capacity deficiency, root damage, the presence of trash and organic debris, poorly constructed or deteriorating lateral connections, and inflow and infiltration. To evaluate the severity of these defects, a closed circuit television inspection program was initiated. The program assigned the following rankings to defective facilities in the project area.

- Grade 5, Very Poor, Defects: 15
- Grade 4, Poor, Defects: 11
- Grade 3, Fair, Defects: 4

Based upon the severity and number of deficiencies per pipe segment, the SDA identified five projects within the downtown specific plan boundary. Table 8.1, Stormwater System Projects, lists the projects, along with their project number, location, the program year of implementation, the associated pipe ID number, a brief description, and a cost estimate. The cost estimates are based on 2013 dollars.

Table 8.1 Stormwater System Projects

Project Number	Location	Year	Pipe ID Number	Description	Cost Estimate
Y2-3	Morningside Drive	2015	1058	Repair 6 feet of 18-inch pipe	\$6,500
Y3-2	Manhattan Beach Boulevard	2016	78	Repair 6 feet of 18-inch pipe in 2 locations; replace planter, sidewalk, and ramp	\$23,000
Y5-5	Manhattan Beach Boulevard	2018	66	Replace 84 feet of 15-inch CMP beginning 5 feet from MHO6-03 including new collar	\$18,144
Y6-12	11th Street	2019	807	Replace entire pipe, including outlet (per SPPWC 150 & 151)	\$39,504
Y7-7	Manhattan Beach Boulevard	2020	1155	Repair joint and construct collar	\$12,500

8.1.D CABLE, PHONE, GAS, & ELECTRIC

AT&T and Time Warner provide telecommunication, cable television, and Internet services. Utility infrastructure in the project area is located both aboveground on utility poles and belowground in public utility easements.

Southern California Edison provides electric services in the project area. Electrical infrastructure in the project area is located aboveground on utility poles as well as belowground.

Southern California Gas Company provides natural gas services in the project area. Natural gas pipelines are located belowground.

These providers have indicated that infrastructure improvements may be required to adequately accommodate development projects in the project area. These improvements would be determined on a project-specific basis and required to be constructed by the applicant or utility provider. As such, no cost should be borne by the City.

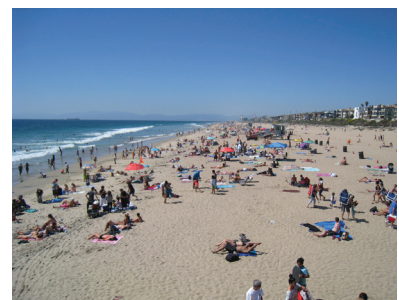
In conjunction with development, it may be desirable to underground some of the existing overhead facilities to improve the aesthetics and reliability of the utilities. Where feasible, undergrounding of utilities should be coordinated with any improvements to the right-of-way to save time and resources.

8.2 RECREATION & PARKS

The project area is served by one designated open space, Veterans Parkway. The parkway extends along the eastern edge of the project area between Valley Drive and Ardmore Avenue. The space includes a row of diagonal parking spaces along Valley Drive between 15th Street and Manhattan Beach Boulevard, extensive landscaping and a pedestrian jogging and walking trail.

The project area also includes several informal open spaces. Two plazas are located in the Metlox development. The larger plaza is sited within the center of the development, anchoring the surrounding retail and restaurant uses. The space provides café seating and periodically hosts community gatherings. The other plaza, located at the development's northwestern corner along 13th Street and Morningside Drive, hosts the weekly Downtown Manhattan Beach Farmers Market. The remaining spaces are located within the Civic Center, which includes two plazas and a turf-covered green on the County Library property.

The project area is served by two other adjacent recreation and park spaces. This includes the beach, located along the district's western edge, and Live Oak Park, an approximately 8.5-acre



Figures 8.1-8.2 Open spaces in and adjacent to the project area include Metlox Plaza (top) and the beach (bottom)

park located at the district's northeastern corner.

The Specific Plan does not propose any additional recreation and park spaces in the project area.



Figure 8.3 The Police & Fire Facility

8.3 PUBLIC SAFETY

Public safety consists of police, fire protection, and emergency services. In the project area, these services are primarily fulfilled by the Manhattan Beach Police Department and the Manhattan Beach Fire Department. The departments share their primary facility, the Manhattan Beach Police & Fire Facility, in the project area along the eastern side of the Civic Center at 400 and 420 15th Street. As of 2016, the police department employed 65 sworn personnel and 40 civilian staff members, and the fire department included 30 career firefighters and 24 volunteer personnel.

Because the project area is built-out and future growth is likely to be limited, the Specific Plan does not anticipate that additional facilities and/or public safety employees will be required to serve the district.

8.4 EDUCATIONAL, LIBRARY, & CULTURAL FACILITIES

Schools and libraries are important components of civic life. Ensuring quality educational facilities for existing and future residents of the plan area is important to the realization of the Manhattan Beach Downtown Specific Plan.

8.4.A SCHOOLS

The project area is located in the Manhattan Beach Unified School District. No schools are located in the project area; however, it is served by Grand View and Robinson Elementary Schools, Manhattan Beach Middle School, and Mira Costa High School.

Because the project area is built-out and future residential development is likely to be limited, the Specific Plan does not anticipate that the school district will need to expand its facilities to serve the project area. The actual need for expansion of the existing schools to meet the demands of future growth in the plan area will depend on enrollment at each school. If enrollment remains stable or declines, it is expected that the school district will be able to absorb the impact of new development in the area. Schools charge a school impact assessment fee for residential development, which is applied to school facilities for new students.

8.4.B LIBRARY

The City's branch of the Los Angeles County Public Library is located in the project area along the southwestern corner of the Civic Center at 1320 Highland Avenue. The new library opened in 2015 and is a state-of-the-art facility that should serve the project area well for the life of the Specific Plan.



8.4.C CULTURAL FACILITIES

The project area does not include any cultural facilities, and the Specific Plan does not anticipate any such facilities being constructed in the district. Several facilities within close proximity do serve the district. This includes the Roundhouse Aquarium, located on the Pier, several buildings located in Live Oak Park: the Annex, Joslyn Community Center, Live Oak Park Recreation Center, and the Scout House, and two buildings located adjacent to the park: the Downtown post office and the Chamber of Commerce.



Figures 8.4-8.6 Recently opened library (top and middle) and Roundhouse Aquarium at the pier (bottom)

