

This section explains the conceptual land use plan for the Related Bristol Specific Plan area and defines the land use designations unique to the Specific Plan. The circulation, drainage, water and sewer, grading, and public services plans are also described.

3.1 Context

The Specific Plan area contains approximately 41 gross acres and is comprised of 21 proposed development areas, each a different "Block". The Specific Plan area includes the existing shopping center which presently contains approximately 465,063 square feet of retail¹ and restaurant uses surrounded by surface parking.

The Specific Plan envisions the creation of a new mixed-use District Center that complements the existing intense urban uses of the South Coast Metro area and provides opportunities to live, work, play, and connect with the community. The new diverse mixture of uses seeks to fulfill a revitalization concept that allows for flexibility in site planning and design to adapt to ever-changing market trends.

The connection of these uses in new and exciting ways will create an experiential destination that is not focused exclusively on shopping but rather on creating an economic and social urban hub for Santa Ana that complements the existing nearby cultural uses.

3.2 Land Use Plan

The purpose of the Related Bristol Specific Plan is to direct the development of the property through a land use plan, development regulations and design guidelines. The Specific Plan provides development regulations and design guidelines for the developer(s) and the City of Santa Ana (City) by identifying development criteria for the Specific Plan and providing for development plans with descriptive text and exhibits that establish the basis for the overall master development of the Specific Plan area.

General Plan Implementation. As addressed in the Introduction to this document and its Vision section, the Specific Plan area is defined by the new Santa Ana General Plan as being within a high intensity District Center 5 (DC-5) and the South Bristol Focus Area. The Specific Plan implements, the City's new General Plan for the South Bristol Focus Area though the following elements which inform the plan:

- Floor Area Ratio: The maximum in the General Plan is 5:1. The Related Bristol FAR is approximately 2.7:1, under the allowed maximum (LU 62).
- Density: The maximum in the General Plan is 125 dwelling units per acre. The Related Bristol Specific Plan density is approximately 91 units per acre (LU 62).
- Height: The maximum height for the DC-5 district is 25 stories (LU 62). The Related Bristol
 Development Regulations show a maximum height of 25 stories except adjacent to the existing
 Versailles multi-family project on the west of the Residential North district.
- "Provide vibrant outdoor space" (LU 60). The Development Plan includes over 13 acres of publicly accessible master outdoor common open spaces as shown in Figure 3-4, Conceptual Open Space.

¹ Including fitness, services, medical, financial, and general retail.

- "Mixed-Use spaces of similar scale to those south of Sunflower are envisioned between Sunflower and MacArthur" (LU 60). The Specific Plan implements this vision through the inclusion of a variety of uses, architecture, and heights.
- "Introduce mixed-use urban villages" (LU 61). The Development Plan is based on two urban village areas with a mixture of residential, commercial, and open space uses.
- "Realize an intense, multistory presence along the corridor" (LU 61). The land plan implements this multistory concept through mid- and high-rise residential, hotel, and senior housing uses.
- "New projects will complement or eclipse the existing buildings in the South Coast Plaza Town Center" (LU 63). The proposed buildings in Related Bristol are consistent with, but lower height, than the most intense uses in the Town Center.



General Plan Artist's Rendering of the area between MacArthur and Sunflower (pg. LU 45)

The Land Use Plan outlined in the Specific Plan has been crafted and informed by community input, market, fiscal/economic, and technical studies prepared by civil engineers, traffic engineers, urban designers, architects, planners, landscape architects, and other consultants. Consultation with City staff and review of Santa Ana's updated General Plan has guided the content and character of this development plan.

The Specific Plan encompasses approximately 41 gross acres and allows up 3,750 residential units, 350,000 square feet of mixed commercial uses, 250 hotel keys, a Senior Living/Continuum of Care of 200 units, and approximately 13 acres of publicly accessible backbone open space (see **Table 3-1**, Land Use Summary). The components addressed in this section are further defined for each Land Use District through the development regulations contained in **Section 4.0**, Development Regulations.

Figure 3-1, Land Use Blocks, Figure 3-2, Conceptual Land Use Plan, and Figure 3-3, Conceptual Site Plan, provide the overall vision for the Project and guide the development of the anticipated mixture of uses. Table 3-2, Land Use outlines the land uses in more detail.

TABLE 3-1 LAND USE SUMMARY

Land Use	Proposed Intensity	Existing Intensity
Residential	3,750 units	0
Private Amenity Building (in Block 4)	16,000 sf (target)	
Senior Living/Continuum of Care	225,000 sf/200 units	0
Hospitality	150,000 sf/250 keys	0
Commercial	350,000 gsf	465,063 sf
Open Space (Publicly Accessible)	13.1 acres	0

3.2.1 **Districts**

The Project's Land Use Plan is comprised of two Mixed-Use districts: a high intensity, Mixed-Use/Village Core District which is located south of Callen's Common and a lower intensity Mixed-Use/Residential District located to the north of Callen's Common. These Districts are both comprised of a mixed-use development pattern, but the intensity of development character differs.

Target residential units and non-residential square footage for both Districts is outlined in Table 3-2, Land Use below.

A. Mixed-Use Village Core District

Blocks: 11-21 (see Figure 3-1)		
Primary Land Uses		
(See Section 4, Development Regulations for full listing)		
Retail, Food Service, Grocery		
Residential		
Senior/Continuum of Care		
Hospitality		
Amenity Spaces/Plazas		

This District is bordered by Sunflower Avenue on the south, Bristol Street on the east, and Callen's Common on the north. Uses in this District exemplify a mixed-use environment, including residential, senior living, hospitality, fitness, and retail/commercial uses (see Table 3-2, Land Use). The Mixed-Use/Village Core District is comprised of the Project's first phase as shown in the Conceptual Phasing Plan, Figure 6-2.

Character. The Specific Plan envisions a neighborhood layout that connects the community (internally and externally) to walkable, pedestrian and bike-friendly private roadways through a variety of sidewalks, greenways, walkable private roadways, and squares/plazas. The circulation network emulates the best practices of a vibrant pedestrian village core while providing the density and overlapping programming that is commonly found in successful town center projects. The District's location on a primary, highly visible intersection (Bristol Street/Sunflower Avenue) is complementary with the adjacent regional commercial uses.

- Residential components of this District benefit from the lively mixed-use nature of their surroundings. They are located on or adjacent to District's publicly accessible amenities and define the beginning of a pedestrian-only green linkage that connects major public open spaces throughout the entire project. Rental or ownership units are permitted.
- The commercial components of the District will be centered around a pedestrian-focused circulation zone that promotes vibrant ground floor retail with clear wayfinding and easy access from surrounding private roadways and parking garages.

Public Realm. Private roadways in this zone are designed to be local Neighborhood Roadways and Shared Retail Roadways, with pedestrian-oriented streetscapes and shared vehicle/bike lanes to maintain slow traffic speeds. Sidewalks will incorporate street trees, planting areas and places for sitting. The public realm will be designed to enhance the shopping experience by providing a vibrant and

comfortable space for walking, sitting, eating, and socializing throughout the day and evening. Streets and other paved areas in the District should have a rich texture of paving patterns, lighting, and planting. Some streets will also serve as programmable public amenities, able to be closed off periodically for such events as farmer's markets, cultural/community events, or holiday festivals.

The core focus of the Specific Plan area will be two distinct but complementary publicly accessible open spaces, one located on each side of the primary north/south internal retail roadway. These two spaces will be a focal point for community events programming, will serve as the social heart of the Plan Area, and will synthesize the experience of its retail, entertainment, and residential users.

The intersection of Bristol Street and Sunflower Avenue is a gateway to the City and will be designed using a menu of gateway architecture, landscape elements, and public art to create a significant and clear entry to the City.

Parking. Parking for the District's mixture of uses will be provided by above- and below-ground parking structures governed by a reciprocal/shared parking agreement. Unique to this project, a large subterranean parking structure is anticipated to cover the majority of the district, providing shared parking among the mixed uses of the plan (see Figure 3-8, *Preliminary Parking Configuration*).







B. Mixed-Use/Residential North District

Blocks: 1-14 (see Figure 3-1)

Primary Land Uses

(See Section 4, Development Regulations for full listing)

Residential and ancillary uses

Commercial, including food service

Amenity Spaces/Plazas/Greenways/Bristol Central Park

The Mixed-Use/Residential North District of the Specific Plan is located north of Callen's Common (see Figure 3-2, Land Use Plan). The Mixed-Use/Residential North District is comprised of the Project's later phases as shown in the Conceptual Phasing Plan, Figure 6-2.

Character. Uses in this district are primarily, but not exclusively, residential in nature, with typical ancillary uses such as recreation areas, leasing offices, fitness centers, pools/spas, business centers, etc. The pace and character of this District is anticipated to be of lesser intensity than the Mixed-Use Village Core District to the south.

Residential uses abutting the existing residential community to the west of this District will be reduced in height, with an allowable maximum height of eight stories to reduce impacts to this neighborhood (see **Table 4-3**, *Development Standards*).

Public Realm. The Mixed-Use/Residential North District includes a significant open space (Bristol Central Park) in the north, and a pedestrian-only greenway linkage, connecting the residential areas to the mixed-use village core. Pedestrian linkages are key to the success of both of the Specific Plan's districts, with a system of local Neighborhood Roadways, Commercial Shared Roadways, and Residential Shared Roadways providing pedestrian and vehicular access.

Parking. Parking for residential uses will be provided by ongrade, above-ground below-ground parking structures governed reciprocal/shared parking agreement where applicable. Unique to this project, a large subterranean parking structure is anticipated to cover the majority of the District, providing shared parking among mixed-uses of the plan (see Figure 3-8, Preliminary Parking Configuration).



TABLE 3-2 LAND USE

Land Use	Proposed Intensity	
Blocks 1-10 (Mixed-Use/Residential North)		
Residential (units)	2,375 units	
Private Amenity Building (in Bristol Central Park)	16,000 sf (target)	
Commercial (gsf)	100,000 sf	
Bristol Central Park	2.5 acres	
Greenlink	0.25 acres	
Open Space (Programmable Roadways and Parkways)	4.3 acres	
Blocks 11-21 (Mixed-Use/Village Core)		
Residential	1,375 units	
Retail/Commercial (gsf)	250,000 sf	
Hospitality (keys) ²	250 keys/150,000 sf	
Senior/Continuum of Care (units)	200 units/225,000 sf	
Bristol Plaza and Bristol Green, Retail Village Open Space	1.5 acres	
Greenlink	0.3 acres	
Open Space (Programmable Roadways and Parkways)	4.3 acres	



² Hospitality use may include a number of elements, including restaurant, ancillary alcohol (on-site), conference facilities, event spaces, rooftop amenities, the details of which will be determined during Development Project Review (DPR).



Figure 3-1 Land Use Blocks

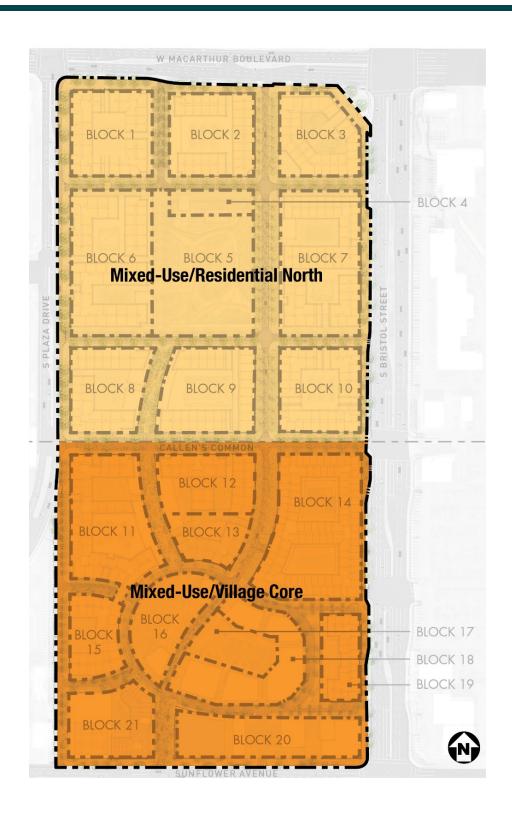


Figure 3-2 Conceptual Land Use Plan





Illustrative Ground Floor Plan

Illustrative Upper Floor Plan

Note: This is an illustrative site plan of one design solution for the buildout of the Specific Plan area. Final layout and design may change during the Development Project Review (DPR) process.

Figure 3-3 Conceptual Site Plan

3.3 Open Space

Publicly accessible backbone open space is present throughout the Specific Plan area, including landscape areas and street trees on all public streets as well as the private internal streets. See **Figure 3-4**, Conceptual *Open Space*. The primary publicly accessible backbone open space elements are described on the following pages.

There are no natural open space or resources existing within the Specific Plan area. Implementation of the Development Plan will result in a significant increase in sustainability through provision of open space and trees within the site and this portion of the City. An overall drought-adapted plant pallete is anticipated to conserve water, reduce the heat island effect, use efficient irrigation, and potentially use biofiltration mechanisms to treat rainwater (see Water Quality discussion in **Section 3.5.1** herein).

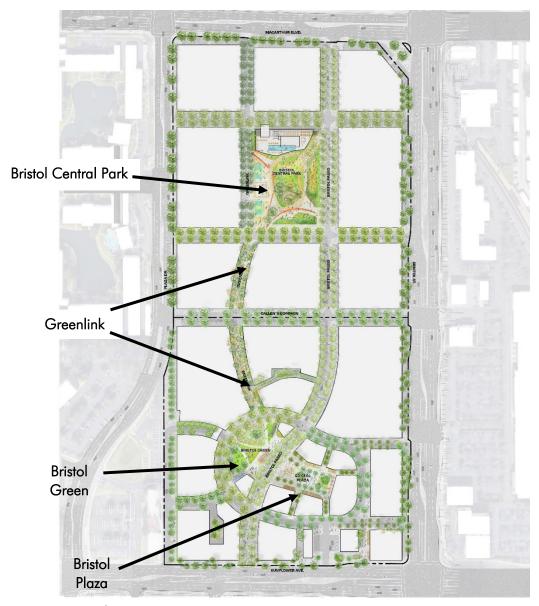


Figure 3-4 Conceptual Open Space

Primary publicly accessible featured "backbone" open space consists of approximately 13.1 acres, comprised of the following primary elements. Other elements are also present such as parkways (including sidewalks) and programmable streets. Specific definition of uses and design elements of these common open space areas will be done during the Development Project Review process (DPR) outlined in Section 6.2.3 herein.

3.3.1 Bristol Central Park

This approximately 2.5-acre publicly accessible open space is located in the Mixed-Use/Residential North District and includes open play areas, walkways, seating, and a private recreation facility for the surrounding residential uses. A private recreation center for project residents will be developed in the northern area. See Design Guidelines for details on the design elements of this park.









3.3.2 Greenlink

This approximately 0.6-acre publicly accessible Greenlink is a landscaped pedestrian paseo linking the north and south areas of the Specific Plan (see **Figure 3-4**, *Conceptual Open Space*). The Greenlink is a dedicated pedestrian path with shade and flowering trees, planning areas, places for sitting and socializing, and path connections for residences with adjoining front terrace and garden areas.









3.3.3 Bristol Green

Bristol Green is an approximately 0.66-acre publicly accessible open space area is located in the central portion of the Mixed-Use/Village Core District. Bristol Green is envisioned to include landscaping, seating areas, walkways, and minor retail or kiosk uses. See Design Guidelines for details on the design and programming of this common open space feature.

See imagery on Figure 3-5, Bristol Plaza and Bristol Green Illustrative Images.









3.3.4 Bristol Plaza/Retail Village Open Space

Bristol Plaza/Retail Village Open Space is comprised of an approximately 0.9 acre publicly accessible plaza and retail village open space and forms a central feature of the Village Core District.

This is an urban plaza, characterized by seating and retail, outdoor dining, and landscaping.

See imagery on Figure 3-5, Bristol Plaza and Bristol Green Illustrative Images.











Bristol Plaza

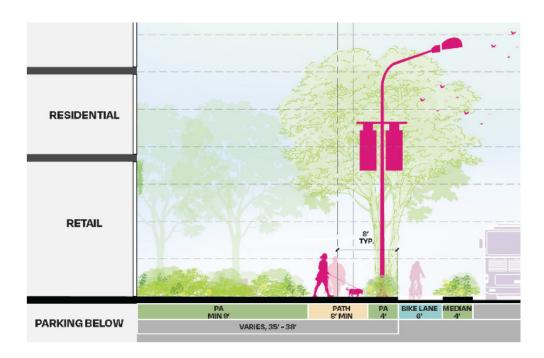


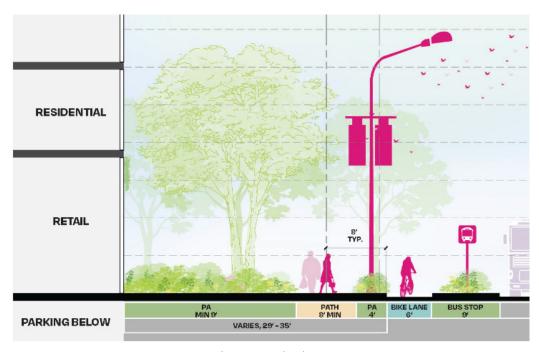
Bristol Green

Figure 3-5 Bristol Plaza and Bristol Green Illustrative Images

3.3.5 Bristol Street Expanded Parkway

Existing Bristol Street includes a widened sidewalk and minimal curb-adjacent parkways. There are two parkway improvement types based on location. The proposed expansion of this area would include a zone with a streetscape buffer and Class IV Bike Trail, and variable setback with planted areas, variable sidewalks, and street trees.





Bristol Street with Floating Bus Stop

3.4 Circulation and Mobility

Vehicular circulation is comprised of two components: peripheral public streets and internal private roadways. The Circulation Plan provides standards and guidelines that provide for the safe and efficient movement of people and vehicles into and through the Specific Plan area, addressing light trucks and passenger vehicles, heavy trucks, public transit, and non-vehicular circulation (pedestrians and bicycles). All on-site roadways are anticipated to be constructed by phase.

3.4.1 Vehicular Circulation

Regional Circulation

Interstate 405 (I-405) provides regional access to the Specific Plan area via Bristol Street. This north-south-oriented regional freeway provides regional access to Los Angeles and San Diego. State Route 55 provides additional regional access to the Specific Plan area via MacArthur Boulevard. SR 55 provides access to northern Orange County and the Inland Empire.

Local Circulation (Periphery)

The circulation components of the plan include the following (see Figure 3-7, Circulation Plan and Figures 3-9 through 3-17, Cross Sections).

A. South Bristol Street (Public)

Bristol Street forms the Specific Plan area's eastern edge. Bristol Street is a paved, six lane public roadway with raised landscaped medians. It is classified as a Major Arterial in the Santa Ana General Plan, defined as a street with six travel lanes and a center median with a 120-140-foot right-of-way, 104-124-foot paved width and 14-foot median. Presently there are pedestrian sidewalks, streetlights, bulb-outs for public transit stops, and Class II bike lanes in both directions in the vicinity of the Specific Plan area. The intersections with Sunflower, Callen's Common, and MacArthur Boulevard are signalized. Three bus stops are present along the frontage of the Specific Plan area, one of which includes a shelter.

Anticipated Improvements for Bristol Street public right-of-way include the following:

- Widened parkway, street trees, and planted setback areas
- New curb cuts for ingress/egress to/from Bristol Street
- Potential right-of-way dedication and vacation for removal of deceleration lanes, and bikeway and bus stop improvements
- Potential median modifications
- Potential driveway deviation for truck access
- Potential signalization of the driveway between Callen's Commons and Sunflower, and
- Installation of protected Class IV bike lane.

B. West MacArthur Boulevard (Public)

West MacArthur Boulevard forms the Specific Plan area's northern edge. MacArthur Boulevard is a paved, six lane roadway with both raised landscaped medians and striped medians. It is classified as a Major Arterial in the Santa Ana General Plan, defined as a street with six travel lanes and a center median with a 104-118-foot right-of-way, 88-102-foot paved width and 14-foot median.

Presently, there are pedestrian sidewalks, streetlights, and public transit stops (no pull-outs). One bus stop is present along the frontage of the Specific Plan area. The intersections at Bristol Street and South Plaza Drive are signalized.

Planned improvements for MacArthur Boulevard include the following:

- Addition of an intersection for a new north/south local neighborhood street (Bristol Paseo)
- Curb cut at the intersection of the residential shared street
- Right-of-way dedication and vacation for removal of a deceleration lane and bikeway and bus stop improvements
- Installation of protected Class IV bike lane per City mobility element
- Construction of new landscaped median between Plaza Drive and Bristol Street
- Planted setback areas and street trees

C. South Plaza Drive (Public)

South Plaza Drive is a paved, four lane roadway with raised landscaped medians designated as a Local Street in the City of Santa Ana General Plan, defined as a street with two travel lanes serving residences and businesses. Typically, these streets include pedestrian sidewalks and on-street parking. Presently there are sidewalks, streetlights, curb, and gutters along the roadway in both directions. Speed Limit is 25 mph. No on-street street parking is allowed. South Plaza Drive provides access to the Project site and nearby multi-family land uses. The intersections of Sunflower Avenue and MacArthur Boulevard are signalized, and the intersection with Callen's Common is stop controlled.

Planned improvements for South Plaza Drive on the Specific Plan frontage include the following:

- New curb cuts for ingress/egress
- Planted setback areas, new sidewalks, and street trees

D. Sunflower Avenue (Public)

Sunflower Avenue is a paved, six lane roadway that has a jurisdictional boundary near the centerline, with Santa Ana on the north, and Costa Mesa on the south. The roadway includes raised landscaped medians on the City of Costa Mesa portion of the roadway. The street is designated as a Major Arterial in the Costa Mesa General Plan, defined as a six-lane divided (raised or painted median) roadway, with a 120-foot right of way, 104-foot curb-to-curb, 4-foot median and 8-foot sidewalk.

Presently, westbound lanes include three travel lanes, one public transit stop (no dedicated pull-outs), pedestrian sidewalks, streetlights, and mature landscaping. Eastbound lanes include three travel lanes with streetlights. No sidewalk or transit facilities are located along eastbound lanes. Both directions contain a left turn pocket lane for access to South Coast Plaza or Metro Town Center. One bus stop and shelter is present along the frontage of the Specific Plan area. The intersections with Bristol Street and South Plaza Drive are signalized.

Planned improvements for Sunflower Avenue include the following:

 Potential median modification and/or signalization of the proposed Bristol Paseo driveway, subject to improvements/realignment of South Coast Plaza driveway

- Potential right-of-way dedication and vacation for removal of deceleration lanes and bikeway and bus stop improvements
- Installation of a protected Class IV bike lane with protected median per City mobility element

E. Callen's Common (Private)

Callen's Common roughly bisects the Specific Plan area designated as a Local Street in the City of Santa Ana General Plan, defined as a street with two travel lanes serving residences and businesses. Typically, these streets include pedestrian sidewalks and on-street parking. Presently, Callen's Common is a paved four-lane road with no medians. Its intersection with Bristol is signalized. There are presently no pedestrian sidewalks, streetlights, or transit stops. This roadway primarily serves as an internal access road within the Metro Town Square. No on-street parking is allowed.

Planned improvements for Callen's Common include the following:

- Expanded parkway improvements with street trees and improved sidewalk conditions
- Greenlink pedestrian crossing
- Reduction of travel lanes to a two-lane street between South Plaza Drive and the Bristol Paseo to allow for on-street parking
- Drop-off and loading areas
- Addition of a six- to eight-foot wide sidewalk on both sides of the roadway
- Potential signalization of Callen's Commons and South Plaza Drive

Local Circulation (Internal)

The planned circulation internal to the Specific Plan area is designed to be highly pedestrian oriented and utilizes several roadway typologies. All internal roadways will be constructed as private roadways. Realignment or elimination of secondary entryways and reconfiguration of portions of the internal circulation system may occur as part of individual development projects.

As noted in the Parking discussion below, the majority of the parking for the Specific Plan land uses will be above- and/or below-ground parking structures and the internal circulation pattern is focused on the efficient and comfortable movement of residents and visitors throughout the site and access to parking structures. Figure 3-6, Roadway Typologies and Figure 3-7, Circulation Plan, illustrate the internal roadway network and anticipated location of above- and below-ground parking garages.

Although the intent of the plan is to focus on minimizing drive widths, access within the Specific Plan area for trash trucks, delivery vehicles, and fire access require certain minimum widths as well as sufficient turning radii.

A. Neighborhood Roadways (Private Drives)

Neighborhood Roadways are designed to create a sense of place and prioritize safety, comfort, streetlife and walkability. Sidewalks, on-street seating areas, retail and lobby frontage, planting areas, parallel parking, street trees, frequent crossing opportunities, narrow travel lanes and accessible pedestrian paths. Neighborhood roadways within the Specific Plan area include multiple segments. See Figure 3-**6**, Roadway Typologies below for location of this circulation type.

- The first segment is Bristol Paseo traversing the Specific Plan area in a north/south direction, connecting MacArthur Boulevard on the North with Sunflower Street at the site's southern edge. Potential signalization at the intersection with Sunflower Avenue will be based on signal warrant analysis as well as realignment of access to South Coast Plaza.
- The second segment provides for vehicle access and pedestrian access on the Specific Plan areas western edge with South Plaza Drive.
- The third segment replaces the existing Callen's Common with this new street typology and serves as the primary vehicular connection between Bristol Street and South Plaza Drive.
- The segments connecting Bristol Street to Bristol Paseo are also designated as neighborhood streets.

These roadways will have a minimum paved width of 20 feet which includes two travel lanes. On-street parking may be provided.

B. Shared Roadways (private)

Shared roadways are pedestrian dominant in character and are designed to create a sense of place and prioritize pedestrians. Sidewalks, planting areas, street trees, and narrow travel lanes characterize both commercial and residential shared drives.

Commercial Shared Roadways. Commercial Shared Drives are pedestrian dominant in character and will provide the primary access to the on-site land uses and parking structures. These drives are designed to promote closure and universal accessibility for events, markets and festivals. They may use special paving and will provide parallel parking as well as maintain the minimum width allowable for fire access.

Residential Shared Roadways. Designed to create a sense of community and prioritize pedestrians, these private roadways provide access to residential uses on site and connect residents to the Village Center and primary streets. Narrow lanes will promote slower traffic, on-street parking will be short-term, and these roadways may incorporate flexible design elements to support potential short-term closure for neighborhood events.



See Figure 3-6, Roadway Typologies below for location for these private roadways.

C. Programmable Roadways

Several of the private roadways within the Specific Plan area, Bristol Paseo (the primary north/south roadway), the looped road ringing Bristol Green and Bristol Plaza areas, and the Shared Roadways will be "Programmable". These roadways, or portions thereof, may be closed off for special pedestrian events such as farmers' markets, seasonal festivals, music events, etc. As such, these roadways have been included as part of common open space acreage within the Specific Plan.

3.4.2 Pedestrian and Bicycle Mobility

Pedestrian mobility is currently provided via existing sidewalks located along MacArthur Boulevard, Bristol Street, Sunflower Avenue and South Plaza Drive. Crosswalks are provided at all signalized intersections adjacent to the Project site and will also be provided at potential traffic signals on Bristol Street and South Plaza Drive. The Project plans to retain this pedestrian infrastructure.

Bicycle mobility is currently provided via Class II bike lanes located along Bristol Street. Proposed Bristol Street improvements include upgrading the southbound bike lane to a Class IV bike lane, which includes a planted buffer separation between vehicular and bicycle circulation (refer to cross sections). Bicycle racks will be provided in conjunction with commercial, office, residential implementing projects. Proposed MacArthur Boulevard and Sunflower Avenue improvements also include construction of a Class IV protected bike lane.



Bristol Street Existing Condition

Internally the Project will provide pedestrian connectivity via sidewalks and internal greenlink pathways. The Village Core portion of the Project will provide a slow speed/low volume ring road to encourage non-vehicular mobility (pedestrian and bicyclists).





3.4.3 Parking

Parking in the Specific Plan area is largely accomplished through structured subterranean and above-grade parking garages, which may cover the majority of the subsurface area of the Specific Plan area, and thus the parking requirements for the Project use shared/joint/reciprocal concepts (see Figure 3-8, Preliminary Parking Configuration). Parking will be evaluated on a project-by-project basis and individual projects within the Specific Plan area will implement/include parking consistent with applicable state law or local standards. Local parking standards for uses within the Specific Plan area are shown in Table 4-4, Parking Standards in Section 4, Development Regulations. These standards reflect the unique characteristics of the proposed mixed-use environment in the Specific Plan area, which result in a requirement for shared parking.

3.4.4 Transit

The Orange County Transit Authority (OCTA) operates five routes in the vicinity of the Specific Plan area. The routes consist of the following:

- OCTA Route 55: The major routes of travel include Macarthur Boulevard and Bristol Street.
 Nearest to the Project site are bus stops on Bristol Street –northbound and southbound south of
 the intersection with Macarthur Boulevard. Route 55 operates on approximate 30-minute
 headways during weekdays and weekends.
- OCTA Route 57: The major route of travel includes Bristol Street. Nearest to the Project site are bus stops on Bristol Street – northbound and southbound south of the intersection with Macarthur Boulevard. Route 57 operates on approximate 15-minute headways on the weekdays and weekends.
- OCTA Route 76: The major route of travel includes Macarthur Boulevard. Nearest to the Project site are bus stops on Macarthur Boulevard— eastbound and westbound west of the intersection with Bristol Street. Route 76 operates on approximate 60-minute headways on the weekdays and does not operate on weekends.
- OCTA Route 86: The major routes of travel include Bristol Street and Sunflower Avenue. Nearest
 to the Project site is a bus stop on Bristol Street northbound and southbound north of the
 intersection with Sunflower Avenue. Route 86 operates on approximate 60-minute headways on
 the weekdays and does not operate on weekends.
- OCTA Route 150: The major route of travel is Sunflower Avenue. Nearest to the Project site are
 bus stops on Sunflower Ave— eastbound and westbound east and west of the intersection with
 South Plaza Drive. Route 150 operates on approximate 40-minute headways on the weekdays
 and does not operate on weekends.
- OCTA Route 553: The major route of travel includes Sunflower Avenue, Plaza Drive, Main Street, and MacArthur Boulevard. Bus stops are provided on Sunflower Avenue, westbound, west of the intersection with Bristol Street, adjacent to the Project site. Route 553 operates on approximately 20-minute headways on weekdays and does not operate on weekends. Route 553 connects to the Anaheim Regional Transportation Intermodal Center.

Existing bus stops are present on the Specific Plan frontage as follow (see Figure 3-7 for locations):

- Bristol Street. Three bus stops, one of which includes a shelter
- MacArthur Boulevard. One bus stop
- South Plaza Drive. One bus stop (outside of the Specific Plan area)
- Sunflower Avenue. One bus stop with shelter

3.4.5 Rideshare

With the rise in use of rideshare services such as Uber and Lyft, it is increasingly important to designate areas for quick and efficient pick-off and drop-off of passengers. Such areas will be provided at strategic areas within the plan; these areas will be illustrated and specifically located as part of a Development Project Review (DPR) package for implementing projects.

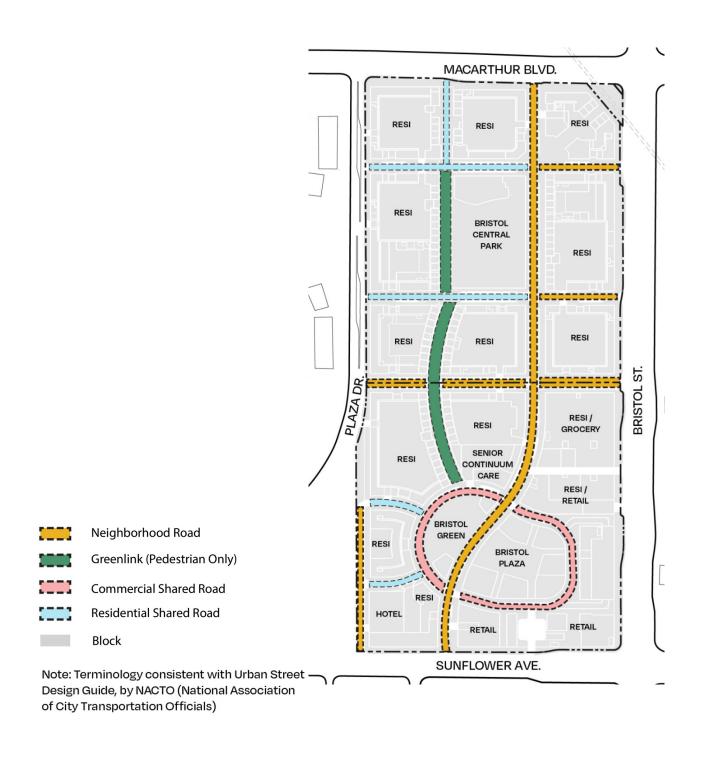
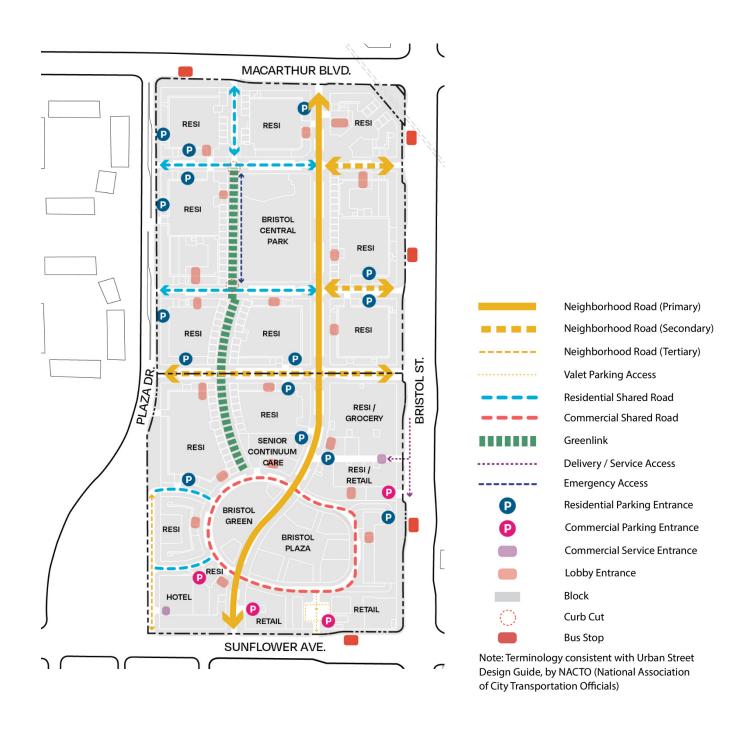
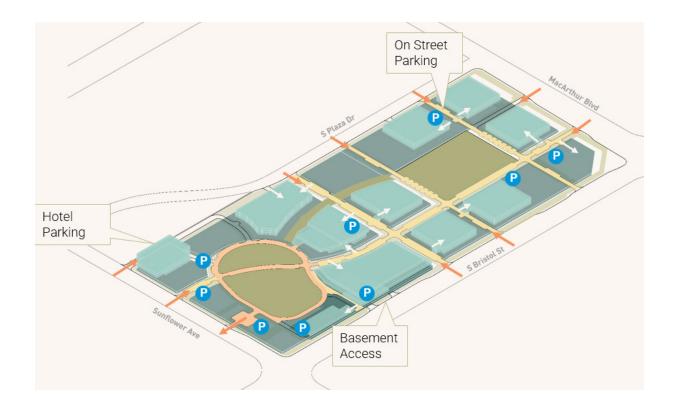


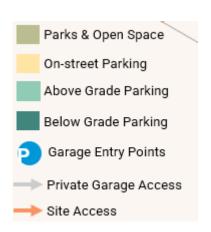
Figure 3-6 Roadway Typologies



Lobby entrances and parking entries shown on this graphic are illustrative based on anticipated project layout. These may change as part of Development Project Review (DPR) for each implementing project

Figure 3-7 Conceptual Circulation Plan





Parking configurations and access shown on this graphic are illustrative based on anticipated project layout. These may change as part of Development Project Review (DPR) for each implementing project

Figure 3-8 Preliminary Parking Configuration

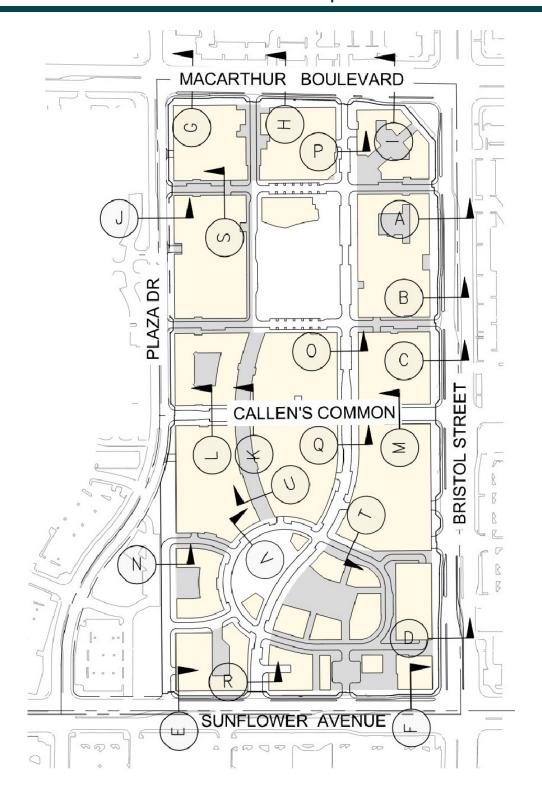


Figure 3-9 Road Section Key Map

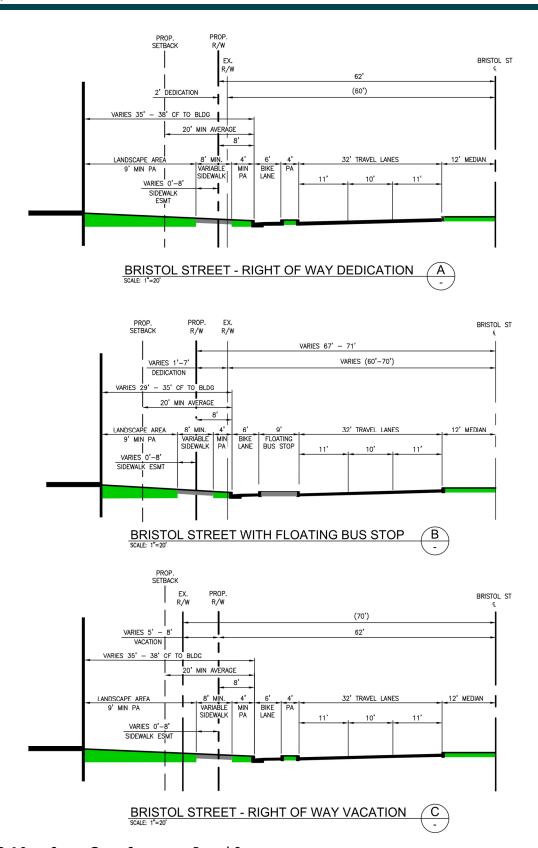


Figure 3-10 Street Cross Sections – Bristol Street

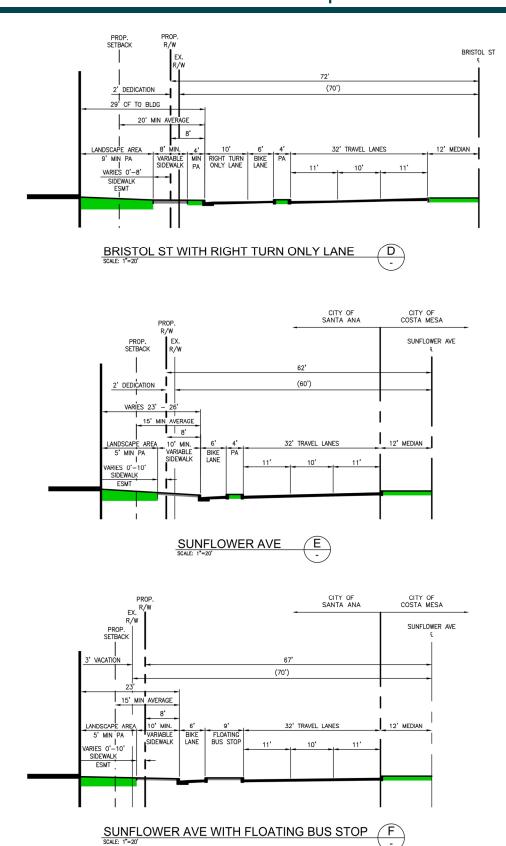


Figure 3-11 Street Cross Sections – Bristol and Sunflower

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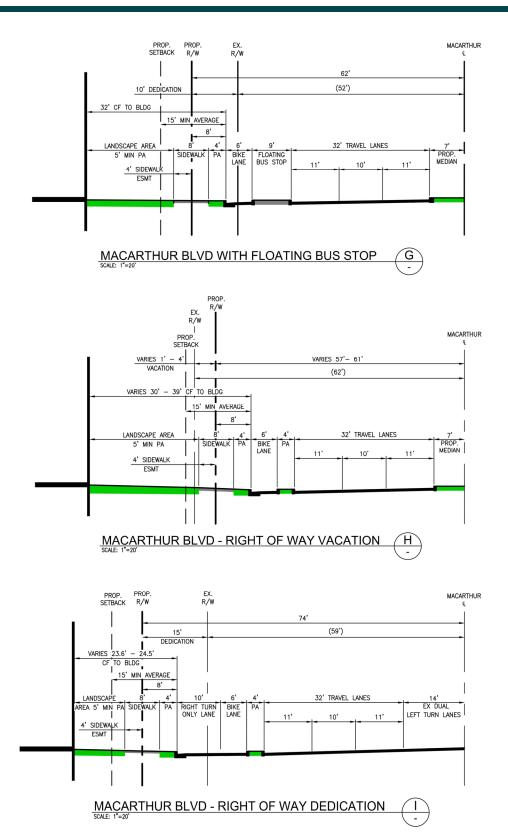
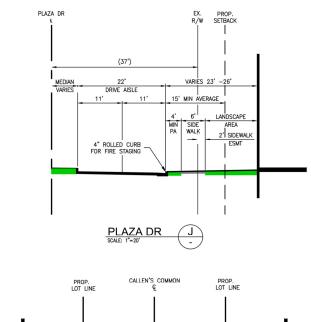
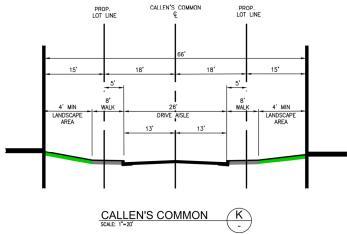
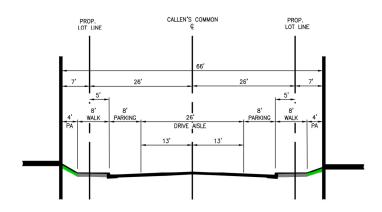


Figure 3-12 Street Cross Sections - MacArthur

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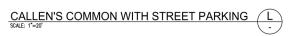
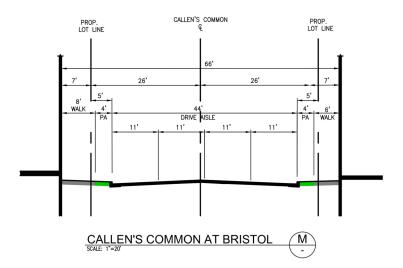
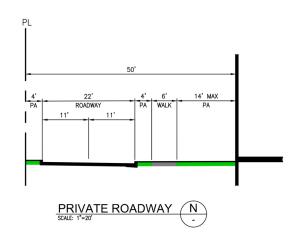


Figure 3-13 Street Cross Sections





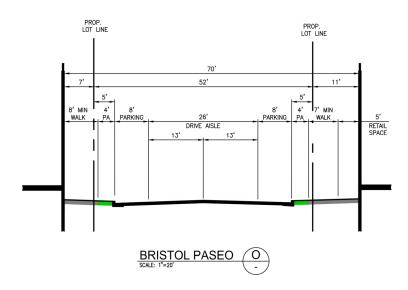


Figure 3-14 Street Cross Sections

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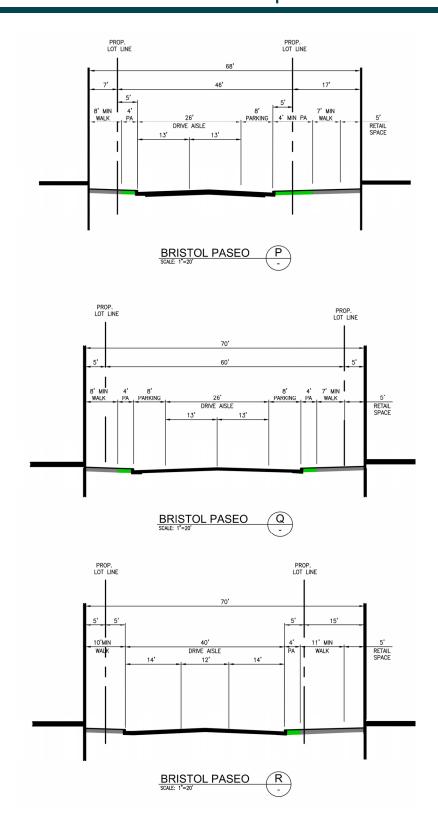
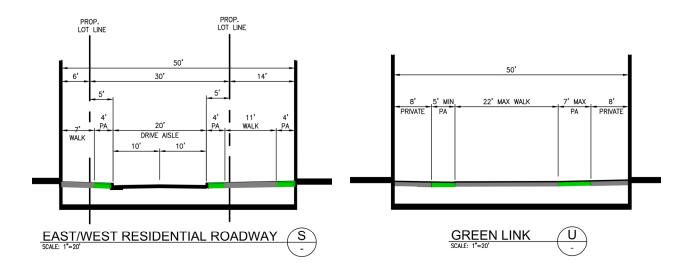


Figure 3-15 Street Cross Sections



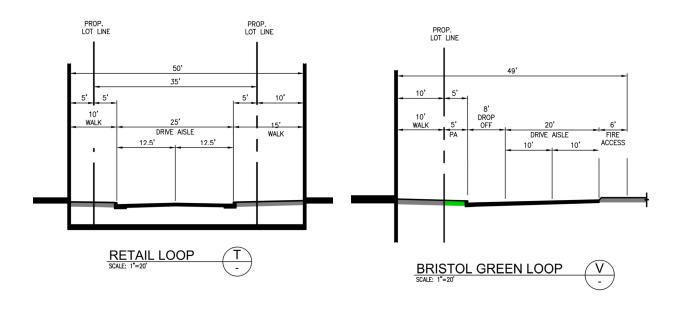


Figure 3-16 and 17 Street Cross Sections

3.5 Infrastructure and Public Facilities

This Specific Plan describes a variety of public facilities and services intended to support and serve the needs of the Related Bristol residents, visitors, and workforce. Services include:

- Water
- Sewer
- Storm drainage and Water Quality
- Solid waste disposal
- Fire and Police Protection
- Schools, and
- Dry utilities

Existing infrastructure is provided to the Specific Plan area, as shown in Table 3-3, Service Providers.

Infrastructure sizing and location may change as part of final engineering; this would not require an amendment to the Specific Plan.

TABLE 3-3
SERVICE PROVIDERS

Service	Provider
Water (Domestic)	City of Santa Ana
Water (Reclaimed)	OCWD
Wastewater	City of Santa Ana/Orange County Sanitation District (OCSD)
Storm Drainage	City of Santa Ana/OCFCD
Electric Service	Southern California Edison
Gas Service	Southern California Gas
Fire Protection	Orange County Fire
Police Protection	Santa Ana Police Department
Schools	Santa Ana Unified School District
Solid Waste Disposal	Republic Services

3.5.1 Storm Drainage and Water Quality Management

The City of Santa Ana owns and maintains an extensive network of storm drain infrastructure, primarily storm drain mains and catch basins, throughout the City. The Specific Plan area is located in the Upper Newport Bay watershed. A Hydrology study was prepared by Fuscoe Engineering and approved by the City of Santa Ana (March 2023) to assess drainage conditions and requirements for the Specific Plan area.

The Project site is within Subarea 40 of the Gardens Watershed, as identified in the City's 2018 Storm Drain Master Plan (SDMP). The Project site is tributary to the Orange County Flood Control District (OCFCD) Gardens Channel, Facility No. F02. The Gardens Channel is a graded earthen channel from upstream at 1st Street to Alton Avenue. Downstream of Alton Avenue, the channel is a reinforced rectangular concrete section, with a triple-barrel culvert at MacArthur Boulevard and Bristol Street, in the vicinity of the Project site. The Gardens Channel confluences with the Delhi Channel at Sunflower Avenue, east of Bristol Street and continues flowing south toward Upper Newport Bay.

The topography of the Specific Plan area is relatively flat with storm water draining via surface flows to existing gutters and onsite area drain systems. Based on evaluation of the existing drainage patterns and as-built plans, and confirmed with scanning results, in the existing condition, approximately ½ of the site drains northerly and northeasterly, and approximately ½ of the site drains southerly and southwesterly. However, this differs with what is presented in the SDMP, which shows the entire site draining southerly into the existing storm drain systems in South Plaza Drive and Sunflower Avenue.

Based on engineering evaluation, Callen's Common, a private street that runs east-west through the middle of the site serves as a natural drainage boundary, essentially splitting the drainage between the northerly portion of the site which drains to the north and northeast, and the southerly portion of the site which drains to the south and southwest.

The northerly drainage is conveyed to the city storm drain systems in South Plaza Drive, Bristol Street, and MacArthur Boulevard, then to the OCFCD Gardens Channel to the north and northeast.

The southerly drainage, conversely, is conveyed to the city storm drain systems in South Plaza Drive and Sunflower Avenue. The drainage is then conveyed easterly in a City of Santa Ana storm drain in Sunflower Avenue, to the OCFCD Gardens Channel to the east of Bristol Street.

Existing Facilities.

The City's 2018 SDMP includes an existing 54-inch storm drain that transitions to an existing 60-inch storm drain in Sunflower Avenue at Bristol Street. Existing backbone storm drain lines are present in MacArthur Boulevard, South Plaza Drive, along with Sunflower Avenue. A catch basin/lateral system exists in Bristol Street, to the east of the Project site.

The City's 2018 SDMP recommends upgrades to the City's storm drain system in Sunflower Avenue (54-inch and 60-inch to a 72-inch) and South Plaza Drive (36-inch, 39-inch and 42-inch to 42-, 54-and 60-inch). Internal drainage lines are present within the Specific Plan area, collecting on-site stormwater from the existing shopping center, and discharging into the existing city storm drain systems in the adjacent roadways. The hydrologic patterns of the Project site have been evaluated, and a SDMP Technical Memorandum (March 2023) has been presented to the city, which includes revisions to the onsite drainage patterns. The SDMP Technical Memorandum identified that although the onsite drainage patterns differ from those in the SDMP, the results are that storm drain upgrades in Sunflower Avenue and South Plaza Drive are still recommended although to a lesser extent. It is recommended to upgrade the existing 54-/60-inch storm drain in Sunflower Avenue to a 72-inch, and the existing 42-inch downstream reach in South Plaza Drive to a 60-inch.

A preliminary hydrology report (March 2023) has been prepared by Fuscoe Engineering and approved by the City of Santa Ana. The concept is that the proposed storm drain systems will be designed with the goal of mimicking existing drainage and discharge conditions, where possible. The proposed storm drain system will be installed within the onsite roadways, to convey the stormwater toward the existing city storm drain systems in MacArthur Boulevard, Bristol Street, South Plaza Drive, and Sunflower Avenue. See Figure 3-18, Conceptual Drainage Plan.

A. Floodplain and Ponding

The Specific Plan area lies within Zone X, which is outside the 100-year floodplain. A small portion beyond the northeast corner of the Specific Plan area lies within Zone A, but this area is contained within

the Gardens Channel, an OCFCD Facility. The SDMP shows that there is potential for 10-year and 100-year localized ponding at the site in the vicinity of Callen's Common and South Plaza Drive. The hydraulics of the existing storm drain will be studied, following analysis of the onsite hydrology to confirm the extents and depths of localized ponding, if it exists.

B. Water Quality

Improvement of water quality is a critical issue for all development. Local, State and Federal laws include requirements for the treatment of storm water runoff to reduce pollutants entering the environment.

The City of Santa Ana and the Specific Plan area fall under the North Orange County MS4 Stormwater Permit (Order No. R8-2010-0062) which identifies stormwater runoff requirements and regulations for new development and significant redevelopment projects to be protective of water quality.

Best Management Practices (BMPs) are structural or engineered devices and systems used to treat storm water runoff before it is discharged into a drainage system (storm drain or channel). BMPs will be required to be implemented as part of the Specific Plan following local MS4 Permit requirements as well as the Orange County Technical Guidance Document and Model WQMP.

Low Impact Development (LID) BMPs are required in addition to site design measures and source controls to reduce pollutants in storm water discharges. LID BMPs are engineered facilities that are designed to retain or biotreat runoff on the Project site.

BMPs appropriate for an urbanized setting may include the following Low Impact Development (LID) Hierarchy of items as defined in the Technical Guidance Document prepared by the County of Orange:

- Infiltration
- Harvest and Reuse
- **Biotreatment**

Although appropriate for urbanized settings, infiltration is infeasible for this project due to low infiltration rates of the soils at the site, along with shallow groundwater levels.

A preliminary Water Quality Management Plan (WQMP) has been prepared for the Project by Fuscoe Engineering and approved by the City of Santa Ana (March 2023). Harvest and reuse and biotreatment BMPs have been explored in the Project's Preliminary Water Quality Management Plan for feasibility of implementation and have been deemed to be feasible.

Harvest and Reuse. Although feasible, due to space constraints harvest and reuse BMPs are not proposed for Related Bristol.

Biotreatment. Biotreatment BMPs are a broad class of LID BMPs that reduce storm water volume to the maximum extent practicable, treat storm water using a suite of treatment mechanisms characteristic of biologically active systems, and discharge water to the downstream storm drain system or directly to receiving waters.

Modular wetlands are included as a method of biotreatment. Modular Wetlands by Modular Wetlands Systems, Inc. are proprietary biotreatment systems that utilize multi-stage treatment processes including screening media filtration, settling, and biofiltration. As storm water passes down through the planting soil, pollutants are filtered, adsorbed, biodegraded and sequestered by the soil and plants, functioning

similar to bioretention systems. The discharge chamber at the end of the unit collects treated flows and discharges back into the storm drain system. This option will be considered during final engineering.

A final WQMP will be submitted as part of the final construction documents for individual implementing projects and will describe the final selection of BMPs for the proposed development.

3.5.2 Water and Water Supply

Water for the Specific Plan area is provided by the City of Santa Ana. The City owns and maintains an extensive network of water infrastructure, including 444 miles of transmission and distribution mains, nine reservoirs with a storage capacity of 49.3 million gallons, 7 pumping stations, 20 wells, and 7 import water connections (General Plan EIR).

The City's water supply comes from a variety of sources: local well water from the Lower Santa Ana River Groundwater Basin, also known as the Orange County Groundwater Basin (OC Basin), which is managed by Orange County Water District (OCWD), imported water from the Metropolitan Water District of Southern California (Metropolitan), and recycled water. The City is a member agency of Metropolitan. Metropolitan, as a regional wholesaler, supplies imported water to Southern California. Metropolitan's primary purpose is to develop, store and distribute water at wholesale rates to its member public agencies for domestic and municipal uses.

A. Water Supply

The City's main source of water supply is groundwater from the OC Basin. Imported water and recycled water make up the remainder of the City's water supply portfolio. Recycled water is primarily utilized for parks, medians, and trails, and is available adjacent to the Specific Plan area however it is presently unavailable to the Project as all reclaimed water supply constituents have been allocated. The City's General Plan EIR indicates that the water demands for the City are projected to be met through the City of 2015 Santa Ana Urban Water Master Plan (UWMP). A Water Supply Assessment was prepared for the Related Bristol Specific Plan and confirmed there are adequate water supplies to support the Project.

B. Water Facilities

Existing Facilities. Domestic water lines are present in MacArthur Boulevard (14-inch), South Plaza Drive (12-inch), Bristol Street (12-inch), Callen's Common (12-inch), and Sunflower Avenue (12-inch). A 14-inch OCWD reclaimed water line is present in MacArthur Boulevard.

Proposed Facilities. New public water mains will be extended into the Specific Plan area to service implementing projects, located within a 20-foot easement within the main north-south and east-west onsite roadway and paseo. The existing 12-inch waterline in Callen's Common will be replaced with a new 12-inch water line, and new connections will be provided for the proposed onsite water facilities. It is anticipated that the existing 14-inch domestic water main in the MacArthur Boulevard will remain. The existing 12-inch water mains in Bristol Street and Sunflower Avenue fronting the Project would need to be replaced with new 12-inch diameter water mains. Additionally, the existing 12-inch water main in South Plaza Drive from Sunflower Avenue to MacArthur Boulevard would be replaced with a new 12-inch water main. Existing connections of the water main in Callen's Common at South Plaza Drive and Bristol Street would be replaced with proposed connections of the on-site public water mains to the new mains in the perimeter public streets.

Service connections to the new and existing City water systems in the adjacent public roads are proposed at MacArthur Boulevard, South Plaza Drive, Bristol Street, and Sunflower Avenue. The proposed onsite water main system will also connect to the city's water system in the adjacent public roads. This connection strategy will provide a looped system, which will help to ensure that water and fire services can be adequately supplied to the proposed development. See **Figure 3-19**, *Conceptual Water Plan*.

3.5.3 Wastewater Treatment

A sewer analysis report was prepared by Fuscoe Engineering (February 2023) and submitted to the City and Orange County Sanitation District (OCSD) as part of the entitlement process for this Specific Plan and its VTTM. Both the City and OCSD have approved the conceptual sewer design report.

Existing Facilities. The City owns and maintains an extensive network of sewer infrastructure, primarily sewer mains, throughout the City. The City mains connect to Orange County Sanitation District (OCSD) trunk sewers throughout the City and convey sewage to OCSD's water reclamation facility in Fountain Valley, processing approximately 117 million gallons per day (MGD) of sewage.

An existing 78-inch OCSD trunk sewer line is present in Sunflower Avenue, along with a smaller OCSD line (10-inch to 15-inch) in South Plaza Drive, which drains southerly from MacArthur Boulevard. to connect to the 78-inch OCSD trunk line in Sunflower Avenue. There are City of Santa Ana sewer lines in MacArthur Boulevard, and within the Project area, which drain toward the OCSD sewer main in South Plaza Drive.

There is a private sewer line along and within the southerly boundary of the Project, which drains westerly, toward an existing 8-inch City of Santa Ana sewer line. The City's sewer line continues westerly in Sunflower Avenue (within the sidewalk), and the wastewater ultimately drains to the existing 78-inch OCSD sewer line in Sunflower Avenue at S. Bear Street, west of South Plaza Drive. No wastewater flows drain into the onsite sewer system from off-site.

The City of Santa Ana owns and maintains a network of systems within and surrounding the property. These sewer systems connect to the following mainline systems:

- 15-inch OCSD sewer system in South Plaza Drive
- 8-inch City of Santa Ana sewer system in Sunflower Avenue from the Project site to Bear Street.
- 78-inch OCSD sewer system in Sunflower Avenue

Proposed Facilities. Although the existing OCSD sewer line in South Plaza Drive includes three manholes with stub-outs for sewer laterals, it is anticipated that the proposed development, blocks/lots fronting South Plaza Drive, would not be able to connect to these existing stub-outs or laterals, based on discussions with City staff, along with lack of capacity in the existing OCSD sewer line in South Plaza Drive. Therefore, virtually all of the onsite wastewater generated by the proposed project will be conveyed internally, within private sewer lines, toward the proposed central north-south roadway. From there the wastewater will be conveyed southerly, within proposed private sewer system, to Sunflower Avenue. At the Sunflower Avenue right-of-way, the sewer system will become public (City of Santa Ana). Due to site constraints, there is an option to drain a small portion of the Project at the southeast corner of the property to an existing manhole in the 78-inch sewer line, just west of Bristol Street.

At Sunflower Avenue the new city sewer (with encroachment into City of Costa Mesa) would convey the Project wastewater flows southerly to connect directly to the OSCD 78" sewer in Sunflower Avenue. The connection would require a new manhole in the OSCD sewer line in Sunflower Avenue mid-block between South Plaza Drive and Bristol Street. It is estimated that the new city of Santa Ana sewer main in Sunflower Avenue between the City right-of-way and the new OCSD manhole would have a diameter of 18 inches.

The existing private sewer infrastructure along and within the southerly property boundary, along with an onsite portion of the City of Santa Ana 8-inch sewer line, are expected to be removed. The Project is not anticipating to drain any wastewater discharges to the City sewer main downstream of this private sewer. The City has requested that following removal of the onsite portion of the City sewer along the southerly boundary, a new terminal manhole be installed at the upstream end of the existing City sewer westerly of the southwest Project corner.

Lastly, there is an existing private sewer lateral that connects to the OCSD 78-inch sewer main near Sunflower Avenue/Bristol Street intersection. Based on discussions with City staff, this lateral may not be utilized by the Project. However, there is an option to drain a small portion of the site to an existing OCSD manhole in this vicinity. See **Figure 3-20**, *Conceptual Sewer Plan*.

3.5.4 Reclaimed Water

There is an existing 14-inch reclaimed waterline in MacArthur Boulevard that may be available in the future to service the Project site but is presently unavailable as all reclaimed water supply constituents have been allocated. The reclaimed waterline is owned by Orange County Water District (OCWD). It is anticipated that this reclaimed water line could provide irrigation service to the Specific Plan area when and if adequate supply becomes available.

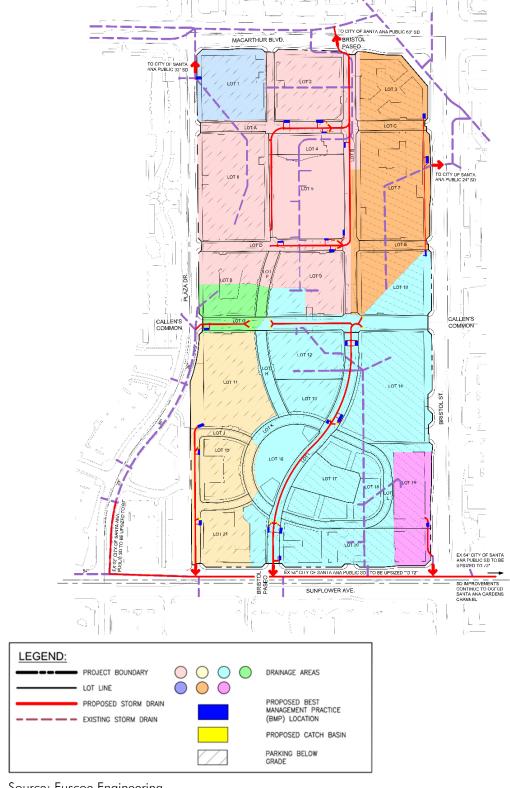
3.5.5 Dry Utilities

Public gas and electric facilities are owned and operated by Southern California Gas and Southern California Edison, respectively. Existing internal utilities will be relocated in the new private roadways with appropriate easements. Service lines for new buildings will be extended from the existing and new public lines.

Additionally, as the infrastructure needed to deliver these services is made accessible in the future, new developments will connect to the existing fiber optic cable network to ensure the Specific Plan area develops as a full "Smart Village".

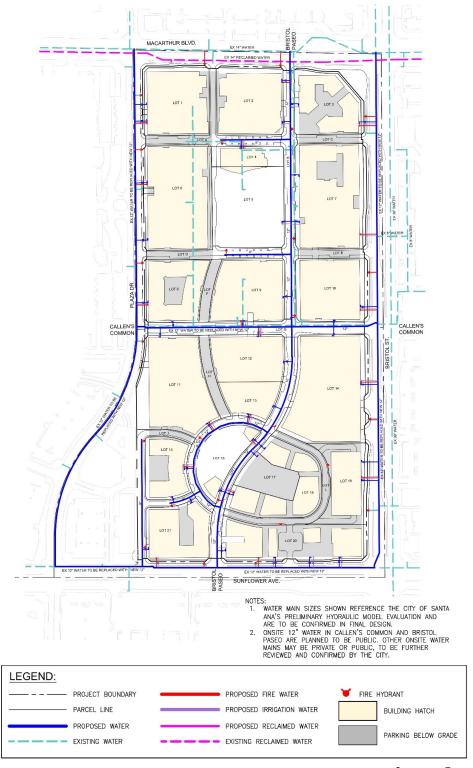
3.5.6 Solid Waste

Starting on July 1, 2022 Republic Services began providing curbside recycling, garbage, and yard waste services to the City of Santa Ana. Republic Services will be providing solid waste and recycling services to the Specific Plan Area, subject to change by the City per state and local requirements and/or agreements. Additionally, City of Santa Ana ordinance now requires three bins for trash collection, trash, general recycling, and organic materials. The City currently participates in several recycling programs, including residential recycling, organics recycling, and construction and demolition recycling. The City has two authorized haulers for construction and demolition recycling, Waste Management and Ware Disposal. Construction and demolition debris is accepted for recycling at Madison Materials in Santa Ana.



Source: Fuscoe Engineering

Figure 3-18 Conceptual Drainage Plan



Source: Fuscoe Engineering

Figure 3-19 Conceptual Water Plan



Source: Fuscoe Engineering

Figure 3-20 Conceptual Sewer Plan

3.5.7 Police Services

Police services in Santa Ana are provided by the Santa Ana Police Department, headquartered at 60 Civic Center Plaza. The Department is divided into two policing divisions: East and West. The Specific Plan area is located in the Southcoast District of the West division, which serves all areas south of First Street and west of Flower Street.

The Department has two substations, the Westend Substation located at 3750 West McFadden Avenue, and the Southeast Substation. Emergency response times for the Department are dependent on where the patrol vehicles are in relation to a call, as well as the nature of the call.

As part of project implementation, an administrative police substation (no transfers or bookings) will be located within the Specific Plan area, and completed in accordance with the provisions of the Development Agreement.

3.5.8 Fire Services

Fire protection and emergency medical services are provided by the Orange County Fire Authority (OCFA). The OCFA is a regional fire service agency that serves 23 cities in Orange County and all unincorporated areas. The OCFA protects over 1,680,000 residents and is organized into seven departments including the Community Risk Reduction Department and the Operations Department. The City of Santa Ana receives regional fire and emergency services from all OCFA stations and resources. The closest fire station to the Specific Plan area is Fire Station 76 located at 950 MacArthur Boulevard, approximately 1 mile from the Specific Plan area. Station 76. Fire service calls will incrementally increase as a result of the development of the Specific Plan area.

A Fire Master Plan has been prepared and submitted to OCFA as part of the Vesting Tentative Tract Map (VTTM) to show that the circulation system allows unhindered OCFA access and maneuvering during emergencies as well as anticipated hose pull lengths and fire hydrant locations.

As part of project implementation, all road/driveway widths, as well as the placement of fire hydrants and installation of automatic sprinkler systems, shall be designed with the guidance of the OCFA.

3.5.9 Schools

The Specific Plan area is within the Santa Ana Unified School District (SAUSD) boundary. The SAUSD provides K-12 schools for areas within its boundaries. The schools which would serve residential units within the Specific Plan area include:

- Jefferson Elementary School. This K-6 school is located at 1522 West Adams Street, approximately 2.3 miles north of the Specific Plan area.
- McFadden IT. This 6-8 school is located at 2701 South Raitt Street, approximately 2 miles to the northwest of the Specific Plan area.
- Segerstrom High School. This 9-12 school is located at 2301 MacArthur Boulevard, approximately 1.2 miles northwest of the Specific Plan area.

Implementing projects will pay statutory school fees at the time of building permits unless otherwise provided for as part of an agreement with the District.

3.6 Affordable Housing

The City of Santa Ana has established an Affordable Housing Opportunity and Creation Ordinance (AHOCO) to encourage the development of housing that is affordable to a range of households with varying income levels. The Ordinance is applicable to new residential projects within the City that meet certain criteria.

As implementing projects in the Specific Plan Area are submitted to the City for review, they will comply with the City's AHOCO, or the Project's Development Agreement when approved. Once approved, the Project's Development Agreement would govern.

The affordable housing provisions of the Development Agreement can be summarized as follows:

• (Placeholder for Development Agreement provision summary)