

## SECTION 3.0 INFRASTRUCTURE AND SERVICES

This section provides a review of the infrastructure and services that support the project. It identifies required circulation, parking, and any necessary infrastructure improvements associated with the proposed build-out of the Specific Plan. Service and utility providers are also identified below.

### 3.1 CIRCULATION PLAN

#### 3.1.1 Regional Access

Regional access to the Specific Plan area is provided by the Foothill Freeway (I-210) and San Gabriel River Freeway (I-605). The Foothill Freeway is located immediately to the north of the project area; the nearest freeway access is via the Buena Vista on-ramps to the west of the site. Interstate 605 is located approximately one and one-half miles to the east.

The Los Angeles County Metropolitan Transportation Authority (Metro)-owned railroad right-of-way is located adjacent to the project area to the south within the planned Duarte transit stop located adjacent to project's Planning Areas D, E, and F. When completed, the Gold Line will provide regional access to cities to the east and west.

#### 3.1.2 Transit

The City has operated a "fixed route" [bus] transit system since 1984. Buses operate along two main routes, weekdays and a single route on Saturdays. The two main transit routes operated by Duarte Transit System are known as the "Blue" and "Green" routes. The "Green" route operates in a counter-clockwise direction. The routes connect with every transit route operated to and through the City of Duarte, operated by Foothill Transit and MTA which provide inter-community public transit service to / from points outside of Duarte. METRO bus line #264 and Foothill Transit Line #272 serve the project area. Line #272 connects with Metrolink Baldwin Park.

The Green route presently extends along Evergreen Street, which borders the Specific Plan area on the north and continues on Highland and Duarte Road, passing both the proposed Gold Line parking area within the project and the Duarte Station location. One Green transit stop is located adjacent to the project's Planning Area I near Highland Avenue. Because of this route's counterclockwise travel direction the route, potential future transit stops would be located on the east side of Highland Avenue.

In addition to the Green route, the commuter line route extends along Evergreen Street. The commuter route travels weekdays and picks up passengers from residential areas and drops them off at locations where they can transfer to either Metro or Foothill Transit lines. The city's transit routes are being modified to serve and enhance ridership to and from the Duarte Station.

### 3.1.3 Perimeter Roads

The Specific Plan area is bordered by Evergreen Street to the north, Duarte Road to the south, Highland Avenue to the east. The I-210 Freeway is located just north of Evergreen Street, in close proximity to the Specific Plan area. Business Center Drive traverses the Specific Plan area in an east/west direction.

- Evergreen Street. Currently, Evergreen Street is a 2-way collector street with one travel lane in each direction that runs in an east/west direction. General Plan right of way for collectors is 60 feet with a 40 foot pavement section.
- Highland Avenue. Highland Avenue is a 2-way Minor Arterial with four travel lanes. General Plan right of way for minor arterials is 100 feet with a 60 foot pavement section. As mitigation for the Gold Line Foothill Extension, the intersection of Highland Avenue with Business Center Drive will be signalized. A second signal north of the I-210 at Central is also included in the Gold Line mitigation.
- Business Center Drive. Business Center Drive is currently a 2-way local street with one travel lane in each direction and space for on-street parking on both sides of the street. As mitigation for the Gold Line Foothill Extension, the intersection of Highland Avenue with Business Center Drive will be signalized. Turn movements from the project onto Business Center Drive will be limited to right-out only to limit project-

related traffic through the residential neighborhoods to the west.

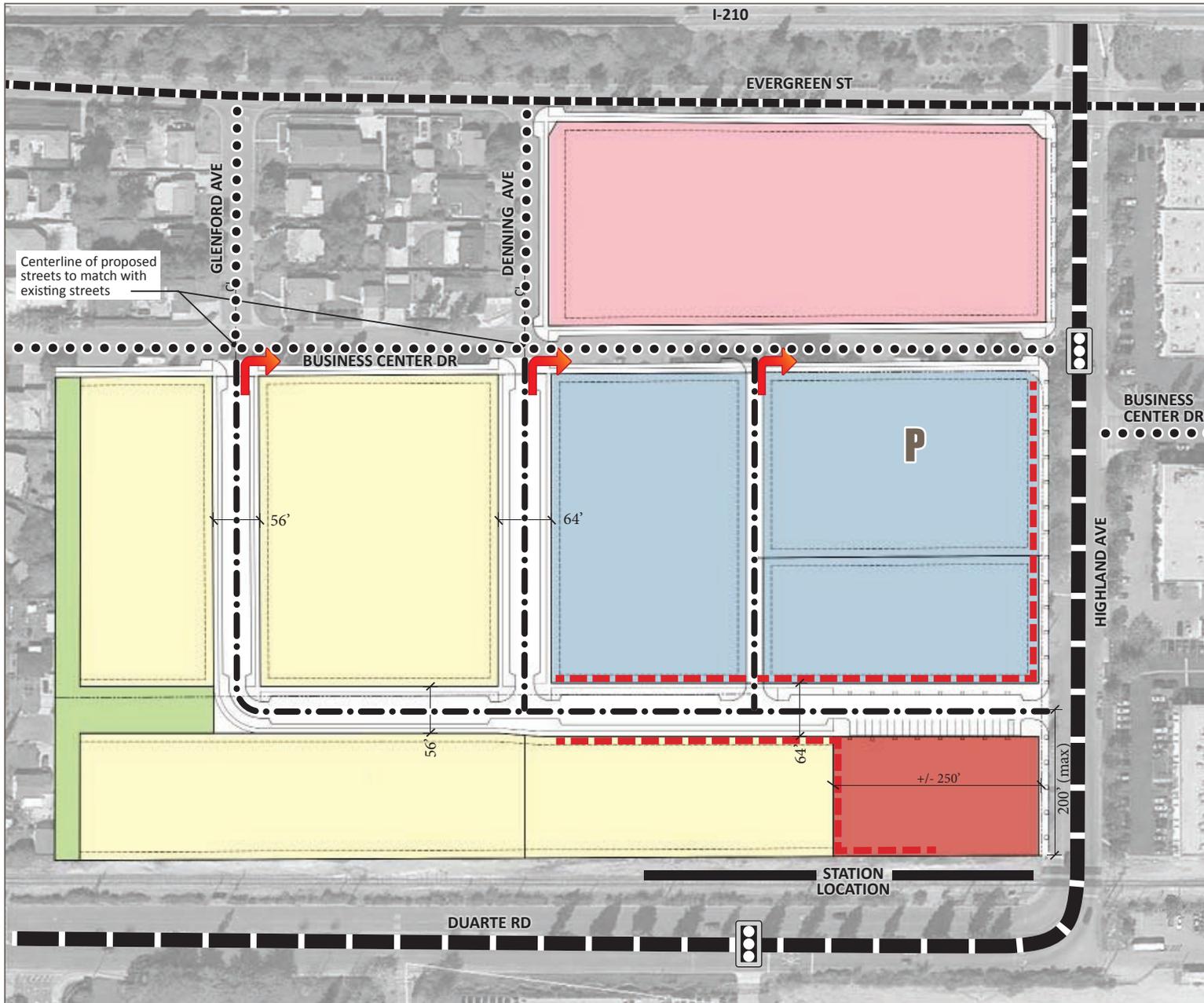
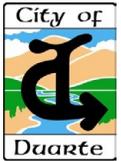
- Denning Avenue. Denning Avenue is currently a 2-way local street with one travel lane in each direction and space for on-street parking on both sides of the street.
- Duarte Road. Duarte road is currently a 4-lane minor arterial with two travel lanes in each direction; the travel lanes are separated by a planted center median. As mitigation for the Gold Line Foothill Extension, the intersection of Duarte Road at the City of Hope driveway will be signalized.

### 3.1.4 Internal Circulation

The proposed Circulation Plan (see Figure 3-1, 3-2 and 3-3, *Circulation Plan* and *Roadway Cross Sections*) identifies a roadway network through the specific plan area to support a variety of potential development plans.

Access will be provided via streets or driveways on Business Center or Highland Avenue; as shown on the Circulation Plan. Turn movements from the project onto Business Center Drive will be limited to right-out only to limit project-related traffic through the residential neighborhoods to the west. Internal streets may consist of one of two configurations:

- A 56-foot right of way neighborhood street with two travel lanes, on-street parking, sidewalks and landscaped parkway.



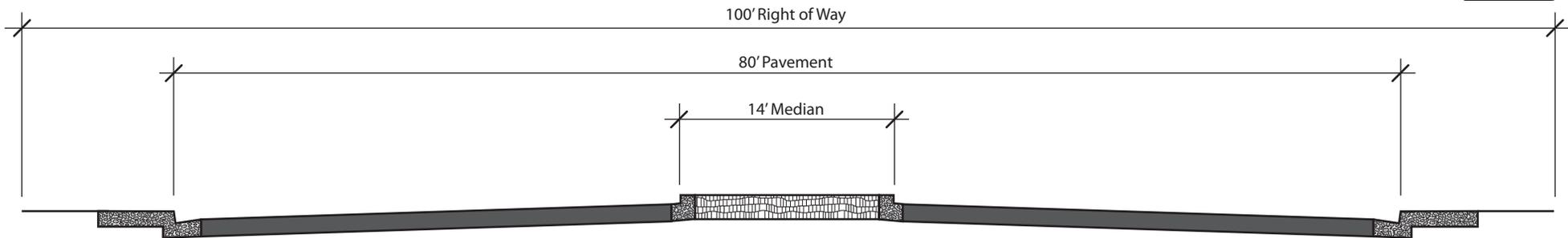
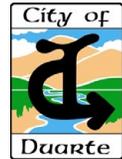
- LAND USE:**
- ▬▬▬ EXISTING MINOR ARTERIAL
  - ▬▬▬ EXISTING COLLECTOR
  - EXISTING LOCAL ROAD
  - - - - PROPOSED LOCAL DRIVE
  - ◻◻◻ FUTURE SIGNAL (GOLDLINE MITIGATION)
  - P GOLDLINE PARKING
  - ↷ Right Turn Only Lanes

Source: DAHLIN group, 5-13

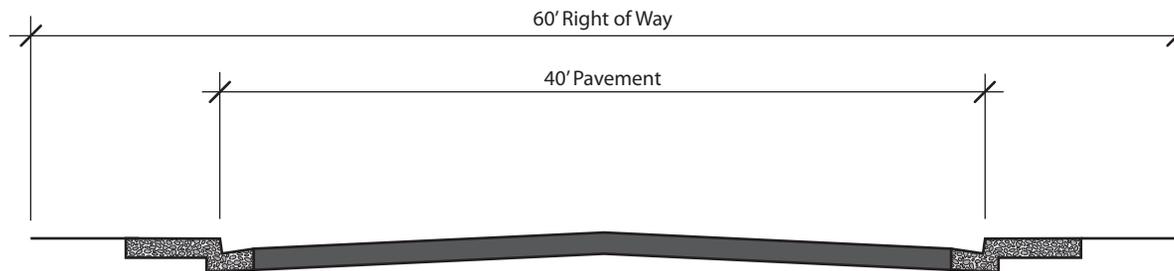


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DUARTE STATION SPECIFIC PLAN  
**Circulation Plan**



**MINOR ARTERIAL**  
Highland Avenue • Duarte Road

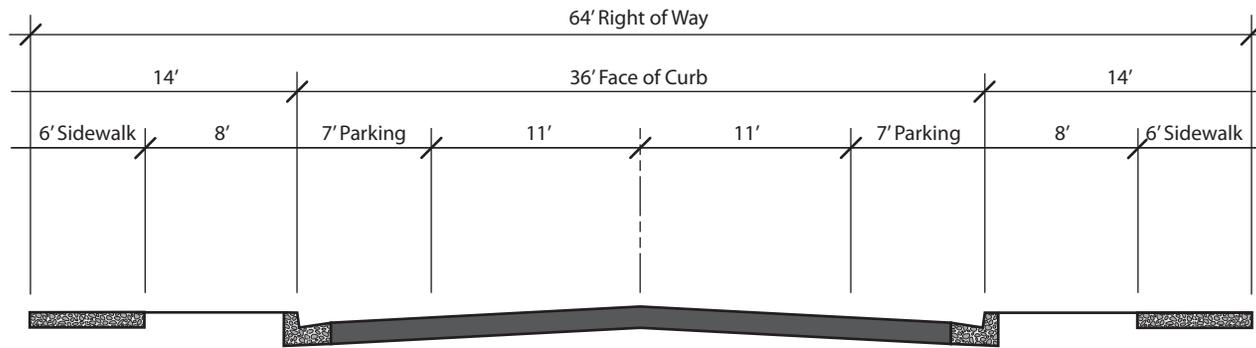
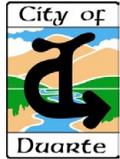


**COLLECTOR STREET**  
Evergreen Street

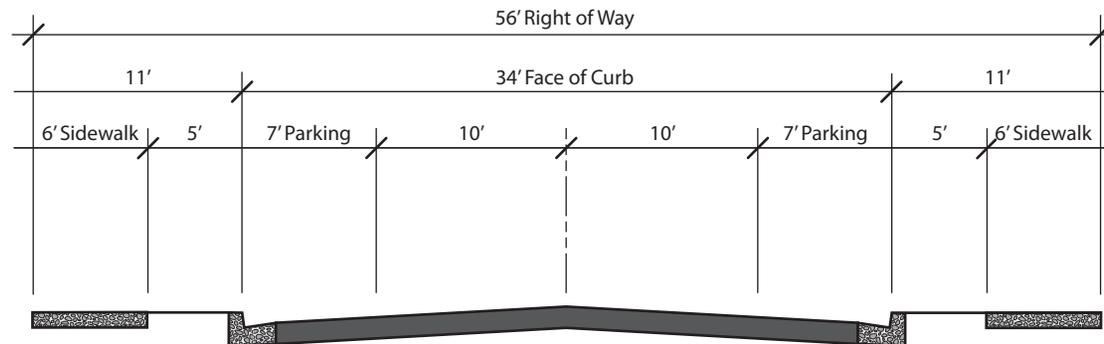


**COLLECTOR STREET**  
Evergreen Street

Note: Sections per General Plan Circulation Element.



**SECTION A-A: 64' LOCAL STREET**



**SECTION B-B: 56' LOCAL STREET**

- A 64-foot right of way neighborhood street with two travel lanes, widened parkway and sidewalk. On-street parking would be included. This street would provide the primary access into the site and would link Highland Avenue with Business Center Drive.

### 3.1.5 Parking

Presently, surface parking is provided on-site to accommodate the three existing buildings. The parking area at the western edge of the Specific Plan area contains approximately 210 parking spaces, including the underutilized lot that is only 50% paved. The parking area at the eastern side of the Specific Plan area contains approximately 264 parking spaces. The parking area designated for the building along the northern portion of the Specific Plan area (along Evergreen Street) contains approximately 140 parking spaces. Additionally, Business Center Drive accommodates on-street parking spaces on each side of the roadway.

The Gold Line will provide a surface parking lot with a minimum of 130 spaces on the project's northeastern corner at the intersection of Highland Avenue and Business Center Drive in the early phases, increasing to 250 in later phases. This parking is for the use of the transit station. Ultimately, this parking is planned to be accommodated within a structure or incorporated within a mixed use building as a parking requirement on any future use.

Parking within the Specific Plan area is outlined in Section 4, Development Regulations. Parking standards will be

determined by a parking study performed by a registered traffic engineer and approved by the Planning Commission as part of the Site Plan and Design Review process.

## 3.2 INFRASTRUCTURE PLAN

### 3.2.1 Domestic Water Service

The City of Duarte lies within the San Gabriel Groundwater Basin. Water service is provided to the City of Duarte by California American Water (Cal-Am). Cal-Am operates three Division Offices. The City of Duarte is located under the Southern Division which incorporates the Los Angeles County District. This District consists of Baldwin Hills, Duarte, and San Marino service areas.

Existing 12-inch water mains occur along the streets of Evergreen Street, and Highland Avenue. A 12-inch water main occurs along Business Center Drive west of Highland Avenue. Smaller diameter lines (4-inch) occur along the streets of Denning Avenue and Glenford Avenue. Proposed new buildings will be served by existing water lines through a series of laterals.

The project area lies within the Scott Pressure Zone which has a hydraulic gradient line (HGL) of 691-feet. This level is typically the pad elevation of the water reservoir that supplies water storage for the pressure zone. The HGL immediate at the project area was noted as approximately 684-feet due to the pressure losses within the piping distribution system from the reservoir or booster pump station to the site area. The

elevations of the site range from 496 to 479-feet. Therefore, pressure ranges between 88 to 81-psi.

New streets built for the project are anticipated to include a minimum water main of 12-inches connected into the existing Cal-Am system (see Figure 3-4, *Water Plan*). It is anticipated that private meters and backflow devices would be required for domestic water service and/or separate fire lines. A more refined hydraulic analysis will be coordinated with Cal-Am for future design as individual project move forward. This would accommodate higher fire flows that may be required for the larger buildings proposed. Upsizing the pipe along Denning Avenue may be required depending on the usage and fire flow need of the tenant in Parcel 3. Existing fire hydrants are present around the project boundary. Additional hydrants may be conditioned based upon the site layout at the time of site plan review.

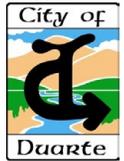
Fire flow requirements are based upon building size and building construction type. The latest fire regulations require all buildings to be equipped with a fire sprinkler system, including residential homes sites. Fire flow requirements that were previously provided for the existing structures may increase due to new regulations. Site plans will be submitted to the fire authority in order to obtain a fire flow requirement based upon the tenant type, building size, and building type. The fire authority also determines the flow and time period requirements based upon building and tenant type.

### 3.2.2 Sanitary Sewer Service

Sanitary sewer services within the City are provided by the Los Angeles County Department of Public Works. Local sewer lines within Duarte are owned by the City. The Los Angeles County Department of Public Works (LACDPW) operates and maintains Duarte's local wastewater conveyance infrastructure, which connects to the County Sanitation Districts of Los Angeles County (CSDLAC) regional trunk sewer lines. Wastewater is conveyed through the CSDLAC's trunk sewer pipelines to the San Jose Creek Water Reclamation Plant (SJCWRP), located at 1965 Workman Mill Road in unincorporated Los Angeles County (adjacent to the City of Industry), and the Whittier Narrows Water Reclamation Plant (WNWRP), located at 301 North Rosemead Boulevard in the City of South El Monte. New developments are reviewed by the City of Duarte and the LACDPW, at which time an "area study" is conducted to determine the available capacity of local sewer lines that would serve the specific project

The Specific Plan area gradually slopes from northeast to southwest with elevations of the site ranging from 496 to 479-feet. The following sewer pipelines exist adjacent to the Specific Plan area:

- An 8-inch VCP sewer occurs along Evergreen Street (formerly Central Avenue). A minimum slope of 0.4% is noted as the sewer slopes in the direction from east to west from Highland Avenue to Glenford Avenue.



**LEGEND :**

- EXISTING WATER LINE
- PROPOSED WATER LINE

**LAND USE :**

- STATION PLAZA MIXED USE
- MIXED USE
- HIGH DENSITY RESIDENTIAL
- OPEN SPACE
- - - PERMISSIBLE RETAIL EDGE

**P** ALTERNATIVE SHARED PARKING LOCATIONS BETWEEN OFFICE AND GOLDLINE STATION

Source: DAHLIN group, 5-13



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The 8-inch sewer along Evergreen Avenue receives flows from the north via an 8-inch line. The sewer along Evergreen Avenue continues south along Glenford Avenue.

- An 8-inch VCP sewer within Business Center Drive slopes from east to west. It picks up lines from the north along Denning Avenue, Glenford Avenue, and Fairdale Avenue. It has a minimum slope of 0.64%.
- A 12-inch sewer exists along Highland Avenue which is the easterly boundary street of the site. The sewer along Highland appears to receive flows from the easterly development along Business Center Drive and from the north, across the 210 freeway. The sewer grade of the 12-inch sewer is 0.6%. The 12-inch sewer along Highland Avenue continues south to the trunk sewer in Duarte Road where it flows westerly at a grade of 1.208%. The sewer along Duarte Road is on the south side of the proposed Gold Line tracks.

Sewer from the project area could be transferred to any number of sewer pipelines that surround the project. A preliminary sewer plan is outlined in Figure 3-5, *Sewer Plan*; refined sewer layouts would be submitted as part of site plan submittals for individual development projects.

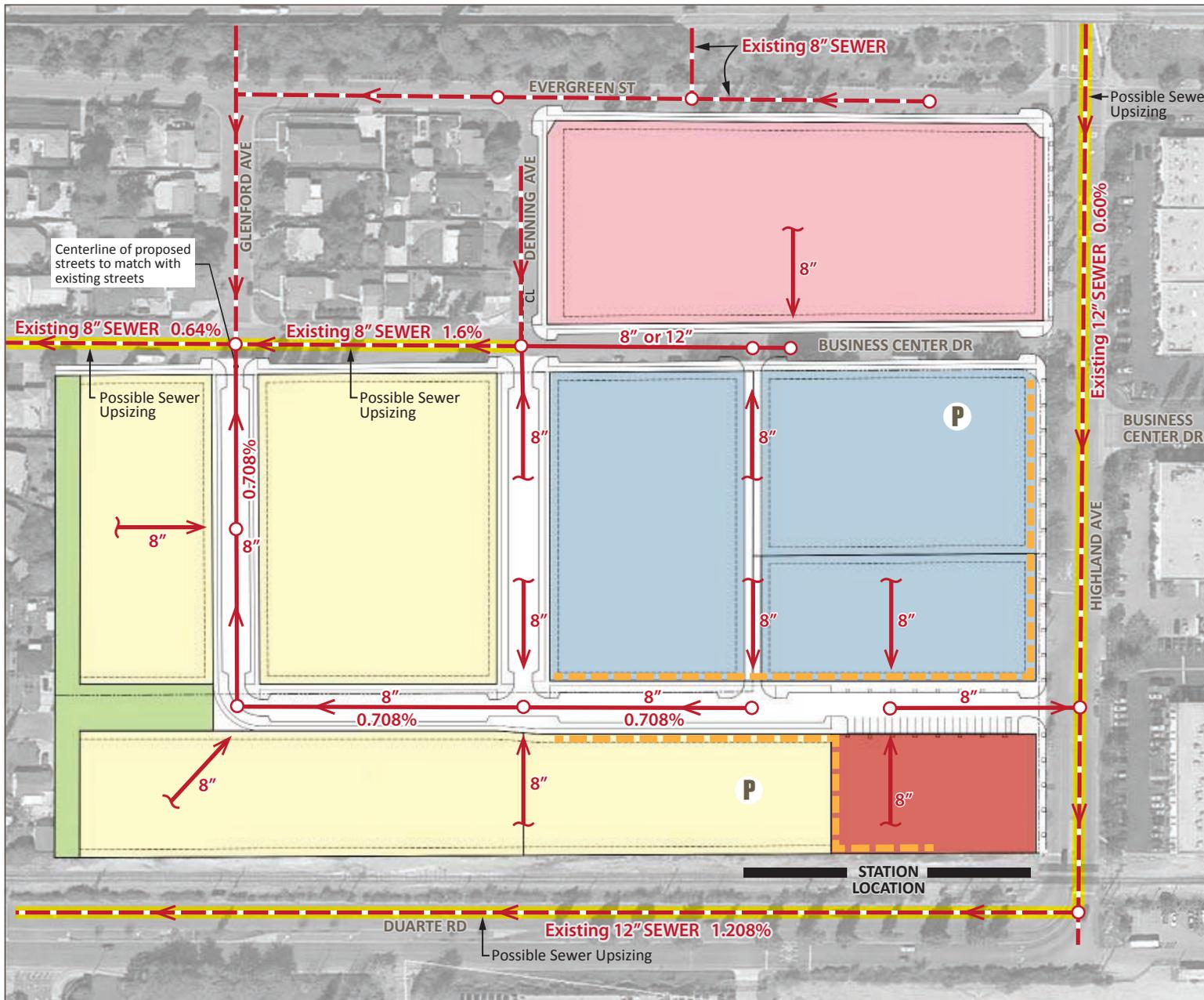
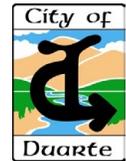
All new developments within the Specific Plan area would be reviewed on a project-by-project basis by the City of Duarte to determine if local sewer lines have sufficient capacity to accommodate effluent from new development. The City may

charge new developments a fee to upgrade or extend local sewer lines, which would be necessary to accommodate new developments. In addition, the LACDPW reviews new developments and assesses fees based on the maintenance of local sewer lines, which would be necessary to accommodate the specific project.

### 3.2.3 Drainage Plan

Currently, no storm drains are present within the perimeter streets on the project boundaries. Development in the local vicinity drains via surface flow to an existing 30-inch storm drain which traverses the site. Los Angeles County Flood Control District has an easement for the existing storm drain. The drainage for the overall site in the existing condition is surface runoff flowing in a southwesterly direction, it enters an above ground swale in the parking area of the southern building, collects through drainage grates in the swale and then outlets into an existing 30-inch storm drain pipe which currently traverses the property from the east (Highland Ave) towards 3 Ranch Road, the residential local road on the west side of the site. The project is located in Zone X as shown on Flood Insurance Rate Map (FIRM) and thus is not within a flood plain.

The proposed drainage plan (see Figure 3-6, *Drainage Plan*) shows the anticipated drainage system for the project. Stormwater flows will be conveyed in existing and proposed streets towards the existing 30-inch storm drain. Hydrology analysis prepared for the project's Environmental Impact Report indicate that stormwater quantities in the proposed



**LEGEND :**

- EXISTING SEWER LINE
- PROPOSED SEWER LINE

**LAND USE :**

- STATION PLAZA MIXED USE
- MIXED USE
- HIGH DENSITY RESIDENTIAL
- OPEN SPACE
- PERMISSIBLE RETAIL EDGE
- P** ALTERNATIVE SHARED PARKING LOCATIONS BETWEEN OFFICE AND GOLDLINE STATION

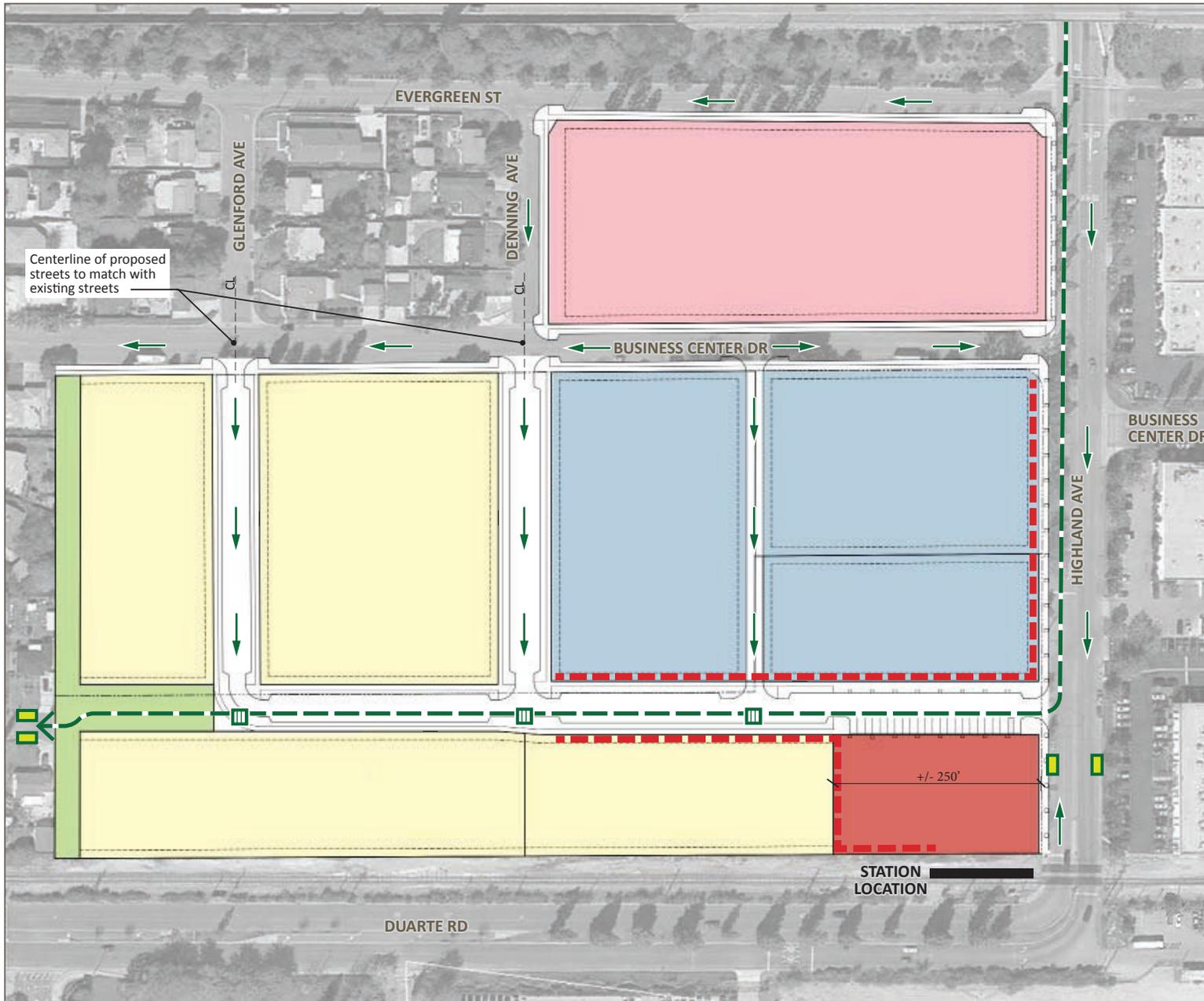
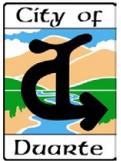
Source; DAHLIN group, 5-13



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**DUARTE STATION SPECIFIC PLAN  
Sewer Plan**

**FIGURE 3-5**



**LAND USE :**

-  EXISTING CATCH BASIN
-  EXISTING 24" RCP STORM DRAIN
-  GRATE DRAINS
-  DIRECTION OF FLOW

Source: DAHLIN group, 5-13



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DUARTE STATION SPECIFIC PLAN  
**Drainage Plan**

FIGURE 3-6

build-out condition will be similar to existing quantities and therefore no significant drainage facilities must be constructed.

### WATER QUALITY

The project is required to comply with the urban runoff pollution control provisions of Chapter 6.15 of the City's Municipal Code, which regulates the treatment of stormwater runoff from development projects. A preliminary water quality assessment has been prepared for the project as part of the EIR hydrology technical study and identifies pollutant sources associated with the proposed development that may affect the quality of discharges of stormwater from the site. The following is a menu of Best Management Practices for the project, which would be refined for each phase via a Final Water Quality Management Plan/SUSMP or equivalent document to incorporate project-specific Best Management Practices as part of site plan review:

- Bioretention
- Rainfall Harvest and Use (e.g. cisterns, rain barrels, planter areas, permeable surfaces, drywells, French drains, etc.)
- Vegetated Swales
- Vegetated Filter Strips
- Green Roofs
- Infiltration Trenches
- Media Filtration
- Porous Pavement (required)

- Permeable Surfaces (e.g. porous concrete/asphalt, block pavers, open cell concrete, reinforced turf, etc.)
- Other BMPs that may be approved by the City of Duarte or the county-wide program in the future to address the 2012 NPDES Permit requirements

### 3.2.4 Grading

The existing site is generally flat in nature, gradually sloping from northeast to southwest with elevations of the site ranging from 496 to 479-feet. On-site parking lots are designed for positive drainage, sloping to parking lot area drains. No natural slopes or landforms are present.

Due to the flat nature of the site, grading for the new development will be minor and will consist of demolition of the existing asphalt parking areas, precise grading of the site of planned structures (which will be detailed at the site plan level of plan review once final architecture and site work has been designed), and placement of foundations for proposed new structures. Because of the flat nature of the site, no significant import or export of soil is expected to occur as part of site development. Prior to issuance of a building permit for any of the proposed structures, a site plan approval will be required, including a precise grading plan based on final architectural design.

### 3.2.5 Public Services

#### SCHOOLS

The Specific Plan area is within the Duarte Unified School District. Duarte High School and Northview Intermediate School are located in close proximity to the Specific Plan area. School fees will be paid at the time of building permit.

#### FIRE

Fire protection services are provided to the City by the County of Los Angeles Fire Department (LACFD). LACFD is divided into 22 Battalions, each serving a territory or multiple cities in Los Angeles County. Battalion 16 provides service to Duarte, Covina, Baldwin Park, and Azusa. The Battalion operates out of eight fire stations located within this service area. Fire Station #44 is located at 1105 S. Highland Avenue, in Duarte, less than ½ miles from the Specific Plan area.

#### POLICE

Police protection services are provided to the City by the County of Los Angeles Sheriff's Department. The Department has a satellite station located at 1042 Huntington Drive, located approximately ¾ miles from the Specific Plan area.

#### LIBRARY

The Duarte Library is operated by the County of Los Angeles Public Library System. The Duarte Library is located at 1301 Buena Vista Street, about ½ miles from the Specific Plan area.

#### SOLID WASTE

Residential and Commercial solid waste disposal is provided through a contract with Burrtec Waste Services. The City is divided into several zones that designate when solid waste is collected during various weekdays. Burrtec provides all residential and commercial customers with containers for solid waste to be picked up.

#### CABLE, INTERNET, TELEPHONE

Cable television service is provided by Charter Communications. Charter Communications also offers internet and telephone service. Telephone is also available to Duarte residents through Verizon, which also offers cable and internet services in some areas. It is anticipated that one (or both) of these providers would provide cable, internet, and telephone service to the Specific Plan area.

#### NATURAL GAS AND ELECTRICITY

Natural Gas is provided to the City of Duarte by the Southern California Gas Company. Electricity is provided to the City of Duarte by Southern California Edison. Both of these purveyors would provide natural gas and electricity to the Specific Plan area. Both natural gas and electric service is currently available on adjacent streets and are presently extended into the site.

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