

6

UTILITIES & PUBLIC SERVICES

Public utilities and community services will need to be expanded to support development in the Hillcrest Station Area. A strong framework of infrastructure, utilities, and amenities is critical to the development of the Area. This chapter describes the infrastructure needed to efficiently integrate new development with the services already provided by the City of Antioch. It establishes the policies and describes the improvement projects necessary for upgrading and expanding public facilities, including:

- Municipal utilities, such as storm drainage, sanitary sewer, potable water, and waste disposal;
- Community services provided by public agencies, such as schools, public safety facilities, and community centers.

This chapter includes policies to reduce the demand placed on utility systems, thereby promoting environmental and economic sustainability. Private utilities, such as electrical transmission and distribution, are also discussed.

Circulation improvements, parks and trail improvements, and public space design policies are defined in Chapter 3, Plan Framework, and Chapter 4, Urban Design.

Utilities and Public Services Principles

- Meet or exceed City standards by providing high-quality, efficient public utilities services and facilities to serve the Hillcrest Station Area.
- Encourage sustainable building practices, operations, and maintenance.
- Partner with private utility providers to limit disruptions to existing systems, and ensure comprehensive utility service for all future development.
- Partner with the Antioch Unified School District to ensure that elementary, junior, and high school facilities are available to serve Station Area residents without causing overcrowding in existing schools.
- Ensure that adequate emergency services facilities and staffing are in place to serve new residents and employees.
- Design new development and public spaces with consideration for public safety.

6.1 PUBLIC UTILITIES

Flooding and Stormwater Management

Flood Hazard Zones

Regional flooding hazards, as evaluated by the Federal Emergency Management Agency (FEMA), are presented in community Flood Insurance Rate Maps (FIRMs) as part of the flood hazard mapping program. The FIRMS indicate that portions of the Station Area are subject to inundation during a 100-year flood event (a storm with a likelihood of occurring every 100 years). The 100-year flood hazard zone is generally located along East Antioch Creek, the delineated wetland complex, and the detention basins. There are also small areas near the detention basins that have been mapped as part of the 500-year flood hazard zone. Figure 6-1 shows Flood Hazard Zones in the Station Area.

The policies of the Antioch General Plan and Municipal Code limit development within the 100-year flood hazard zones, minimize encroachment along floodways, and establish development standards required for permitted uses in flood hazard areas. However, it is anticipated that some areas of the 100-year flood hazard zone, north of East Antioch Creek and east of Phillips Lane, will be graded and filled.

Detention Basins

Drainage facilities in the Planning Area are under the jurisdiction of the City of Antioch and Contra Costa County Flood Control and Water Conservation District (FCD). The FCD is responsible for Drainage Area 56 which includes the Oakley and Trembath Detention Basins, as well as the Lindsey Detention Basin located southeast of the Planning Area along East Antioch Creek. Generally, the FCD purchases the land needed for detention basins, makes the improvements, and then works with the City to operate and manage the basins.

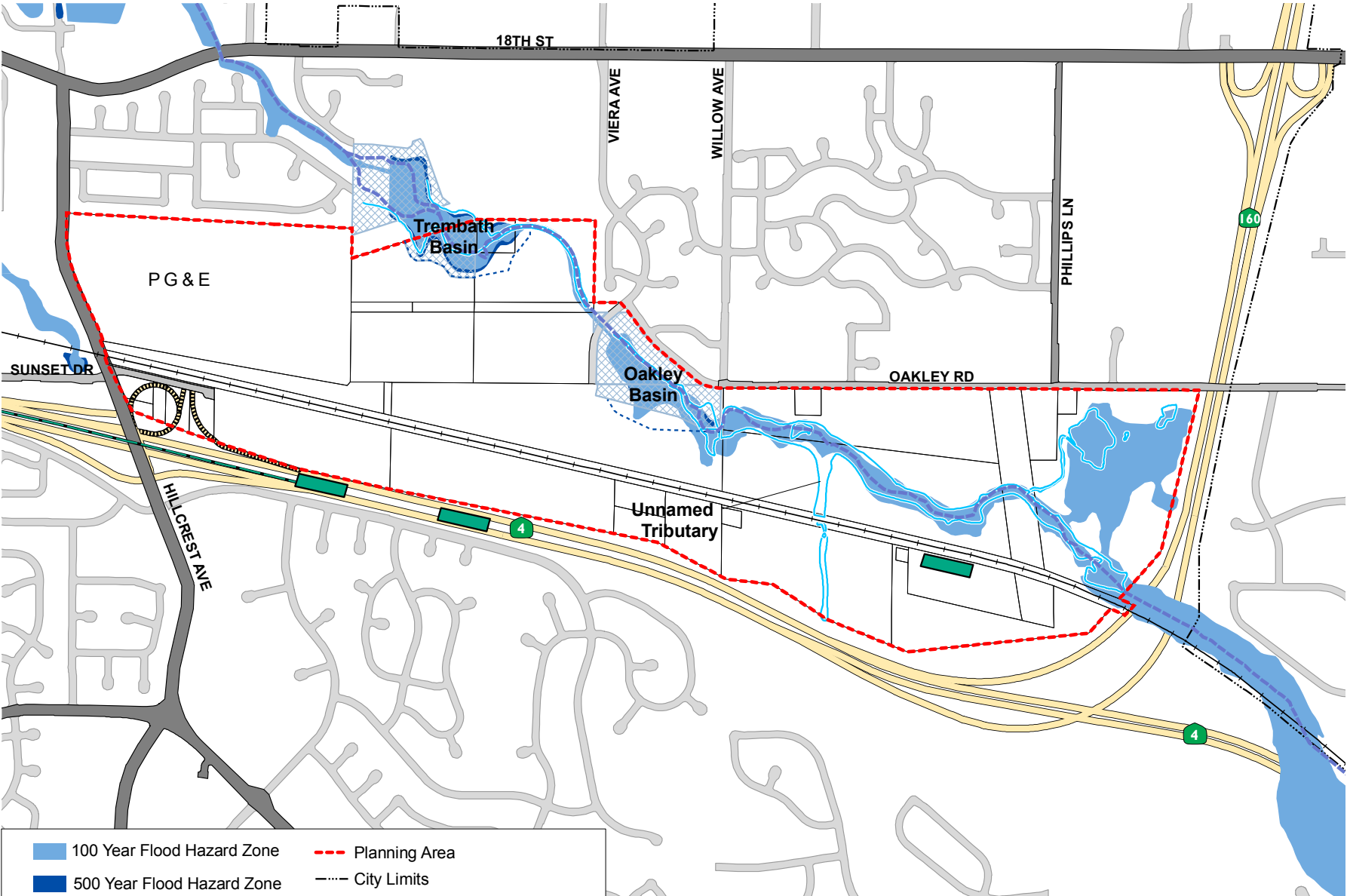
The Oakley and Trembath detention basins provide flood protection for the portions of the City of Antioch within the East Antioch Creek Watershed, including the Station Area. Since 1982, the FCD has planned to expand Oakley Basin and Trembath Basin to accommodate increased storm flows from new development, increase flood storage, and control downstream flooding. The first phase of the Basin Expansion Project was constructed in 1986. Since then, FCD has secured the funding necessary for the next phase through Drainage Area 56 development fees. The next phase of expansion improvements are expected to be implemented in 2010-2011.

Oakley Basin was built to serve development in the City of Oakley and has a storage capacity of 50 acre-feet. The City of Antioch owns a portion of the existing basin. The FCD has plans to expand the basin to approximately 70 acre-feet storage capacity, which would place the dam at Oakley Basin under the jurisdiction of the California Department of Water Resources Division of Safety of Dams (DSOD). The dam would be retrofitted to meet current state standards.

The storage capacity of Trembath Basin is designed for 100 acre-feet. The district plans to use the soil excavated from the Oakley Basin to build a dam at the western edge of Trembath Basin. The 14-foot high embankment dam would better control flow released to Lake Alhambra. With the improvements in place, the two basins will have a combined storage capacity to accommodate the 100-year flood event. Funding for these drainage improvements has been secured. FCD plans to acquire temporary or permanent rights-of-way to accommodate elevated floodwaters during the final design process.

The planned improvements to the basins were designed to accommodate runoff from the Station Area. However, the land use assumptions that were used to plan these improvements must be compared to the land uses and densities proposed in the Specific Plan. Additional detention may be required, which may be accommodated by the additional expansion of the existing basins and/or implementation of smaller, auxiliary basins within future development.

Figure 6-1: Flood Hazard Zones

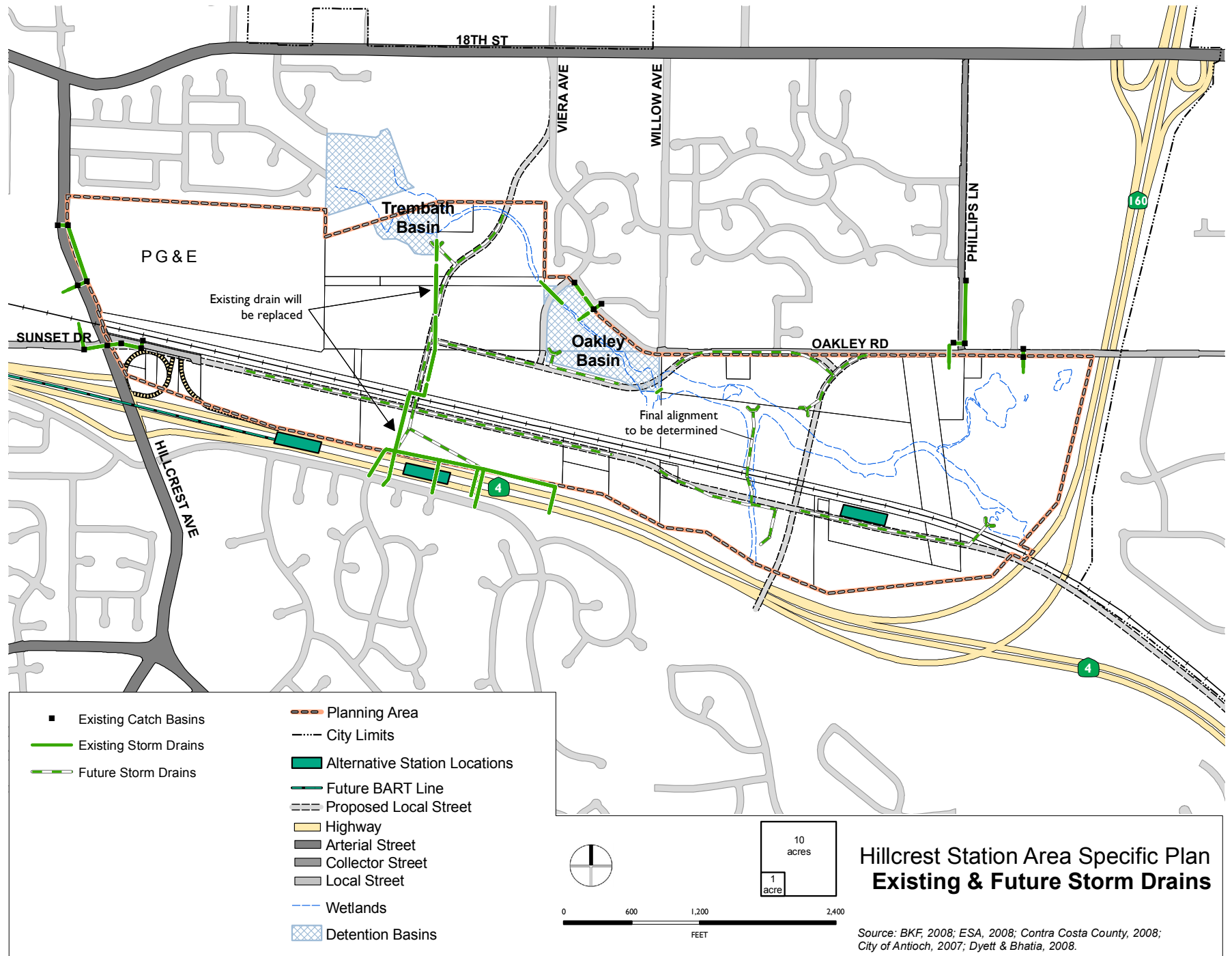


100 Year Flood Hazard Zone	Planning Area
500 Year Flood Hazard Zone	City Limits
Detention Basins	Alternative Station Locations
Proposed Detention Basin Expansion	Future BART Line
Delineated Wetland Complex	Highway
East Antioch Creek	Arterial Street
	Collector Street
	Local Street

**Hillcrest Station Area Specific Plan
Flood Hazard Zones**

Source: ESA, 2008; Contra Costa County, 2008; City of Antioch, 2007; Dyett & Bhatia, 2008.

Figure 6-2: Existing and Future Storm Drains



**Hillcrest Station Area Specific Plan
Existing & Future Storm Drains**

Source: BKF, 2008; ESA, 2008; Contra Costa County, 2008; City of Antioch, 2007; Dyett & Bhatia, 2008.

Storm Drainage

The City of Antioch maintains the necessary storm drainage systems that handle stormwater runoff. Drainage infrastructure is financed through a variable drainage area flood control improvement fee on new development. At this time, very little storm drainage infrastructure is in place in the Station Area. A large storm drain line carries collected runoff from south of SR 4 to Trembath Basin. Catch basins are located near the intersections of Sunset Drive and Hillcrest Avenue, Phillips Lane and Oakley Road, and Viera Avenue and Brazil Drive.

Stormwater runoff is expected to significantly increase as the Station Area develops. Many areas that are now vacant soil will be covered with buildings and paving. New trunk mains will be located along the backbone street alignments and discharged into East Antioch Creek, as illustrated in Figure 6-2, Existing and Future Storm Drains. The following Specific Plan policies require a Drainage and Flood Management Master Plan for the Hillcrest Station Area. Policies related to stormwater quality are contained in Chapter 5, Environmental Protection and Hazard Mitigation.

Stormwater Management Policies

- UT-1** Prior to approval of any land subdivisions or development projects within the Hillcrest Station Area, a Drainage and Flood Management Master Plan shall be prepared in collaboration with Contra Costa County Flood Control and Water Conservation District, the City of Antioch Public Works Department, the City of Antioch Planning Department, and the City of Antioch Parks and Recreation Department. The Plan shall:
 - Document the overall drainage and flood control concept to be employed within the Hillcrest Station Area to ensure adequate and safe storm flows and to minimize flooding;
 - Address funding and responsibility for long-term maintenance of the flood control improvements;
 - Demonstrate how the natural hydrologic functions of the site are integrated with the storm drainage system and the overall site design, to the maximum extent feasible; and,
 - Identify how improvements can be phased for each development area.
- UT-2** Continue the Contra Costa County Flood Control and Water Conservation District Drainage Area Fee Program to fund flood control improvements in the Hillcrest Station Area.
- UT-3** Ensure that new development provides needed drainage and flood protection improvements in proportion to a project's impacts, to assure an equitable distribution of costs to construct and maintain drainage infrastructure. Construct new trunk mains along the backbone street alignments and provide connections into East Antioch Creek, as shown conceptually in Figure 6-2, Existing and Future Storm Drains.
- UT-4** Minimize total impervious areas by allowing narrow road sections and shared driveways, and using pervious materials on driveways, gutters, and off-street parking areas, where appropriate.

Potable Water

Water Supply and Demand

Potable water supply for the Hillcrest Station Area is provided by the City of Antioch through its municipal water system. The City currently purchases surface water primarily from the San Joaquin River and the Delta from Contra Costa Water District (CCWD). The Contra Costa Water District has a water supply contract through 2045 with the U.S. Bureau of Reclamation for water from the Central Valley Project, and is prepared to sell the City all its projected water needs through year 2028, unless constrained by drought conditions. The total available water supply for the City of Antioch is projected to be 49,140 acre feet per year in 2025. This is almost double the projected water demand for the whole City, as analyzed in the 2006 Urban Water Management Plan. Thus the City will have an adequate water supply during normal, single dry years, and multiple dry years. A Water Supply Assessment for the Hillcrest Station Area will be completed to confirm this. However, the anticipated water demand from the Station Area will not cause the City's total demand to exceed the total available supply. Nor will it require that the water treatment plant capacity be increased more than the existing plans.

Water Treatment and Distribution System

The City of Antioch operates a water treatment, storage, and distribution system which serves the entire City. Raw water is stored in the Municipal Reservoir (735 acre foot capacity), located adjacent to the Lone Tree Golf Course, and then treated at the Antioch Water Treatment Plant (WTP), located on Putnam Street. The WTP currently has a maximum capacity of 38 mgd and there is room to expand it to 48 mgd; and thus has adequate capacity to serve new development in the Station Area. The Antioch Water Treatment Plant (WTP) produces high-quality drinking water that meets all state and federal primary and secondary standards.

After treatment, water is transmitted through a distribution system of 4 to 30 inch pipelines throughout the City. The majority of the Station Area is in

Pressure Zone II, though the southeastern portion of the site is in Pressure Zone III East. Due to the limited development in the Station Area, few water mains have been installed. The existing lines include Oakley Road (12-inch diameter), Honeynut Street (8-inch diameter), Willow Avenue (8- to 16-inch diameter), Willow Avenue/Oakley Road/Viera Avenue (16-inch diameter), Hillcrest Avenue (20-inch diameter), and Sunset Drive (8-inch diameter). In addition, there are a few pipelines (8 to 16-inch diameters) which are not built within the road improvements, but serve the existing housing units near the south end of Willow Avenue.

Water lines will be installed as required to serve new development in the Hillcrest Station Area as conceptually shown in Figure 6-3, Existing and Future Water System. The 16-inch waterline that extends from Willow Avenue/Oakley Road/Viera Avenue will be relocated. An additional 16-inch line will be built to connect this line to the one in Hillcrest Avenue. Final sizing of all water lines will be based on updated demand models that reflect the proposed development and corresponding fire and domestic water demands.

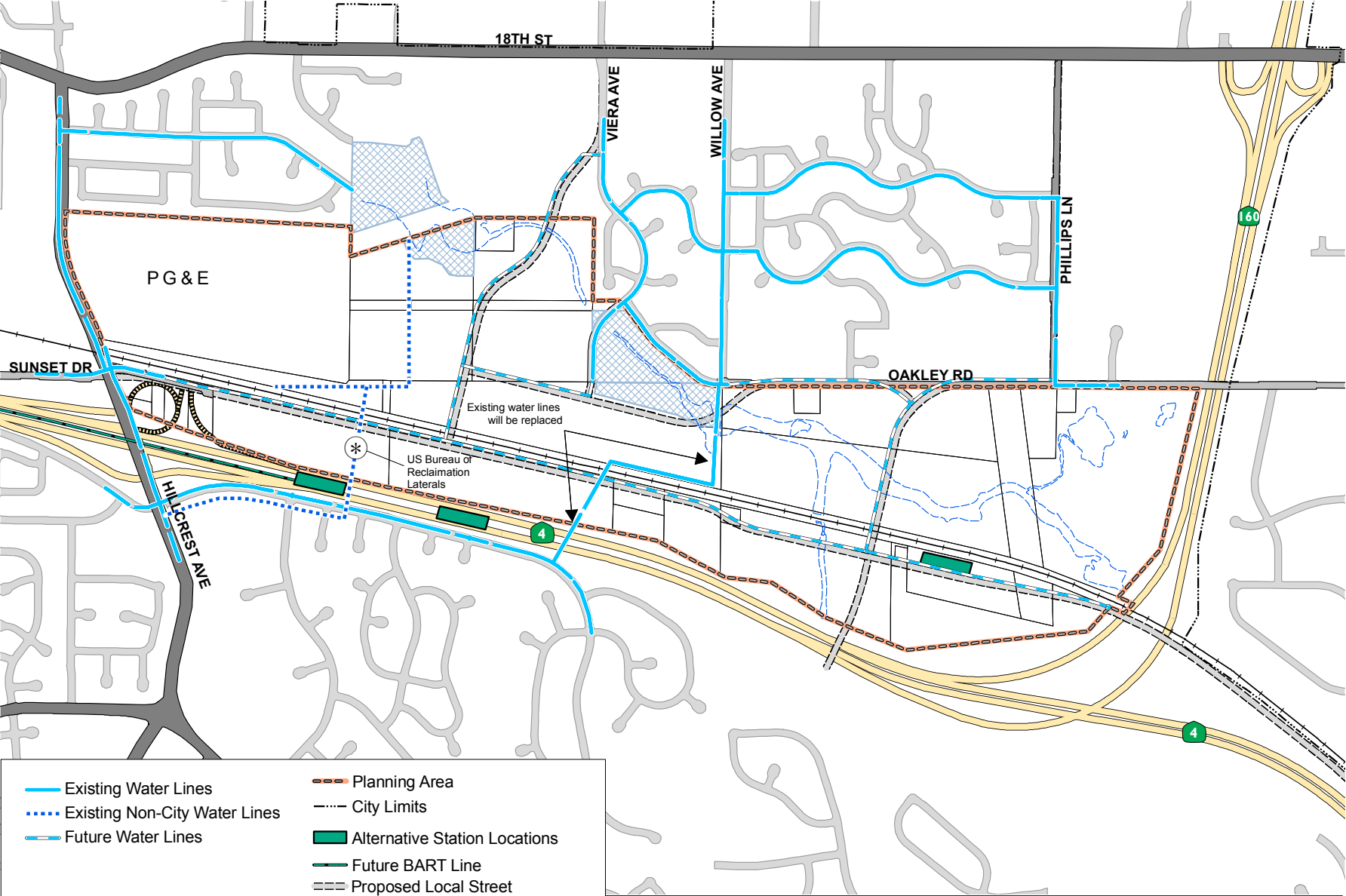
Potable Water Policies

- UT-5** Expand the water distribution system such that it is adequate to serve new development in the Hillcrest Station Area, as conceptually illustrated in Figure 6-3, Existing and Future Water System.
- UT-6** Work with the Contra Costa County Fire Protection District to determine required fire flow and the need for water pressure boosting systems.

Water Conservation Policies

- UT-7** To reduce water consumption, require the installation of:
 - Low-flow showerheads, faucets, and toilets;
 - Low-flow irrigation systems in public rights-of-way, public parks, and recreation areas; and,
 - Drought-tolerant plant palettes in all new streetscape areas.
- UT-8** To reduce water consumption, recommend the installation of:
 - Low-flow irrigation systems in private landscaped areas; and
 - Drought-tolerant plant palettes in private landscaped areas.

Figure 6-3: Existing and Future Water System



	Existing Water Lines		Planning Area
	Existing Non-City Water Lines		City Limits
	Future Water Lines		Alternative Station Locations
			Future BART Line
			Proposed Local Street
			Highway
			Arterial Street
			Collector Street
			Local Street
			Wetlands
			Detention Basins

0 600 1,200 2,400
FEET

10
acres

1
acre

**Hillcrest Station Area Specific Plan
Existing & Future Water System**

Source: BKF, 2008; ESA, 2008; Contra Costa County, 2008; City of Antioch, 2007; Dyett & Bhatia, 2008.

Sanitary Sewer and Wastewater Management

Wastewater Collection System

The City is responsible for collection of wastewater and maintenance of local sanitary sewer lines. The main outfall sewer line serving the Station Area ends at the intersection of Oakley Avenue and Willow Avenue. This line serves the northerly and central sections of the City and flows to the Fulton Shipyard (Antioch) pump station. There is an 8-inch wastewater line located in Sunset Drive at the southwesterly corner of the project site and southerly of the Union Pacific Railroad tracks. At the easterly edge of the project site, there is a 33-inch wastewater line located adjacent to the Highway 4 right-of-way. The wastewater line serves the southern part of the City and the line flows from the southeast, crosses the Union Pacific Railroad right-of-way, continues along SR 4, crosses Oakley Road and continues north to the Bridgehead pump station. The 2003 Wastewater Collection System Master Plan recommended that 3,567 feet of this pipeline starting at the Union Pacific Railroad north to East 18th Street be upgraded to help serve development in the southern part of the City. New development within the Hillcrest Station Area will have new public wastewater mains constructed in the public streets that connect to the existing system, as conceptually illustrated in Figure 6-4, Existing and Future Sewer System.

Treatment and Discharge

Delta Diablo Sanitation District (DDSD) provides sewer treatment service to Antioch, as well as to Pittsburg and Bay Point. The Delta Diablo Sanitation District is also responsible for conveyance of wastewater from City pipelines to interceptor sewers, which convey the sewage to the Bridgehead and Fulton Shipyard (Antioch) pump stations. The wastewater is treated at the DDSD Water Pollution Control Facility (WPCF), located near the border of Antioch and Pittsburg.

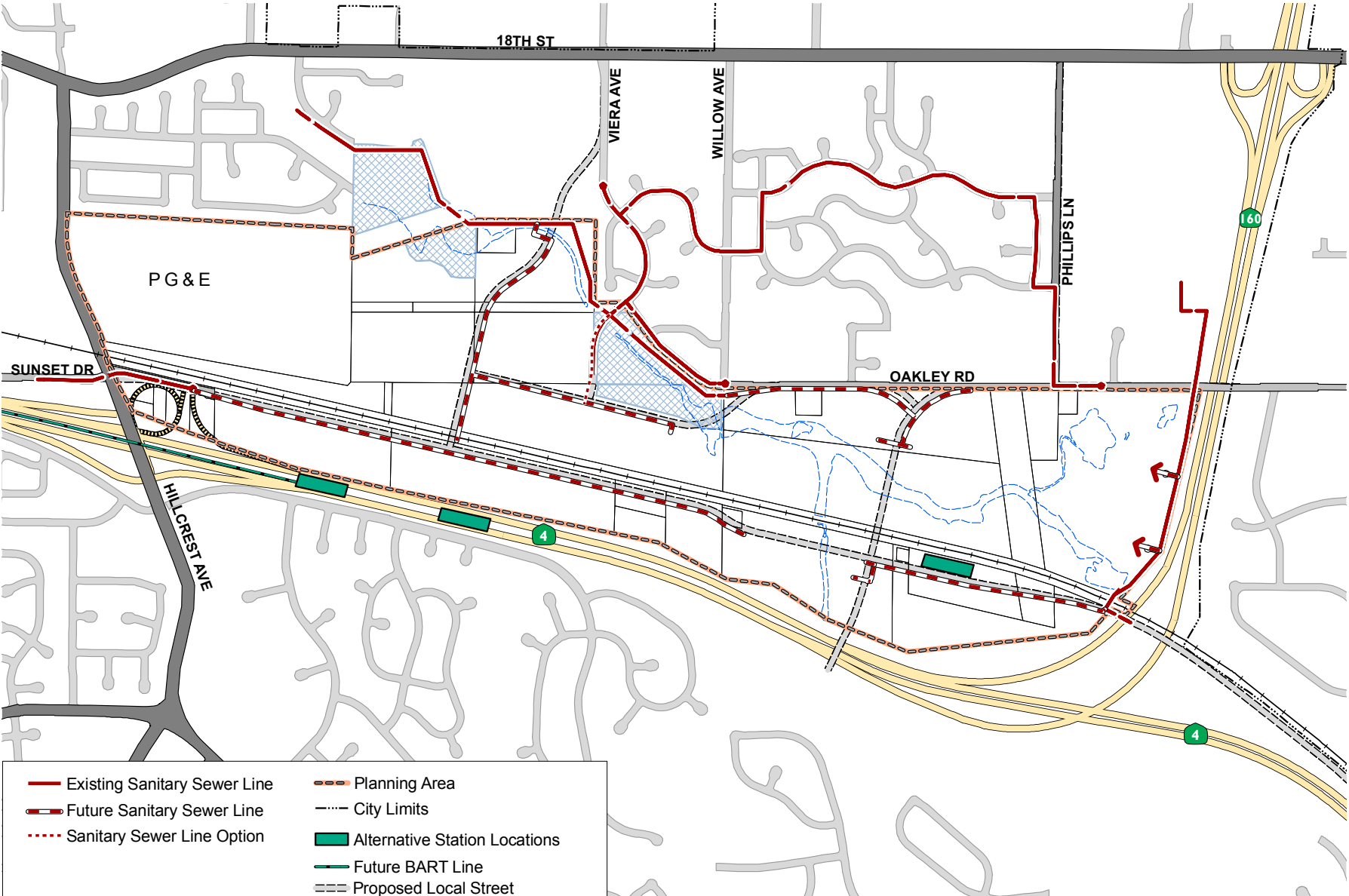
DDSD is currently planning WPCF improvements to increase the capacity from 16.5 mgd to approximately 18.0 mgd. New capacity should be operational in March 2010. Capacity improvements are constructed gradually as demand increases, based on the District's master plan. In 2020, DDSD anticipates increasing capacity to 22.5 mgd, and after 2030, capacity is expected to be 24.0 mgd. (Delta Diablo Sanitation District, 2007) Revenues for expansion projects come from Capital Facility Capacity Charges. The fees were evaluated in fiscal year 2005-2006, and new fees were established in 2007.

Based on per capita projections and the water conservation programs in place in 2003, it is estimated that average annual flows will increase to 24.0 mgd by 2025. (City of Antioch, 2006) This amount is consistent with the planned WPCF capacity improvements to handle 24.0 mgd by 2030. The full capacity may need to be provided sooner, depending on the actual timing of new growth. The Antioch General Plan performance standards require that prior to approval of discretionary development projects, the City must receive written verification from the DDSD that the proposed project will not cause the rated capacity of treatment facilities to be exceeded during normal or peak flows.

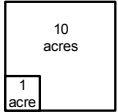
Wastewater Management Policies

- UT-9** Expand the wastewater collection system such that it is adequate to serve new development in the Hillcrest Station Area, as conceptually illustrated in Figure 6-4, Existing and Future Sewer System. The 2003 Wastewater Collection System Master Plan identifies the sewer main on the eastern edge of the Planning Area between the Union Pacific Railroad tracks and East 18th as needing substantial additional capacity.
- UT-10** Amend sewer fees and/or other financing mechanisms if necessary such that Hillcrest Station Area project sponsors pay their fair share of the costs for sewer main improvements.

Figure 6-4: Existing and Future Sewer System



Existing Sanitary Sewer Line	Planning Area
Future Sanitary Sewer Line	City Limits
Sanitary Sewer Line Option	Alternative Station Locations
	Future BART Line
	Proposed Local Street
	Highway
	Arterial Street
	Collector Street
	Local Street
	Wetlands
	Detention Basins



**Hillcrest Station Area Specific Plan
Existing & Future Sewer System**

Source: BKF, 2008; ESA, 2008; Contra Costa County, 2008; City of Antioch, 2007; Dyett & Bhatia, 2008.

Solid Waste Management

Pleasant Hill Bayshore Disposal currently provides solid waste collection, disposal, recycling, and yard waste services to the City through a franchise agreement. Solid waste and recyclables from Antioch are taken to the Contra Costa Transfer and Recovery Station located in Martinez, where recyclables are separated out and stored before shipment to recycling markets. Solid waste is transferred from the transfer station to the Keller Canyon Landfill in Pittsburg. The operators of the landfill estimate its life span to be beyond 2060, even accounting for expected growth throughout Contra Costa County. Household hazardous waste is collected by the Delta Diablo Sanitation District.

Implementation of the following policies will help ensure the efficient use of resources, reduce greenhouse gas emissions, and reduce the amount of solid waste that must be landfilled.

Solid Waste Management Policies

- UT-11** All new development shall participate in all solid waste source reduction and diversion programs in effect at the time of the issuance of building permits.
- UT-12** All projects in the Hillcrest Station Area shall comply with the City's Construction and Demolition Debris recycling regulations by preparing a Waste Management Plan and diverting at least 50 percent of all construction and demolition debris.
- UT-13** Restaurants should use on-site composting systems if a food waste recycling program is not available.
- UT-14** Trees, stumps, vegetation, and soils associated with excavation and land clearing shall be composted, recycled, or reused, except when soils may be contaminated with hazardous materials, or where other conditions make this infeasible as determined by the City.

6.2 NON-MUNICIPAL UTILITIES

Numerous utility-owned parcels and service corridor easements are located within the Hillcrest Station Area, including water lines, natural gas and oil transport pipes, and electricity transmission and distribution lines and towers.

Water Pipelines

In addition to the municipal water system pipelines, there are three water pipelines that the Contra Costa Water District maintains on behalf of the United States Bureau of Reclamation within the Planning Area. Lateral 9.1 crosses from north to south in the western portion of the Station Area. Lateral 9.1-1 connects to lateral 9.1 along the southern edge of the PG&E substation parcel. Lateral 7.3 is parallel with Oakley Road and Phillips Lane at the northeastern edge of the Station Area. Any impacts to these laterals will require NEPA (National Environmental Policy Act) review and Reclamation approval. See Figure 6-3.

Natural Gas and Electricity

Pacific Gas & Electric provides electricity and natural gas to the Station Area. PG&E does not foresee any issues meeting the gas and electricity needs for the development area.

In addition to the existing electrical substation in the northwest quadrant of the Station Area, PG&E electrical transmission and distribution lines crisscross the area as shown in Figure 6-5, Existing and Relocated Electrical Lines. Three sets of large towers (between 80 and 100 feet tall) support 230 kV lines; two sets run approximately north-south at both the east and west ends of the Station Area; and a third set runs east-west from the substation at the northern edge of the Station Area. PG&E maintains a 175-foot easement on parcel APN: 052-030018 for the western line. PG&E owns the 175-foot right-of-way parcel for the east-west line. PG&E also owns a 200-foot wide parcel for the eastern set of lines and towers. This

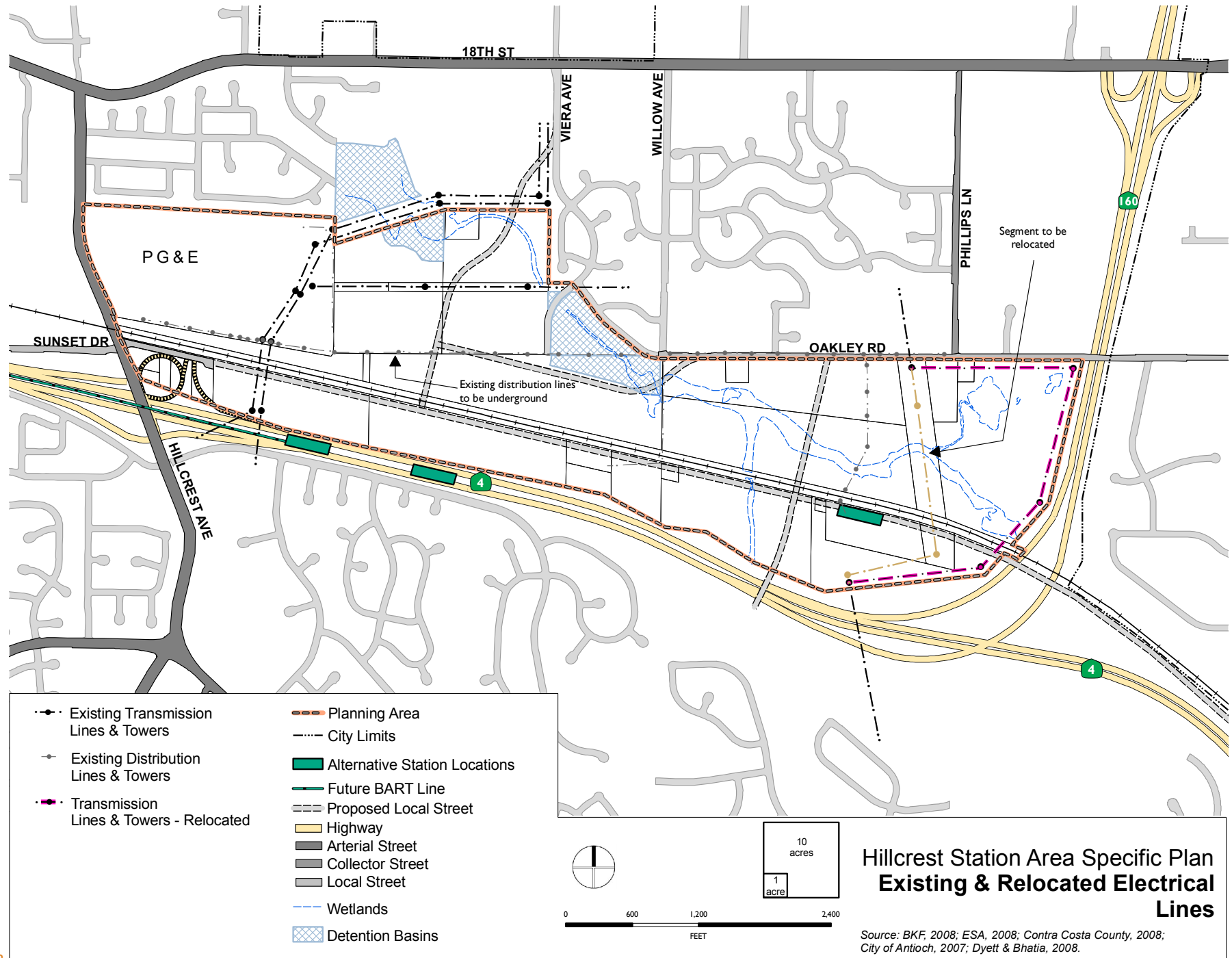
right-of-way has been planned for an additional line in the future. This set of lines may be relocated along the SR 4/SR 160 right-of-way to allow more cohesive development opportunities in the future, as conceptually illustrated in Figure 6-5.

Distribution lines, typically 12 and 21 kV, extend east-west near Oakley Road, across Oakley Detention Basin to the substation. Another set of distribution lines extend north-south from Oakley Road to the PDQ Products property. It is the City's policy to underground utility lines where feasible. PG&E also owns two gas distribution pipelines that run from the Hillcrest Substation along the northwestern border of the Station Area under the electricity transmission towers and line.

Telecommunications

The City of Antioch's Economic Development goals and strategies recognize the importance of telecommunications infrastructure as part of a positive business climate and high quality of life. The General Plan policies require the provision of fiber optic networks and other advanced telecommunications in new employment-generating developments, such as the Hillcrest Station Area.

Figure 6-5: Existing and Relocated Electrical Lines



Hillcrest Station Area Specific Plan
Existing & Relocated Electrical Lines

Source: BKF, 2008; ESA, 2008; Contra Costa County, 2008; City of Antioch, 2007; Dyett & Bhatia, 2008.

Non-Municipal Utilities Policies

UT-15 Develop a comprehensive map showing all existing service corridor and utility easements to ensure proper inter-agency coordination prior to issuing any grading permits. Maps should show the location and dimensions of each pipeline within the easement or right-of-way. Coordinate with:

- Chevron to map all active and abandoned petroleum product pipelines;
- PG&E to map all active natural gas pipelines;
- City of Antioch Public Works Department to map all stormwater pipelines;
- Delta Diablo Sanitation District to map all sewer pipelines; and,
- Contra Costa Water District to map all water pipelines.

UT-16 Work with Contra Costa Water District to provide appropriate levels of environmental review, if the U.S. Bureau of Reclamation water laterals will be impacted by proposed development.

UT-17 Work with PG&E to minimize impacts on the natural gas pipelines in and near the Hillcrest Station Area.

UT-18 Coordinate with PG&E to relocate the electricity transmission towers and power lines currently located in the eastern portion of the project site to the eastern edge of the Hillcrest Station Area along SR 4/SR 160, to the extent feasible.

UT-19 Coordinate with PG&E to minimize the impact of the electrical transmission towers and power lines on new development in the western portion of the Station Area.

6.3 PUBLIC SERVICES

Community services and amenities are critical to public safety and the overall quality of life for the residents and employees of the Hillcrest Station Area and the City of Antioch. Facilities for emergency services affect livability and safety. Increasing the population and density of development in the Hillcrest Station Area will likely increase the demand for emergency services. In addition, new residents and employees will create new demand for community facilities such as day care, libraries, and community centers. Securing construction and operational funds for new public facilities will be challenging, and will require commitment, leadership, and perseverance from City officials, stakeholders, and residents. Existing and proposed public services are located on Figure 6-6.

Fire Protection

The Contra Costa County Fire Protection District (CCCFPD) provides fire and emergency services to residents of the City of Antioch and adjacent unincorporated areas, including fire fighting and rescue, fire prevention and training, and emergency medical care. The CCCFPD is the first responder providing supplemental basic life support (BLS) and advanced life support (ALS). Transportation is provided by Emergency Medical Response (AMR), a private ambulance service contracted by the CCCFPD. The District’s current ISO rating is Class 3.

The adopted City standard for fire response is a maximum five-minute response time for 80 percent of emergency fire, medical, and hazardous materials calls on a citywide response area basis. Based on an estimated 30 mile per hour travel speed, the five-minute response time roughly correlates with a 1.5-mile service radius from each station. At this time, there are no fire stations that are able to provide service to the Station Area within the adopted response time standard.

In order for CCCFPD to meet the City standard for service in the Station Area, either significant access and circulation improvements would need to be built and existing fire facilities, equipment, and staffing would have to be upgraded; or a new station would need to be built, in or near the Hillcrest Station Area. CCCFPD will need to conduct an analysis to determine their precise needs to adequately serve the Station Area.

Fire Protection Policies

- UT-20** At the time of any development application, subdivision, or master plan submittal, inform the CCC Fire Protection District, and involve them in the development review process. Prior to approval of any discretionary development project in the area, require written verification from the CCC Fire Protection District that a five minute response time (including three minute running time) can be maintained for 80 percent of emergency fire, medical, and hazardous materials calls on a citywide response area basis.
- UT-21** Project sponsors are required to submit a minimum of three (3) copies of a site plan for each phase of development so that Contra Costa County Fire Protection District is able to determine the placement of fire hydrants, required fire flow, and review of access in order to ensure compliance with minimum requirements as set forth in the California Fire Code.
- UT-22** The City and project sponsors in the Planning Area shall work with the Contra Costa County Fire Protection District to provide a 1-acre building site at a location subject to approval by the Contra Costa County Fire Protection District.
- UT-23** Fire access roadways and fire hydrants shall be installed and in service prior to construction.
- UT-24** Traffic signals, which are installed or modified as part of this Specific Plan, shall have preemption devices (Opticom) installed.

Police Services

The Antioch Police Department (APD) provides crime prevention and law enforcement services within the City’s boundaries. In addition to city police and the California Highway Patrol (CHP), BART has a police department which provides the full range of police services for their transit facilities.

Operating from a central station in Rivertown, the APD maintains a combination of professional sworn officers and non-sworn positions, along with volunteer positions. APD currently meets the current City standard for police services, which is a minimum of 1.2 and a maximum of 1.5 officers per 1,000 residents. The APD also meets the City’s objective to provide average response times to emergency calls of between seven (7) and eight (8) minutes from the time the call is received to the time an officer arrives on scene.

To maintain current levels of service, staffing and equipment will need to be increased as the City’s population grows. To maintain the City’s minimum standard, approximately six new officers will be needed at buildout of the Hillcrest Station Area.

Police Services Policies

- UT-25** Ensure that the Antioch Police Department has adequate police staff and equipment to serve the new development in the Hillcrest Station Area.
- UT-26** As part of new development applications, require a fiscal impacts analysis related to police services. The analysis must either demonstrate that total estimated tax revenues to the General Fund will pay for the total estimated cost of police services, or propose additional funding sources for ongoing police services to the Hillcrest Station Area.
- UT-27** Coordinate with the Antioch Police Department on project site design to increase public safety. Consider lighting and minimizing hiding spots in building and street design.

Schools

Public education for students in the Hillcrest Station Area will be provided by the Antioch Unified School District (AUSD). Students living in the Station Area are likely to attend the following schools:

- Elementary and Middle School: Orchard Park School
- High School:
 - Deer Valley High School
 - Dozier-Libbey Medical High School
 - Delta Academy for Performing Arts

Based on student generation rates used by AUSD to project student enrollment, projected housing development in the Station Area would generate students as shown in Table 6-1:

TABLE 6-1: STUDENT ENROLLMENT PROJECTIONS (2035)	
SCHOOL TYPE	STUDENTS
Elementary	250
Middle	113
High	200

Source: Antioch Unified School District; Dyett and Bhatia, 2008

AUSD anticipates that elementary schools will be at 101% of capacity without any Station Area development. It is likely that 250 new elementary school children from the Station Area would exacerbate the problem and cause overcrowding. This problem is compounded by limited access to other elementary schools south of the Station Area. It is foreseeable that Orchard Park School will need to be expanded or an additional elementary school will be needed to serve northeast Antioch and northwest Oakley. AUSD currently has no plans to expand any existing schools or build new ones; however, the AUSD Facilities Master Plan is currently

being updated. Existing middle and high school facilities are projected to be adequate to serve anticipated need.

Existing General Plan policies, City regulations, and School District policies and fees require that project applicants pay all legally established fees or participate in land-based financing districts for school facilities.

The General Plan policies also highlight the need for higher education facilities in the City of Antioch. Certain higher education uses, such as public and private university satellite campuses and trade schools, often locate near large employment centers in traditional office buildings. The Hillcrest Station Area, where students can conveniently use the eBART and bus transit systems, provides a good location for this type of educational facility.

Schools Policies

- UT-28** Require new development to pay all legally established fees or participate in land-based financing districts established by local school districts for the acquisition and development of school sites with adequate, permanent classroom space, as required by the local school district.
- UT-29** Prior to approval of any development projects or subdivisions that include residential units, the City and project applicants shall work with the Antioch Unified School District to identify any additional elementary school facilities needed to serve students from the Planning Area. If it is determined that students from the project or subdivision will cause the capacity of the elementary school serving the Hillcrest Station Area to be exceeded, the City and the project sponsor shall work with AUSD to provide the additional required facilities prior to occupancy of the residential units.
- UT-30** Promote the recruitment of a public or private university satellite campus or trade school to the Hillcrest Station Area.

Community Facilities

Antioch defines community facilities as buildings needed to support daily operations of the City, as well as other buildings designed for community meetings, indoor recreational and instructional programs, and social activities. Community centers can include space for day care, youth and teen activities, social services, libraries, and senior activities. These types of facilities contribute to neighborhood vitality, support diversity, and strengthen community relationships. The adopted City standard is to maintain a minimum of 750 square feet (sf) of community center space per 1,000 residents.

Childcare is a critical component of today's economy. Childcare services located near employment centers and transit provide important benefits for working families by allowing parents to use transit to commute, and decreasing traffic congestion.

Community Facilities Policies

- UT-31** Provide adequate community center space for new residents, either in development projects or through an in-lieu fee.
 - Community center space must serve all the residents of the City, and be programmed with activities that meet the unmet needs of the Antioch community.
 - Exempt ground floor public community center space from floor area ratio (FAR) limits in mixed-use development projects.
- UT-32** Exempt the floor area devoted to day care and childcare from floor area ratio (FAR) limits in development projects.

Figure 6-6: Existing and Proposed Public Services

