

## 3.3 Visual Quality

### 3.3.1 Approach to Analysis

This section addresses the aesthetic and visual quality impacts associated with the proposed construction and operation of the WTTIP. It includes a description of existing visual conditions and an evaluation of potential effects on visual resources and public view corridors. Presumed views from private viewpoints are also discussed. Over 100 photographs document existing visual conditions at the project sites. Photographs of existing visual conditions and associated viewpoint maps are summarized in Table 3.3-1, and are presented in the Visual Quality Figures section following this chapter.

**TABLE 3.3-1  
PHOTOGRAPHS OF EXISTING VISUAL CONDITIONS – WTTIP PROJECT FACILITY SITES**

Facility Site	Viewpoint Map	Figure Number for Site Photos	Photo Numbers
Lafayette WTP	3.3-LWTP-1	3.3-LWTP-2, 3.3-LWTP-3	L1 – L8
Orinda WTP	3.3-OWTP-1	3.3-OWTP-2, 3.3-OWTP-3	O1 – O8
Orinda-Lafayette Aqueduct	3.3-OWTP-1	3.3-OWTP-4	O9 – O11
Walnut Creek WTP	3.3-WCWTP-1	3.3-WCWTP-2, 3.3-WCWTP-3	WC1 – WC8
Sobrante WTP	3.3-SOBWTP-1	3.3-SOBWTP-2, 3.3-SOBWTP-3, 3.3-SOBWTP-4	S1 – S11
Upper San Leandro WTP	3.3-USLWTP-1	3.3-USLWTP-2, 3.3-USLWTP-3	U1 – U8
Donald Pumping Plant and Ardith Reservoir	3.3-ARRES-1	3.3-ARRES-2, 3.3-ARRES-3, 3.3-ARRES-4	A1 – A12
Fay Hill Reservoir	3.3-FHRES-1	3.3-FHRES-2	F1 – F4
Fay Hill Pumping Plant	3.3-FHPP/MORPL-1	3.3-FHPP/MORPL-2	F5 – F6
Glen Pipeline Improvements	3.3-GLENPL-1	3.3-GLENPL-2	G1 – G4
Happy Valley Pumping Plant	3.3-HVPP-1	3.3-HVPP-2	HV1 – HV4
Highland Reservoir	3.3-HIGHRES-1	3.3-HIGHRES-2	H1 – H4
Highland Pipelines	3.3-HIGHRES-1	3.3-HIGHRES-3	HP1 – HP4
Moraga Reservoir	3.3-MORRES-1	3.3-MORRES-2	M1 – M3
Moraga Road Pipeline	3.3-FHPP/MORPL-1, 3.3-HIGHRES-1	3.3-FHPP/MORPL-2, 3.3-HIGHRES-2	MR1 – MR2, HP3 – HP4
Sunnyside Pumping Plant	3.3-SUNPP-1	3.3-SUNPP-2	SS1 – SS4
Tice Pumping Plant	3.3-TICEPP-1	3.3-TICEPP-2	T1 – T4
Withers Pumping Plant	3.3-WITHPP-1	3.3-WITHPP-2	W1 – W4

For the purpose of this analysis, visual or aesthetic resources are generally defined as the natural and built landscape features that can be seen. The overall visual character of a given area results from the unique combination of natural landscape features, including landform, water, and vegetation patterns as well as built features such as buildings, roads, and other structures.

The EIR visual impact analysis considers view obstruction, negative aesthetic effects, conflict with adopted environmental plans or goals, and light and glare effects. As part of the analysis, a set of computer-generated visual simulations has been produced to illustrate “before” and “after” visual conditions at key project sites. The visual simulations provide a clear depiction of the location, scale, and general appearance of proposed project facilities. Digitized photographs and computer modeling and rendering techniques were used to prepare the simulation images. The simulations are based on conceptual project drawings and technical data provided by District engineers, and are presented in the Visual Quality Figures section following this chapter.

The visual assessment is based on field observations of the project facility sites and surroundings in addition to review of topographic maps, project drawings, and technical data supplied by EBMUD, aerial and ground-level photographs of the project area, computer-generated visual simulations from representative viewing locations, and public planning documents.

## 3.3.2 Setting

### Regional Setting

The WTTIP project sites are located in the Oakland and El Sobrante Hills and in the western Contra Costa County communities of Orinda, Moraga, Lafayette, and Walnut Creek. Figure 3.3-1 shows the regional landscape context for the WTTIP project.

The area’s visual setting contains visual resources representative of California’s northern Coast Range mountains and inland valley landscapes. Natural features include rolling, grass-covered hillsides; steep, rugged hills and narrow ravines; broad valleys and prominent ridges; meandering, tree-lined creeks and drainages; and oak woodlands. Within this landscape setting, peaks, open ridgelines, and wooded hillsides are prominent landscape features that provide a visual backdrop for the region’s urban and suburban development pattern.

Topographic features in the northern project area include the San Pablo and Sobrante Ridges and the Briones Hills, which rise to elevations of over 1,000 feet above sea level. To the west/southwest, the Berkeley-Oakland Hills roughly parallel the San Francisco Bay shoreline, rising to elevations of over 1,500 feet. Prominent landforms situated southeast of the Berkeley Hills, including the Gudde, Rocky, and Shell Ridges as well as Las Trampas Peak, reach up to 2,000 feet in elevation. To the east, the urban and suburban development in the broad Ygnacio Valley spreads to the base of the Mt. Diablo massif, which rises to over 3,800 feet in elevation.

The hills and ridges found in the project area are prominent visual features that provide a sense of orientation and identity within individual community landscapes as well as within the larger regional context. The undeveloped hills and ridgelines serve in part as visual and recreational open space. As such, the hills and designated open-space preserves provide a visual backdrop and contrast to urbanized portions of the suburban communities in the project area.



SOURCE: USGS and Environmental Vision

EBMUD Water Treatment and Transmission Improvements Program . 204369

**Figure 3.3-1**  
Regional Landscape Context

Several major roadway corridors traverse the project area. Interstate 580 (I-580), an east-west scenic corridor, parallels the Oakland Hills, passing near the Upper San Leandro WTP before continuing eastward through the Livermore Valley south of Mt. Diablo. Highway 24, a scenic corridor, passes through a tunnel in the Berkeley Hills, then continues east past the Lafayette WTP to connect to I-680 in the urbanized valley. I-680 extends in a general north-south direction, passing in close proximity to the New Leland Pressure Zone Reservoir site, and provides panoramic views of Mt. Diablo and other ridgelines. Portions of Mt. Diablo Boulevard and Camino Pablo, two locally designated scenic routes, lie adjacent to the Lafayette and Orinda WTPs, respectively. Highway 24, I-580, and I-680 are officially designated state scenic highways, requiring special measures by local governments to protect views along the travel corridor.

## **Project Facilities**

### ***Lafayette WTP***

#### **Visual Character and Quality**

The Lafayette WTP occupies a 15.7-acre, partially wooded site bordered by Highway 24 on the north and Mt. Diablo Boulevard on the south. Figure 3.3-LWTP-1 is an aerial photograph showing the Lafayette WTP and surrounding area. (All aerial and site photographs, landscape plans, and visual simulations are included in the Visual Quality Figures section following this chapter.)

As shown in the figure, a variety of mature trees and shrubs are clustered around key buildings and site facilities. Relatively dense vegetation is located along much of the site's perimeter, providing substantial visual screening from offsite locations. The Lafayette Reservoir Recreation Area is directly across Mt. Diablo Boulevard to the south. Some commercial development, including a motel, a synagogue, and a new veterans memorial building, lie to the east. To the west, low-density residential development is situated more than a quarter mile away.

The elevation of the Lafayette WTP site is approximately 350 to 460 feet above sea level. The site's terrain slopes down gradually from north to south, rising steeply at its northeast corner. Lafayette Creek traverses the southern portion of the site, running roughly parallel to Mt. Diablo Boulevard. Relatively flat open areas are found along Mt. Diablo Boulevard southwest of the creek and near the western end of the site, between the creek and Highway 24. As shown in Figure 3.3-LWTP-1, the Walter Costa Trail runs through the WTP site. The trail connects with the Lafayette Reservoir Recreation Area to the south.

Originally developed in 1953, the Lafayette WTP was improved in 1960 and again in the 1980s. Existing WTP facilities include the Bryant #1 and #2 Pumping Plants, filters, an operations building, a chemical building, clearwell and storage tanks, as well as a variety of ancillary structures such as an electric substation and generator. Two large-diameter, underground aqueducts pass directly through the plant site. Paved parking areas and road access from Mt. Diablo Boulevard are also included on the WTP site.

## Public View Corridors

Due to its topography and the presence of mature tree cover, the Lafayette WTP is not very visible to the public. Views of the site are not generally available from distant locations because of intervening terrain and vegetation. Portions of the site and existing facilities are visible, however, from nearby viewing locations in the surrounding vicinity. Figures 3.3-LWTP-2 and 3.3-LWTP-3 present photographic views of the site as seen from representative public vantage points. Figure 3.3-LWTP-1 depicts the viewpoint locations.

The Lafayette WTP lies due south of Highway 24, a designated state scenic highway (Caltrans, 1999, 2005). Mature vegetation situated along the edge of the roadway largely screens motorists' views of the site and facilities, but an unobstructed view of the westernmost portion of the site (shown in Photo L1) is available from a limited segment of Highway 24 (Figure 3.3-LWTP-1 shows viewpoint locations). The roadway, built on a bridge structure at this location, provides a somewhat elevated and typically very brief view of the site.

The Walter Costa Trail (a public recreation trail on EBMUD property via a license agreement with the City of Lafayette) traverses the southern side of the site. Western portions of the site are visible at close range from places along the trail. Photo L2 (Figure 3.3-LWTP-2) is a view looking southwest toward the WTP from the trail near the Highway 24 undercrossing. Photos L3 and L4, also taken from the trail, are views looking northwest toward the site.

Site visibility from Mt. Diablo Boulevard to the south is limited due to the dense tree cover along the roadway and on the site. Photo L5 (Figure 3.3-LWTP-3); is a view from Mt. Diablo Boulevard near the WTP entry road looking northeast. Part of the Bryant Pumping Plant can be seen near the center of the view, beyond the dense mature trees in the foreground. A view looking toward the WTP from Mt. Diablo Boulevard at the Lafayette Reservoir entrance road is presented in Photo L7. Photo L8 shows a view looking west on Mt. Diablo Boulevard near the southeastern edge of the WTP near the exit road. Both photos show substantial screening provided by roadside vegetation. Photo L6, taken from the concrete bridge at the WTP entrance, shows a perspective similar to that of Photo L5, but from closer range. In this view, the Bryant Pumping Plant facade can be seen beyond the trees, with the concrete bridge, gate, and gatehouse in the foreground.

## Orinda WTP

### Visual Character and Quality

The Orinda WTP occupies a 39-acre site along the east side of Camino Pablo. The City of Orinda has designated Camino Pablo a scenic corridor. Manzanita Drive, a narrow two-lane local road, bisects the WTP. Figure 3.3-OWTP-1 is an aerial photograph showing the Orinda WTP and surrounding area.

As shown in the aerial photo, the main portion of the WTP lies south of Manzanita Drive. This area includes the historic Orinda Filter Plant as well as chemical and operations buildings, maintenance buildings, an entry road, and parking area. Backwash water settling basins and a secondary paved area are located on the opposite side of Manzanita Drive. Currently, there is a

fence around the existing settling basins at this location. A ravine and undulating wooded terrain lie to the northwest of the backwash water settling basins. San Pablo Creek lies north of the Orinda WTP facilities (within EBMUD property). To the northwest, the Orinda Sports Field is adjacent to the WTP on District land.

The site is about 320 to 420 feet in elevation. The topography is relatively level in the developed portions of the site. The highest elevations are found where the site rises east of the creek in the northeast corner. To the south, near the edge of the Orinda Sports Field, a wooded embankment rises steeply up to Camino Pablo. Site vegetation includes dense trees along the southern and eastern edges, including along San Pablo Creek. Dense woodland is also found near the ravine between the Orinda Sports Field and backwash water settling basins.

Single-family residences are situated to the west, across Camino Pablo, and to the east, above San Pablo Creek. The Orinda Country Club lies beyond San Pablo Creek to the south of the Orinda WTP.

### **Public Views and View Corridors**

Dense tree and shrub cover screens views of the Orinda WTP from many locations within the surrounding vicinity; however, portions of the site and facilities are visible from some places along nearby public roadways. Views of the site are not generally available from distant locations due to intervening topography and vegetation. Figures 3.3-OWTP-2, 3.3-OWTP-3, and 3.3-OWTP-4 present photographic views of the site as seen from representative public vantage points. Figure 3.3-OWTP-1 depicts the viewpoint locations.

Photos O1 through O4 are views taken from Camino Pablo looking toward the Orinda WTP (refer to Figure 3.3-OWTP-2). As demonstrated in these photos, the mature vegetation situated along the roadway's edge generally screens views of WTP facilities from Camino Pablo. Filtered views into the site are available from a limited area where roadside vegetation is less dense (refer to Photos O3 and O4). A portion of the chemical building is visible from this location. This building, which is set back 50 to 100 feet from the fenceline, appears against a wooded hillside backdrop.

Manzanita Drive bisects the Orinda WTP. Although existing vegetation provides considerable screening, close-range views from the roadway encompass portions of the WTP facilities. Photo O5, looking southeast from Manzanita Drive near the Orinda WTP entrance, is a close-range view showing part of the Orinda Filter Plant beyond the entry gates, perimeter landscaping, and parking area (refer to Figure 3.3-OWTP-3). Photo O6, taken from a similar close-range viewpoint, shows a portion of the chemical building, which is visible beyond landscaped berms in the foreground. As demonstrated by Photo O8, views of the Orinda WTP from the residential area situated to the north are generally screened by intervening dense vegetation.

Photos O9 through O11 are views at the Orinda Sports Field on District land (refer to Figure 3.3-OWTP-4). The roadside vegetation and bank up to Camino Pablo are seen in Photo O9 looking west. The San Pablo Creek corridor and wooded slopes to the east are visible across the open Orinda Sports Field in Photos O10 and O11.

## **Walnut Creek WTP**

### **Visual Character and Quality**

The Walnut Creek WTP site is adjacent to the Acalanes Ridge Open Space. The facility site is situated on a shoulder of the ridge at an elevation of about 300 to 400 feet. As shown on Figure 3.3-WCWTP-1 (an aerial photograph), the Briones–Mt. Diablo Trail traverses the open space area and the Walnut Creek WTP (EBRPD, 2005). The Acalanes Ridge rises to about 700 feet. The grass-covered, oak-studded hills of the Acalanes Ridge landscape, a City-owned open space area and distinctive ridgeline with a high degree of scenic value, are characteristic of undeveloped areas of Contra Costa County. Portions of the Acalanes Ridge allow for panoramic views, as mapped in the Walnut Creek General Plan (2006). Two District distribution reservoir tanks, Larkey and Bacon, are located atop and midway between the Walnut Creek WTP and the ridgeline. In all other directions, the surrounding topography is lower than the operations building and clearwell.

Figure 3.3-WCWTP-2 and 3.3-WCWTP-3 present photos at and around the Walnut Creek WTP. At present, an expansion of the existing WTP is close to completion.<sup>1</sup> Photo WC7 is a view looking northwest across the new clearwell toward Acalanes Ridge. Photo WC4 shows the temporary backwash water holding tank, which has been removed. All of the existing and expanded WTP facilities as well as the proposed WTTIP facilities are located within property owned by the District. There are residential areas surrounding the WTP site, primarily to the east and the northwest.

### **Public Views and View Corridors**

As seen from much of the surrounding area, the Walnut Creek WTP is not visually prominent due to intervening topography, landscaping, and berming. Photos WC1 and WC4 are views from the Briones–Mt. Diablo Trail toward the northern side of the site where WTTIP improvements are proposed (see Figure 3.3-WCWTP-2). New landscaping installed on the eastern slopes of the site (Photo WC8) as part of the current WTP expansion will further screen views from the residential area to the east, as seen in Photo WC6 (refer to Figure 3.3-WCWTP-3). Large trees in the northern portion of the site screen views from the north, as shown in Photo WC5, from Ramsay Circle.

Views from the site looking northwest and east are shown in Photos WC7 and WC8. To the northeast, east, and southeast, the surrounding topography is lower than the facility site. Although the site offers panoramic views to the north, east, and southeast, including Mount Diablo State Park (about six miles east of the site), its elevation and screening (landscaping and berms) limit views from these directions.

<sup>1</sup> An evaluation of visual effects associated with this expansion of the Walnut Creek WTP is documented in the *Walnut Creek–San Ramon Valley Improvement Project Environmental Impact Report* (EBMUD, 2000).

## **Sobrante WTP**

### **Visual Character and Quality**

The Sobrante WTP is located along Valley View Road. Figure 3.3-SOBWTP-1 is an aerial photograph showing the Sobrante WTP and vicinity. Valley View Road bisects the 38-acre WTP, with the main portion of the plant situated on a hillside, east of this roadway. Facilities located in the main, larger WTP parcel include an operations building, a chemical building, clearwell, sedimentation basin, access road, and parking area. The facilities are built on a graded, level area situated at an elevation of approximately 250 feet. With the exception of the clearwell, and operations and ozone buildings, most facilities are low profile or are built near grade. Topography on the main part of the plant slopes up to the east. A grass- and tree-covered embankment drops down from the site's southern edge to Valley View Road. Mature trees border the perimeter fence along the north, east and west sides of the WTP.

D'Avila Way further bisects the smaller two-acre western part of the WTP. Facilities located south of D'Avila Way include two concrete settling basins along Valley View Road. The topography at this site slopes down to the west, toward San Pablo Creek, and lies at about 160 feet above sea level. Dense vegetation occurs along the site perimeter, with a planted berm situated outside the WTP fenceline along Valley View Road.

Hillside residential development lies above the WTP to the southeast as well as across Amend Road to the north. A Richmond Fire Station and a PG&E substation are located adjacent to the site to the northwest and northeast, respectively. Single-family and multifamily residential development is the predominant land use in the surrounding area.

### **Public Views and View Corridors**

Portions of the Sobrante WTP site are visible from a variety of locations in the vicinity. Figures 3.3-SOBWTP-2, 3.3-SOBWTP-3, and 3.3-SOBWTP-4 present photographic views of the site as seen from representative public vantage points. Figure 3.3-SOBWTP-1 depicts the location of the viewpoints.

Photos S1 and S2, taken from Valley View Road at D'Avila Way, are views of the smaller part of the WTP site located west of Valley View Road (Figure 3.3-SOBWTP-2). From the roadway, perimeter fencing and landscaping appear in the foreground, with the wooden roofs of the concrete settling basins partially visible beyond. Photos S3 and S4, looking north and northeast toward the main part of the WTP site, show views of the grass- and tree-covered embankment situated along the east side of Valley View Road. This embankment largely screens views of the existing WTP facilities located on the main portion of the WTP site. In the view from D'Avila Way, the uppermost part of the basin structure is just barely visible along the top of the embankment (Photo S3). Photos S5 and S6, taken from Valley View Road looking southeast toward the WTP site, demonstrate the screening provided by the perimeter trees and roadside embankment. Photo S6 encompasses part of the Richmond Fire Station as well.

Photos S7 through S11 are views looking toward the Sobrante WTP from places along Amend Road (Figures 3.3-SOBWTP-3 and 3.3-SOBWTP-4). The photos demonstrate that, to varying

degrees, intervening trees and vegetation screen views of existing WTP facilities. Photo S7, taken from Amend Road near Valley View Road, shows a relatively unobstructed view toward the project site's northern edge. From here, the upper portion of a WTP building, seen near the right side of the photo, is visible through the vegetation. Looking south from Heavenly Ridge Lane, views of the WTP are partially obstructed by vegetation in the foreground (Photo S8).

Photo S9, taken from Amend Road near Simoni Court and the PG&E substation, encompasses roadside landscaping/berms and houses in the foreground, with distant hillsides in the backdrop. Additional views taken from farther east along Amend Road encompass roadside vegetation in the foreground that screens the WTP facilities (Photos S10 and S11).

Views from the residential area situated above and east of the WTP site are generally screened by intervening vegetation and structures; however, existing facilities may be partially visible from a limited number of residences in this area.

### ***Upper San Leandro WTP***

#### **Visual Character and Quality**

The Upper San Leandro WTP occupies a 22-acre hillside site immediately south of I-580 and west of Keller Avenue in Oakland. Figure 3.3-USLWTP-1, an aerial photo showing the site vicinity, shows the WTP facility complex with its pattern of relatively dense vegetation along much of the site's perimeter. The WTP site entrance, located at Greenly Drive and Field Street, includes stucco gate posts and a gate house. Tan-colored stucco buildings with red terracotta roofs are arranged along the southern side of the site. Tanks, basins, and a clearwell occupy the northern and western sides of the site. Mature landscaping, including shrubs and tree groupings near key buildings and stands of large redwood trees, are found within the site's interior.

With the exception of the I-580 corridor immediately to the northeast, the area surrounding the WTP site is primarily single-family hillside residences. This area is characterized by narrow hillside residential streets and mature landscape vegetation.

#### **Public Views and View Corridors**

Figures 3.3-USLWTP-2 and 3.3-USLWTP-3 present photos of the site as seen from representative public vantage points (refer to Figure 3.3-USLWTP-1 for viewpoint locations). As shown in these photos, the site is generally well screened by mature vegetation.

Photos U1 through U4 are views toward the WTP from places along Greenly Drive. The view from Greenly Drive near Field Street encompasses the entry gate and the operations building (Photo U1). When looking northeast from this area, the site is largely screened by landscaped berms; however, the upper portion of the clearwell is partially visible (Photo U2). As shown in Photo U3, dense trees line most of the site's Greenly frontage, except in a limited area where portions of the stucco building facades and tile roofs can be seen against a hillside backdrop (Photo U4). Views of the WTP from the residential streets located to the north, including Circle Hill Drive and Valentine Street, are largely screened by berms and mature vegetation (Photos U5 and U6). Similarly, dense vegetation screens views of the WTP from Keller Drive to the south (Photo U7).

Due to a steep embankment along the roadside as well as dense trees at the top of the embankment along the site perimeter, the Upper San Leandro WTP is not visible from the I-580 freeway corridor. Photo U8, taken from Mountain Boulevard near the I-580 on-ramp, displays screening provided by the embankment and vegetation.

### ***Ardith Reservoir and Donald Pumping Plant***

#### **Visual Character and Quality**

The Ardith Reservoir and Donald Pumping Plant site lies west of Ardith Drive in a predominantly single-family hillside residential area. Figure 3.3-ARRES-1 is an aerial photograph showing the site and surrounding area. Figure 3.3-ARRES-2 presents four photos taken at the site.

The existing Donald Pumping Plant, which is approximately 15 by 25 feet and 10 feet tall, lies on the east side of the site near the end of a paved access drive (Photo A2). To its west, a roughly 180- by 180-foot flat, graded area occupies the central portion of the site. In 1960, when the pumping plant was built, EBMUD created the graded pad in anticipation of a future reservoir at the site.

The site's topography consists of a steep bank that slopes down from Ardith Drive to reach the graded area. From this level pad, the site slopes down to the west and north toward the site's boundary. Site elevations drop from approximately 760 feet above sea level near Ardith Drive to about 720 feet at the graded pad to approximately 680 feet near the site's western edge. As shown in the aerial photo (Figure 3.3-ARRES-1), relatively dense vegetation covers much of the site's perimeter. Photos A9 through A12 are views from the site looking north and northwest toward existing residential areas. The photos illustrate the considerable screening provided by this perimeter vegetation.

In addition to surrounding single-family residential use, the Orinda Intermediate School lies uphill, approximately 700 feet to the east (see Figure 3.3-ARRES-1).

#### **Public Views and View Corridors**

Public views of the Ardith Reservoir and Donald Pumping Plant site are extremely limited due to the intervening landform and extensive screening provided by vegetation. Filtered views of portions of the site are available from some close-range viewpoints. Figures 3.3-ARRES-3 and 3.3-ARRES-4 present photographic views of the site as seen from representative public vantage points. Figure 3.3-ARRES-1 depicts the viewpoint locations.

Photos A1 through A5 are views taken from points along Ardith Drive looking toward the site (Figures 3.3-ARRES-2 and 3.3-ARRES-3). As demonstrated in these photos, the mature trees and dense shrubs situated along the site's perimeter and along the roadway edge generally screen views to the site's interior from Ardith Drive. In addition, Photos A3 and A4 indicate that this vegetation also screens views of the site from the adjacent residences located to the north and south. However, as seen from a limited area immediately adjacent to the perimeter fence, a break in this vegetation pattern enables partial filtered views into the site (Photo A7). A similar but slightly elevated view may be available from the rear yards of several residences located to the

east on Westover Court. Photo A6, taken from the top of the slope embankment along the east side of Ardith Drive, represents a comparable perspective of these residential rear yards. However, as shown in Photo A5, rear yard fences generally obstruct residential views toward the Ardith Reservoir/Donald Pumping Plant site. As shown in Photo A8, views of the site from farther east are generally screened by vegetation and intervening structures.

The site is not generally visible from the residential area located downhill to the north and west due to intervening vegetation and topography.

### ***Fay Hill Pumping Plant and Pipeline Improvements***

#### **Visual Character and Quality**

The Fay Hill Pumping Plant site, located in Moraga at the intersection of Moraga Road and Rheem Boulevard, occupies a small (less than 0.25-acre) area at the corner of a commercial shopping center. The relatively flat site is landscaped and lies adjacent to public sidewalks. Figure 3.3-FHPP/MORPL-1 is an aerial photograph showing the site and its landscape context.

#### **Public View Corridors**

Views of this site are available from nearby locations along Moraga Road and Rheem Boulevard. In addition, the site is visible from a portion of the adjacent shopping center parking lot. Photos F5 and F6 show close-range views of the site as seen from Moraga Road (refer to Figure 3.3-FHPP/MORPL-2).

### ***Fay Hill Reservoir***

#### **Visual Character and Quality**

The Fay Hill Reservoir is located in Moraga, north of Rheem Boulevard and east of Moraga Road. The reservoir is situated on a three-acre hilltop site, surrounded by perimeter trees and undeveloped open grassland, at an elevation of approximately 950 feet above sea level. A transmission line with lattice towers crosses the open hillside from northwest to southeast. A graded access road runs up the hillside from the southeast at Rheem Boulevard. As shown in Figure 3.3-FHRES-1 (aerial photo), suburban development lies below the hill to the south, west, and north.

#### **Public Views and View Corridors**

Public views of the Fay Hill Reservoir site are available from some surrounding residential areas and roadways. Figure 3.3-FHRES-2 presents photographic views of the site as seen from representative public vantage points. Figure 3.3-FHRES-1 depicts the viewpoint locations.

Photo F1 shows a view looking toward the site from Natalie Drive in the residential area to the north (Figure 3.3-FHRES-2). Where not screened by foreground landscaping, views of the site are available from this area. From this viewpoint, the site is seen on the hilltop skyline approximately one-half mile away and 300 feet higher in elevation. An existing transmission tower is also seen on the hilltop in this view. As demonstrated in this and the other site photos,

the mature trees along the site perimeter screen views to the site's interior from the surrounding areas. From Moraga Road near Campolindo High School, as shown in Photo F2, the site is visible on the hilltop through mature roadside trees. Views toward the site from many other locations in this vicinity are screened by landscaping.

Photo F3 shows a view looking up toward the site from Moraga Road almost one-half mile away to the southeast. Other similar open views of the site are available from the adjacent shopping center parking lots. Onsite perimeter landscaping effectively screens the facility from these viewpoints. Transmission line towers are also seen along the skyline in this view. The view from Rheem Boulevard looking north is shown in Photo F4. From this point, before Rheem Boulevard descends the hill and curves to the northwest, the site is seen along the skyline in the center of the view. Views toward the site from residences immediately west of this point are generally screened by the roadside trees seen on the left side of the photo.

### ***Glen Pipeline Improvements***

#### **Visual Character and Public Views**

Figure 3.3-GLENPL-1 is an aerial photograph showing the landscape context for the proposed Glen Pipeline alignment along Glen Road and Nordstrom Lane. Segments of the proposed alignment are bordered by single-family residences. Photos G1 and G2 are views along Nordstrom Lane in areas of single-family homes (refer to Figure 3.3-GLENPL-2). Photos G3 and G4 were taken along the Glen Road portion of the project.

### ***Happy Valley Pumping Plant and Pipeline***

#### **Visual Character and Quality**

The 1.93-acre Happy Valley Pumping Plant site and pipeline alignment are situated within an established single-family residential area. Figure 3.3-HVPP-1 is an aerial photograph showing the site and vicinity.

This site is relatively level and currently undeveloped. Near its northern edge along Lombardy Lane, the site's topography rises and falls slightly in elevation, creating a berm-like landform. Vegetation includes a number of mature trees and shrubs. There is a clearing within the site's central area. The site includes approximately 75 feet of street frontage on Lombardy Lane and extends back toward a riparian area and creek located to the south.

#### **Public Views and View Corridors**

Dense roadside vegetation, mature residential landscaping, and houses screen views of the site from much of the surrounding area. Figure 3.3-HVPP-2 presents four photos taken in the immediate site vicinity. As shown in the photos, close-range views of the northern portion of the site are available from nearby points along Lombardy Lane.

Views from Lombardy Lane near the site are shown in Photos HV1 and HV2 (Figure 3.3-HVPP-2). From these locations, the street frontage of the site is visible; however, onsite and adjacent trees and shrubs screen views of the site's interior. A large and visually prominent deciduous oak on

the northern side of the site provides a substantial amount of screening from Lombardy Lane. In addition, the slightly elevated landform along the site's northern edge provides a degree of visual screening. As shown in photos taken from the site, relatively dense surrounding vegetation substantially screens views from neighboring residential properties (refer to Photos HV3 and HV4, looking southwest and northwest, respectively, across the site). In Photo HV4, an adjacent residence can be partially seen in a view filtered by vegetation.

## ***Highland Reservoir and Pipelines***

### **Visual Character and Quality**

The Highland Reservoir site occupies 2.5 acres of hillside within the Lafayette Reservoir Recreation Area, a public recreation area owned and operated by EBMUD. Figure 3.3-HIGHRES-1 is an aerial photograph of the site and surrounding area. The site lies about 1,000 feet northwest of the Lafayette Reservoir Dam and adjacent parking area. Oak woodland covers much of the surrounding hillsides, including the project site. Open panoramic views of the surrounding hillside and reservoir landscape are available from places along the shoreline and trails as well as from the 53-acre Lafayette Reservoir.

Several trails traverse the open space, including the Rim Trail, which passes adjacent to the proposed reservoir site. Terrain within the Lafayette Reservoir Recreation Area is relatively steep. Topography and vegetation intermittently enclose and screen views from points along the recreational trail system.

### **Public Views and View Corridors**

Figure 3.3-HIGHRES-2 presents photographic views of the Highland Reservoir site as seen from four locations within the recreation area. Figure 3.3-HIGHRES-3 presents photographic views of the Inlet/Outlet (I/O) Pipeline alignment. Viewpoints include the trail adjacent to the site and more distant locations, as shown in Figure 3.3-HIGHRES-1.

Photos H1 through H4 are views of the Highland Reservoir site. Photo H1 shows the view from the Rim Trail looking to the northwest across the site. From this viewpoint just south of the site, the trail can be seen curving around a group of mature trees on the site in the center of the view. With the exception of the trees and shrubs in the background, the site includes most of the area seen in this photo. On the Rim Trail to the west of the site, views toward the site are generally screened by trees and shrubs.

The open view from the dam and nearby parking area is shown in Photo H2. From here and from the perimeter trail (Photo H3), the site is located on the far hillside, screened by the oak woodland. Panoramic views from these locations encompass the reservoir water surface, shoreline, and surrounding ridges. At other points along the perimeter trail, views toward the site are screened by foreground vegetation.

The Big Oak Trail, shown in Photo H4, climbs from the perimeter trail up a spur ridge to the Rim Trail. From this elevated perspective, views include the reservoir, surrounding ridges, and more distant ridges outside of the Lafayette Reservoir Recreation Area. The reservoir site and trees are

visible on the slope above the far shore in the center of the photo at a distance of almost three-quarters of a mile.

Photos HP1 through HP4 are views of the Highland Reservoir I/O Pipeline (see Figure 3.3-HIGHRES-3). Except for the crossing of Mt. Diablo Boulevard, the pipeline alignments would be located within the Lafayette Reservoir Recreation Area. Photo HP1 is a view northeast from just east of the proposed Highland Reservoir site along the Rim Trail. In this area the I/O Pipeline line cuts east across the rim trail and joins the Lafayette Reclaimed Water Pipeline alignment. The vegetation in this area along the ridgeline is large-diameter Oak Woodland and an understory of shrubs and non-native grasses. Photo HP2 was taken near the rim trail where the I/O Pipeline heads northeast towards Mt. Diablo Boulevard. Oak Woodland is dominant on this north-facing slope. Photo HP3 is looking towards the alignment of the Highland Reservoir I/O line near where it leaves the Lafayette Reservoir Recreation Area and runs north across Mt. Diablo Boulevard to Lafayette WTP. Photo HP4 looks southeast along Mt. Diablo Boulevard at the turn-in the Lafayette Reservoir Recreation Area. This is the area where the joint pipeline alignment of the Highland Reservoir I/O Pipeline and the Lafayette Reclaimed Water Pipeline would cross the roadway. The pipelines would diverge on the north shoulder of the road.

## ***Moraga Reservoir***

### **Visual Character and Quality**

Moraga Reservoir is a five-acre landscaped site located in a hillside suburban neighborhood. Figure 3.3-MORRES-1 is an aerial photo showing the site and surroundings. There are residential streets adjacent to the site on the north and west, and single-family residences or residential driveways abutting the reservoir site to the south and east.

### **Public View Corridors**

Public views of the Moraga Reservoir site are available from some vantage points within the surrounding residential areas in the immediate vicinity. Intervening topography and vegetation generally screen views of the reservoir from distant locations. Figure 3.3-MORRES-2 presents photographic views of the site as seen from representative public vantage points. Figure 3.3-MORRES-1 depicts the viewpoint locations.

Claudia Court and Draeger Drive, adjacent to the site on the north and west, respectively, have close-range views of the perimeter site area. Photo M1, a view from Draeger Drive near Fernwood Drive, encompasses the western slope along the perimeter of the reservoir site. With the exception of a small amount of fencing seen at the top of the embankment, the existing reservoir facilities are not visible from this roadway location. Taken from Draeger Drive at Claudia Court, Photo M2 shows the mature landscaping at the site's western corner. As seen from this location, an embankment with mature landscaping also screens views of the reservoir facilities. Portions of the reservoir structure and perimeter gate and fencing are visible in the foreground from Claudia Court, near the site access drive (Photo M3). To some degree, reservoir facilities may be partially visible from adjacent residences to the south and east; however, views are generally screened by mature landscaping and intervening topography.

## ***Moraga Road Pipeline***

### **Visual Character and Public Views**

Photos MR1 and MR2, taken from Moraga Road at Madrone Drive and Nemea Court, respectively, show the visual character along this segment of the Moraga Road Pipeline route, which passes through undulating wooded terrain and grassland (Figure 3.3-FHPP/MORPL-2). Figure 3.3-FHPP/MORPL-1 depicts the viewpoint locations. Contra Costa County has designated Moraga Road as a scenic route. The northwestern portion of the pipeline alignment (between Nemea Court and Mt. Diablo Boulevard) traverses the Lafayette Reservoir Recreation Area. In addition, Figure 3.3-HIGHRES-1, as well as Maps C-MORPL-1 through C-MORPL-3 (presented at the end of Chapter 2), are aerial photographs showing the recreation area. As shown in the photos, the alignment passes through an orchard near the toe of the Lafayette Reservoir Dam, through woodlands, and open fields. The alignment ascends a ridge near its crossing of the Rim Trail (see C-MORPL-2).

## ***Sunnyside Pumping Plant***

### **Visual Character and Quality**

The 0.49-acre (portion of a 10.7 acre parcel) Sunnyside Pumping Plant site is located along Happy Valley Road in a single-family hillside residential area. Figure 3.3-SUNPP-1 is an aerial photograph showing the site and landscape surroundings.

This currently undeveloped, grass-covered property lies at the base of a steep wooded embankment, immediately south of Happy Valley Road. The terrain rises steeply on the north side of this narrow, winding road, and single-family residential development occupies the partially wooded hillside. The adjacent property to the south and west is used for horse grazing; several small outbuilding structures lie within 200 feet to the southwest of the site. In addition, there is residential development downhill, farther to the west. The site's topography includes sloping terrain, and the site lies below the elevation of Happy Valley Road.

### **Public View Corridors**

Topography and vegetation generally screen public views of the Sunnyside Pumping Plant site. Glimpses of the site are available from a limited area along Happy Valley Road; however, the hillside and vegetation along the road tend to obstruct motorists' line of sight toward the project site. With the exception of the closest residence (which lies several hundred feet to the east), residential views of the site are generally screened by intervening vegetation and topography. Limited portions of the site may be visible from a few other nearby residences. Photos SS1 through SS4 in Figure 3.3-SUNPP-2 are close-range views of the site from viewpoints along the Happy Valley Road and from the adjacent entry road. Photo SS3, a view looking southwest toward the site from Happy Valley Road, includes Mt. Diablo in the background.

## ***Tice Pumping Plant and Pipeline***

### **Visual Character and Quality**

The approximately one-acre Tice Pumping Plant and Pipeline site is located in unincorporated Contra Costa County along Olympic Boulevard, approximately 400 feet west of the Tice Valley Boulevard intersection. Figure 3.3-TICEPP-1 is an aerial photograph showing the site and surrounding area. As shown in the photo, the site is adjacent to a segment of paved recreational trail that parallels Olympic Boulevard. This undeveloped site is situated at the foot of a steep, grass-covered slope. Clusters of trees and shrubs interspersed with grassland cover the site. Adjacent land uses include open space to the south, commercial uses (including an adjacent corner gas station) to the east, and single-family residential development to the west and north (across Olympic Boulevard). The pipeline alignment extends up Boulevard Way, through an established residential area with mature trees, crossing Las Trampas Creek (see Map C-TICEPP-1 at the end of Chapter 2).

### **Public View Corridors**

Public views of the site are available from nearby locations, including Olympic Boulevard. Photos T1 through T3 include views looking southwest toward the site from Olympic and Tice Valley Boulevards (Photo T1) and looking southwest and east, respectively, from the adjacent recreation trail (Photos T2 and T3). Photo T4 shows a view near the site looking southwest toward the adjacent homes (refer to Figure 3.3-TICEPP-2). Views of the site are available from a limited number of these residences.

## ***Withers Pumping Plant***

### **Visual Character and Quality**

The Withers Pumping Plant site is situated near the intersection of Reliez Valley Road and Silver Hill Way in an unincorporated area of Contra Costa County. The site occupies a portion of the District's hillside property at the location of the existing Grayson Reservoir. Reliez Valley Road is a County-designated scenic route.

Figure 3.3-WITHPP-1 is an aerial photograph showing the site and vicinity. The site is surrounded by open space and single-family residential development, including homes that border the west side of Grayson Woods Golf Course. The site's topography slopes steeply up to the southwest (toward the reservoir) from the base of the hillside near Reliez Valley Road. As shown in the Figure 3.3-WITHPP-1 aerial photo, the site includes dense vegetation along much of the hillside and around its overall perimeter.

### **Public Views and View Corridors**

Topography and vegetation generally screen views of the Withers Pumping Plant site from much of the surrounding area. Views of the site are available from limited areas along Reliez Valley Road. Photos W1, W2, and W4 are views looking toward the site from various points along the roadway, including a view near the existing site access drive (Photo W2) (refer to Figure 3.3-WITHPP-2). Views of portions of the site may also be available from a limited number of

residences situated near the top of the embankment along the northeast side of Reliez Valley Road. Photo W3 is a view from the top of the roadway embankment near the rear yard of one of these residences. However, the rear yards are generally fenced and include mature vegetation that provides foreground screening.

## Regulatory Framework

**Appendix D** presents general plan and EBMUD *Watershed Master Plan* goals, policies, and implementation measures related to visual resources (EBMUD, 1996). Potential inconsistencies between the proposed WTTIP project and local plans, policies, and zoning regulations are discussed in Section 3.3.3, below, under Impact 3.3-3 (City of Lafayette, 2002; City of Lafayette Municipal Code; City of Oakland, 2005; City of Orinda, 1989; City of Orinda Municipal Code; City of Walnut Creek, 2006; City of Walnut Creek Municipal Code; Town of Moraga, 2002; Contra Costa County, 2005; Contra Costa County Code). It is District practice to work closely with host jurisdictions and the neighboring community during project planning and to conform to local land use plans and policies to the extent possible. However, actual determinations of project consistency with general plans would be made by the pertinent land use jurisdictions during project implementation.

## 3.2.3 Impacts and Mitigation Measures

### Significance Criteria

For the purposes of this EIR and consistent with Appendix G of the CEQA Guidelines, a WTTIP project is considered to have a significant impact if it would:

- Substantially degrade the existing visual character or quality of the site and its surroundings;
- Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway;
- Have a substantial, adverse effect on a scenic vista; or
- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

The significance determination is based on several evaluation criteria, including the extent of project visibility from sensitive viewing areas such as designated scenic routes, public open space, or residential areas; the degree to which the various project elements would contrast with or be integrated into the existing landscape; the extent of change in the landscape's composition and character; and the number and sensitivity of viewers (Smarden et al., 1986). Project conformance with public policies regarding visual quality was also taken into account.

As part of the aesthetic impact evaluation of the WTTIP, visual simulations were produced using computer modeling and rendering techniques. These simulations (presented by individual project in the figures section following this chapter) illustrate the appearance of the proposed project changes at 11 of the project sites as seen from representative public viewing locations. Visual

simulations are presented in color, with two images per page: the top image is a photographic view showing the existing visual condition, and the bottom image is a visual simulation depicting the proposed project. The evaluation of potential visual impacts associated with the WTTIP is based in part on a comparison of the “before” and “after” visual conditions as portrayed in the simulation images and assessing the degree of visual change that the project would bring about. Table 3.3-2 provides a summary of the viewpoint locations and facility sites represented in the visual simulations.

**TABLE 3.3-2  
WTTIP PROJECT VISUAL SIMULATIONS**

<b>Facility Site</b>	<b>Viewing Location</b>	<b>Visual Simulation Figure</b>	<b>Associated Viewpoint Map</b>
Lafayette WTP	Highway 24	3.3-LWTP-5, 3.3-LWTP-6	3.3-LWTP-1
Lafayette WTP	Walter Costa Trail	3.3-LWTP-7, 3.3-LWTP-8	3.3-LWTP-1
Orinda WTP	Camino Pablo	3.3-OWTP-6, 3.3-OWTP-7	3.3-OWTP-1
Orinda WTP	Manzanita Drive	3.3-OWTP-8, 3.3-OWTP-9	3.3-OWTP-1
Walnut Creek WTP	Briones–Mt. Diablo Trail	3.3-WCWTP-5, 3.3-WCWTP-6	3.3-WCWTP-1
Walnut Creek WTP	Alfred Avenue	3.3-WCWTP-7, 3.3-WCWTP-8	3.3-WCWTP-1
Sobrante WTP	Valley View Road	3.3-SOBWTP-6, 3.3-SOBWTP-7	3.3-SOBWTP-1
Ardith Reservoir and Donald Pumping Plant	Ardith Drive	3.3-ARRES-6, 3.3-ARRES-7	3.3-ARRES-1
Fay Hill Reservoir	Natalie Drive	3.3-FHRES-3	3.3-FHRES-1
Happy Valley Pumping Plant	Lombardy Lane	3.3-HVPP-4, 3.3-HVPP-5	3.3-HVPP-1
Highland Reservoir	Lafayette Reservoir Recreation Area, Rim Recreation Trail	3.3-HIGHRES-5, 3.3-HIGHRES-6	3.3-HIGHRES-1
Highland Reservoir	Lafayette Reservoir Recreation Area, Big Oak Recreation Trail	3.3-HIGHRES-7, 3.3-HIGHRES-8	3.3-HIGHRES-1
Sunnyside Pumping Plant	Happy Valley Road	3.3-SUNPP-4, 3.3-SUNPP-5	3.3-SUNPP-1
Tice Pumping Plant	Recreation Trail along Olympic Boulevard	3.3-TICEPP-4, 3.3-TICEPP-5	3.3-TICEPP-1
Withers Pumping Plant	Reliez Valley Road	3.3-WITHPP-4, 3.3-WITHPP-5	3.3-WITHPP-1

Computer modeling and rendering techniques were employed to produce the visual simulation images. The computer-generated visual simulations are the result of an objective analytical and computer modeling process. The visual simulations are based on conceptual engineering design data provided by EBMUD engineers.

As described in Chapter 2, Project Description, the project includes pipelines and other facilities (e.g., many of the basins proposed at the WTPs) that would be located at or below grade. These facilities would not be visible to the public. The potential visual effects associated with the construction of proposed underground facilities, including tree removal, are described in the discussion under Impacts 3.3-2 and 3.3-3. Section 3.6, Biological Resources, describes tree

removal impacts associated with project construction; in particular, Table 3.6-4 quantifies the estimated tree removal impacts for each of the WTTIP sites.

Conceptual landscape plans, designed to provide screening of new facilities, are proposed as part of the WTTIP. The planting concepts (presented in the 3.3 Visual Quality Figures section) are also intended to enhance the appearance of the new facilities and to integrate them with their visual setting. In addition, proposed landscaping is designed to provide a measure of erosion control at the project sites. The WTTIP conceptual landscape plans include a recommended plant palette of drought-tolerant trees and shrubs (EBMUD, 2004). Table 3.3-3 provides a suggested list of the trees and shrubs, with estimates of plant heights at both 5- and 20-year maturity levels. The landscape design schemes will be refined during the final design phase, but will remain generally consistent with the conceptual landscape plans presented in the EIR.

Table 3.3-4 summarizes impact significance by project component. Table 3.3-5 provides a summary of the applicable mitigation measures.

Map C-HIGHRES-1 shows the Highland Reservoir and Pipelines project and the Lafayette Reclaimed Water Pipeline project. With the exception of the Lafayette Creek crossing, the Lafayette Reclaimed Water Pipeline would be constructed concurrently with and would be co-located with other pipeline projects (the Bryant and Leland Pipelines or the Orinda-Lafayette Aqueduct, as well as with the Highland Reservoir inlet/outlet and overflow pipelines). Therefore, the Lafayette Reclaimed Water Pipeline impacts included in the discussion are for the Lafayette Creek crossing only and, because the impacts relate directly to opening up views of the Lafayette WTP, are presented as part of the discussions of the Lafayette WTP. Impacts resulting from installation of the remaining portions of the Lafayette Reclaimed Water Pipeline are included within the pipeline discussions.

## Impacts and Mitigation Measures

### **Impact 3.3-1: Short-term visual effects experienced from nearby areas during project construction.**

Construction activities associated with the WTTIP projects would involve earthwork and the use of heavy equipment to install new structures, equipment, and paving as well as to remove and/or relocate existing facilities. Earthwork could periodically create dust.

The degree to which construction activities would be noticeable varies among the sites based on existing conditions. The proposed Highland Reservoir and Pipelines and the Tice, Sunnyside, and Happy Valley Pumping Plants would involve project activities at undeveloped sites, as would the section of the Moraga Pipeline passing through the Lafayette Reservoir Recreation Area.

**TABLE 3.3-3  
SUGGESTED PLANT PALETTE TREES AND SHRUBS<sup>a</sup>**

Common Name	Botanical Name	Container	5-year size <sup>b</sup>		20-year size <sup>b</sup>	
			Height	Width	Height	Width
<b>Trees</b>						
California Buckeye	<i>Aesculus californica</i>	15 gallon	15 feet	12 feet	15 feet	25 feet
Silk Tree	<i>Albizia julibrissin</i>	15 gallon	30 feet	40 feet	40 feet	50 feet
Marina Arbutus	<i>Arbutus 'Marina'</i>	15 gallon	12 feet	15 feet	25 feet	25 feet
Incense Cedar	<i>Calocedrus decurrens</i>	15 gallon	12 feet	5 feet	75 feet	15 feet
Western Redbud	<i>Cercis occidentalis</i>	24-inch box	12 feet	12 feet	18 feet	18 feet
Goldenrain Tree	<i>Koelreuteria paniculata</i>					
Sour Gum	<i>Nyssa sylvatica</i>	15 gallon	14 feet	8 feet	50 feet	30 feet
Chinese Pistache	<i>Pistache chinensis</i>	15 gallon	15 feet	10 feet	50 feet	50 feet
Coast Live Oak	<i>Quercus agrifolia</i>	24-inch box	18 feet	6 feet	50 feet	50 feet
Valley Oak	<i>Quercus lobata</i>	15 gallon	10	8 feet	70 feet	70 feet
California Pepper Tree	<i>Schinus molle</i>	24-inch box	12 feet	12 feet	30 feet	25 feet
<b>Shrubs</b>						
Strawberry Tree	<i>Arbutus unedo</i>	5 gallon	5 feet	5 feet	15 feet	15 feet
Manzanita	<i>Arctostaphylos</i> sp.	5 gallon	Varies by specific selection			
Japanese Barberry	<i>Berberis thunbergii</i>	5 gallon	4 feet	4 feet	5 feet	5 feet
Wild Lilac	<i>Ceanothus</i> sp.	5 gallon	Varies by specific selection			
Smoke Bush	<i>Cotinus coggygria</i>	5 gallon	8 feet	6 feet	12 feet	12 feet
Pride of Madiera	<i>Echium candicans</i>	5 gallon	4 feet	6 feet	6 feet	8 feet
Silktassel	<i>Garrya elliptica</i>	5 gallon	8 feet	8 feet	15 feet	15 feet
Red-Hot Poker	<i>Kniphofia uvaria</i>	5 gallon	3 feet	3 feet	3 feet	3 feet
Tree Mallow	<i>Lavatera assurgentiflora</i>	5 gallon	8 feet	8 feet	12 feet	12 feet
Sticky Monkeyflower	<i>Mimulus aurantiacus</i>	1 gallon	4 feet	4 feet		
	<i>Osmanthus</i>	5 gallon	Varies by specific selection			
Coffeeberry	<i>Rhamnus californica</i>	5 gallon	6–8 feet	3 feet	15 feet	8 feet
Sage	<i>Salvia</i> sp.	5 gallon	Varies by specific selection			
Bush Germander	<i>Teucrium fruticans</i>	5 gallon	4 feet	4 feet	5 feet	5 feet

<sup>a</sup> Refer to **Visual Quality Figures section** for conceptual landscape plans.

<sup>b</sup> Sizes are estimated, with the assumption of regular plant watering and maintenance during an initial 2 to 3 year period; data is partially derived from "SelectTree: A Tree Selection Guide" (Reimer and Mark, 2006).

**TABLE 3.3-4  
SUMMARY OF POTENTIAL PROJECT-LEVEL VISUAL IMPACTS**

Facility	Impact 3.3-1	Impact 3.3-2	Impact 3.3-3	Impact 3.3-4	Impact 3.3-5
	Short-Term Visual Effects during Construction	Alteration of Appearance of WTTIP Sites	Effects on Views	Effects on Scenic Vista	New Sources of Light and Glare
Lafayette WTP <i>Alternative 1</i>	LTS	SM	SM	LTS	SM
<i>Alternative 2</i>	LTS	SM	SM	LTS	LTS
Orinda WTP <i>Alternative 1 or 2</i>	LTS	SM	SM	LTS	SM
Walnut Creek WTP <i>Alternative 1 or 2</i>	LTS	SM	SM	LTS	SM
Sobrante WTP <i>Alternative 1 or 2</i>	LTS	SM	SM	LTS	SM
Upper San Leandro WTP <i>Alternative 1 or 2</i>	LTS	LTS	LTS	LTS	SM
Orinda-Lafayette Aqueduct <i>Alternative 2 only</i>	LTS	LTS	LTS	LTS	SM
Ardith Reservoir/Donald Pumping Plant	LTS	SM	SM	LTS	SM
Fay Hill Pumping Plant and Pipeline Improvements	LTS	LTS	LTS	LTS	SM
Fay Hill Reservoir	LTS	LTS	LTS	LTS	SM
Glen Pipeline Improvements	LTS	LTS	LTS	LTS	LTS
Happy Valley Pumping Plant and Pipeline	LTS	SM	SM	LTS	SM
Highland Reservoir and Pipelines	LTS	SU	SU	SU	SM
Lafayette Reclaimed Water Pipeline	LTS	SM	SM	LTS	SM
Leland Isolation Pipeline and Bypass Valves	LTS	SM	SM	LTS	LTS
Moraga Reservoir	LTS	LTS	LTS	LTS	LTS
Moraga Road Pipeline	LTS	SM	SM	LTS	LTS
Sunnyside Pumping Plant	LTS	SM	SM	LTS	SM
Tice Pumping Plant and Pipeline	LTS	SM	SM	LTS	SM
Withers Pumping Plant	LTS	SM	SM	LTS	SM

NOTE: With the exception of the Lafayette Creek crossing shown in Map C-HIGHRES-1, the Lafayette Reclaimed Water Pipeline would be constructed concurrently with and would be co-located with the Bryant and Leland Pipelines or the Orinda-Lafayette Aqueduct (depending on whether Alternative 1 or Alternative 2 is selected), as well as with the Highland Reservoir pipeline. Therefore, the Lafayette Reclaimed Water Pipeline impacts included in this table and throughout this section are for the Lafayette Creek crossing only. Impacts resulting from installation of the remaining portions of the Lafayette Reclaimed Water Pipeline are included within the discussions of the other above-referenced projects.

SM Significant Impact, Can Be Mitigated  
 SU Significant Impact, Unavoidable  
 LTS Less-Than-Significant Impact  
 – No Impact

**TABLE 3.3-5  
SUMMARY OF APPLICABLE MITIGATION MEASURES – IMPACT 3.3-1 THROUGH 3.3-4**

Facility	Measure 3.3-1	Measure 3.3-2a	Measure 3.3-2b	Measure 3.3-2c
	Clean Construction Activity	Landscape Plans	Restore Disturbed Areas	Enhance Aesthetic Appearance
Lafayette WTP				
<i>Alternative 1</i>	✓	✓	✓	✓
<i>Alternative 2</i>	✓	✓	✓	–
Orinda WTP				
<i>Alternative 1</i>	✓	✓	✓	✓
<i>Alternative 2</i>	✓	✓	✓	✓
Walnut Creek WTP				
<i>Alternative 1 or 2</i>	✓	✓	✓	✓
Sobrante WTP				
<i>Alternative 1 or 2</i>	✓	✓	✓	✓
Upper San Leandro WTP				
<i>Alternative 1 or 2</i>	✓	–	–	–
Orinda-Lafayette Aqueduct				
<i>Alternative 2</i>	–	–	–	–
Ardith Reservoir and Donald Pumping Plant	✓	✓	✓	✓
Fay Hill Pumping Plant and Pipeline Improvements	✓	–	–	–
Fay Hill Reservoir	✓	–	–	–
Glen Pipeline Improvements	–	–	–	–
Happy Valley Pumping Plant and Pipeline	✓	✓	✓	✓
Highland Reservoir and Pipelines	✓	✓	✓	✓
Lafayette Reclaimed Water Pipeline	–	–	✓	–
Leland Isolation Pipeline and Bypass Valves	✓ <sup>a</sup>	–	✓	–
Moraga Reservoir	✓	–	–	–
Moraga Road Pipeline	–	–	✓	–
Sunnyside Pumping Plant	✓	✓	✓	✓
Tice Pumping Plant and Pipeline	✓	✓	✓	✓
Withers Pumping Plant	✓	✓	✓	✓

✓ = Applicable Impact  
– = No Impact  
<sup>a</sup> = Applicable to Bypass Valves

At the other WTTIP sites (the Lafayette, Orinda, Walnut Creek, Upper San Leandro, and Sobrante WTPs; Ardith Reservoir/Donald Pumping Plant; Fay Hill Pumping Plant; Fay Hill Reservoir; Moraga Reservoir; and Withers Pumping Plant sites), most project construction would be seen within the context of an existing water facility, where construction activity could be less noticeable. Pipeline construction projects through urbanized areas (Happy Valley Pipeline, Fay Hill Pipeline, Moraga Pipeline, Tice Pipeline, Glen Pipeline, Lafayette-Orinda Aqueduct, and pipelines in Mt. Diablo Boulevard) would be highly noticeable for short periods of time (generally about two weeks) to land uses adjacent to the alignment, traffic, and others passing the work site. With the exception of the Highland Reservoir site, which is situated on an undeveloped hillside within a publicly accessible area, and pipeline alignments traversing open space areas in the Lafayette Reservoir Recreation Area (Highland I/O and Overflow pipelines, Lafayette Reclaimed Water Pipeline, Moraga Road Pipeline), construction at proposed WTTIP sites would occur within generally developed urban/suburban areas where temporary construction activity might be expected. Project construction would be visible from places along public roadways and recreation trails and from within public open space and residential areas; construction would likely be most noticeable when seen at close range by neighboring residents at those sites that are not screened by buildings and landscaping.

The expected duration of construction activities varies among the project sites (refer to Tables 2-6 and 2-9, in Chapter 2). For example, construction of project-level improvements at the Lafayette WTP (Alternative 1) would occur over a four- to six-year period, whereas pipeline construction at any particular location would typically last a total of two weeks. Due to the limited duration of construction activities, potential visual impacts due to construction activities are considered less than significant. Although Impact 3.3-1 is considered less than significant for all projects, EBMUD is proposing to implement Measure 3.3-1, below, to help ensure that publicly visible construction sites would be maintained and screened where practical.

### ***Mitigation Measure***

**Measure 3.3-1:** For stationary (non-pipeline) projects expected to be constructed over a period of one year or more, the District will require the contractor to ensure that construction-related activity is as clean and inconspicuous as practical by storing building materials and equipment within the proposed construction staging areas or in areas that are generally away from public view and by removing construction debris promptly at regular intervals.

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### **Impact 3.3-2: Alteration of the appearance of WTTIP sites.**

To varying degrees, the above-ground changes proposed as part of the WTTIP projects would alter the existing appearance of the facility sites. The specific modifications proposed and the resulting changes in site appearance are described below, with references to proposed site layout drawings.

## **Lafayette WTP**

### **Alternative 1**

Alternative 1 would involve substantial modification to the existing Lafayette WTP site. Map D-LWTP-1 following Chapter 2 shows the layout of proposed improvements. Map D-LWTP-3 is a profile at Lafayette WTP under Alternative 1. As shown on these figures and described below, under Alternative 1 several new facilities would be constructed on the western portion of the site, which is currently graded but undeveloped. Additional modifications would occur within the central, developed portion of the site. Alternative 1 also includes the installation of several new underground pipelines that would not be visible.

New facilities proposed on the western part of the site would include the 140-foot-diameter Clearwell #1, the 100-foot-diameter Clearwell #2, and a building that would house the new Leland and Bryant Pumping Plants. The pumping plant structure would be about 70 square feet and about 25 feet tall. The clearwells would be constructed largely below grade, extending only a few feet above grade. Additional site modifications proposed in this area would include low-profile valves and a 14-foot-wide paved access road extending to the new pumping plant structure from the central WTP area. The new paved road would widen to about 70 feet at the edge of the pumping plant; a 25-foot-wide paved access road is also proposed between the new clearwells. Figures 3.3-LWTP-5 and Figures 3.3-LWTP-6 show “before” and “after” views of the pumping plant structure from Highway 24. Figures 3.3-LWTP-7 and 3.3-LWTP-8 show a close-range “before” and “after” view of the new pumping plant structure as seen from the Walter Costa Trail. As shown in the visual simulations, the new building, fencing, and pavement would contrast with the existing landscape setting in terms of their form and scale. This visual change would alter the landscape character in this area. The introduction of two new clearwells would also contribute to the change in the visual character of the western portion of the site. Although the clearwells would not be as visually prominent as the new pumping plant structure, their built form would contrast with the undeveloped landscape setting. In addition, this alternative would require realignment of approximately 200 feet of the Walter Costa Trail to accommodate the new pumping plant building (the trail would be closed during project construction). EBMUD intends to reestablish the trail segment on District property, consistent with EBMUD security requirements. The specific realignment would be determined in coordination with the City of Lafayette.

The conceptual landscape plan proposed under Alternative 1 is presented as Figure 3.3-LWTP-4. The figure shows the proposed native tree and shrub planting. As it matures, the project landscaping would partially screen the new structures, contributing to their aesthetic integration with the surrounding landscape setting (refer to Figure 3.3-LWTP-8). The new facilities proposed at the undeveloped western portion of the site, in particular the new 25-foot-tall pumping plant structure, would noticeably alter the visual character in this area.

The Alternative 1 modifications proposed at the central portion of the site would not appear dissimilar to the existing Lafayette WTP facilities in terms of their scale and general appearance; consequently, these new facilities would represent an incremental change that would not substantially alter the site’s overall visual character and appearance. Modifications proposed in

the central, developed portion of the site would include a new electrical substation (approximately 100 by 40 feet, 16 feet tall) and a new sodium hypochlorite storage and feed building (70 by 50 feet, 20 feet tall). The substation would be enclosed by 8-foot-tall fencing and would include a transformer, switchgear, capacitors, and meters. Also proposed in the central part of the site are a 70-foot-diameter chlorine contact basin and basins associated with the backwash water recycling system. The basins would be low profile, extending barely 5 feet above grade. Two existing pumping plant structures would be demolished under this alternative.

Construction-related vegetation clearing would include the removal of shrubs, grasses, and about 40-45 mature trees, including oaks (refer to Map C-LWTP-1 and Table 3.6-4 in Section 3.6). Much of the vegetation clearing would occur within the site's interior, particularly in the central portion (refer to Map C-LWTP-1). In addition, construction of the Lafayette Reclaimed Water Pipeline would require oak and riparian tree removal (approximately 15 trees) within a roughly 20-foot-wide, 100-foot-long area at the creek crossing. The site's appearance would be noticeably altered by proposed tree disturbance and removal, particularly in the area between the creek and Mt. Diablo Boulevard, which is within the public roadway view corridor. In light of the City's tree protection policies, the change in site appearance associated with tree removal is considered a significant visual effect. Implementation of Measures 3.3-2a through 3.3-2c, in addition to tree-related mitigation measures (3.6-1a through 3.6-1d), would reduce the visual impact to a less-than-significant level.

## **Alternative 2**

Under Alternative 2, the Lafayette WTP would be decommissioned (see Map D-LWTP-2). Proposed modifications would be relatively minor and would not involve the introduction of prominent new above-ground features in undeveloped portions of the site. As with Alternative 1, construction of the Lafayette Reclaimed Water Pipeline would require oak and riparian tree removal (approximately 15 trees) within a roughly 20-foot-wide, 100-foot-long area at the creek crossing. Construction of the pipeline adjacent to the Lafayette WTP (the Orinda/Lafayette Aqueduct) would result in the removal of two oak trees along Mt. Diablo Boulevard at the eastern edge of the site, near the plant exit drive. The site's appearance would be noticeably altered by proposed tree disturbance and removal, particularly in the area between the creek and Mt. Diablo Boulevard, which is within the public roadway view corridor. In light of the city's tree protection policies, the change in site appearance associated with tree removal is considered a significant visual effect. Implementation of Measures 3.3-2a and 3.3-2b, in addition to tree-related mitigation measures (3.6-1a through 3.6-1d), would reduce the visual impact to a less-than-significant level.

## **Orinda WTP**

### **Alternative 1**

**Map D-OWTP-1** shows the layout of proposed facilities at the Orinda WTP. **Map D-OWTP-3** provides two cross-sections at Orinda WTP. Section B is through the backwash water recycle system proposed under Alternative 1 or 2. The new (project-level) facilities would occupy an approximately 120- by 220-foot area. The backwash water recycle system would be mostly below grade and therefore minimally visible. The above-grade portion of this facility would include a

building housing the chemical and electrical room and the UV disinfection building. This part of the structure would be about 100 by 75 feet and about 15 feet tall. In addition, three smaller structures would be installed just east of the new building, near the northern corner of the existing chemical building. Each of these structures would be about 16 feet tall and would include a 35-foot-diameter sludge storage tank, a new solids pumping plant approximately 35 square feet in size, and a slightly smaller emergency generator building. Paved access from the entry drive would encircle the north side of the new basins and the new buildings. The above-ground portion of the facility would be located north/northwest of the existing Orinda WTP near Camino Pablo and Manzanita Drive and at the site's interior near the entry drive. Project construction would not result in the removal of mature trees or shrubs. The conceptual landscape plan for Alternative 1 is presented as Figure 3.3-OWTP-5. The landscape concept calls for clusters of drought-tolerant trees and shrubs to be installed near portions of the new above-ground facility. The new planting would complement the existing mature landscaping found along Camino Pablo and Manzanita Drive. As part of Alternative 1, the District would also replace the chain-link gate to the washwater settling basins.

Overall, the proposed Alternative 1 modifications would not appear dissimilar to existing facilities found at the Orinda WTP site in terms of their scale and general appearance. In this respect, the new facilities would represent an incremental aesthetic change that would not substantially alter the site's appearance. Implementation of Measures 3.3-2a through 3.3-2c would reduce the visual impact to a less-than-significant level.

### **Alternative 2**

Under Alternative 2, proposed facilities south of Manzanita Drive would be essentially the same as under Alternative 1. Under Alternative 2, proposed modifications north of Manzanita Drive include the installation of a new 220-foot-diameter clearwell, a new partially buried pumping plant, and an electrical substation with transformers, switchgears, and other equipment; the substation would occupy an area of about 50 by 100 feet and would be enclosed by a 7-foot-tall wall or fence. The substation components would range in height from approximately 5 to 9 feet. Map D-OWTP-2 depicts the proposed layout of Alternative 2. Map D-OWTP-3 provides two cross-sections applicable to Alternative 2. Section A is through the clearwell and Los Altos Pumping Plant No. 2. Section B is through the backwash water recycle system. A 20-foot-wide paved drive would separate the clearwell from the new above-ground structures. The new upgraded facilities would not be dissimilar to existing facilities in terms of their physical and aesthetic characteristics and would not result in substantial visual changes to the site's appearance. As under Alternative 1, Figure 3.3-OWTP-5 would serve as a conceptual landscape plan under this alternative. However, substantial alteration of the site's visual character would occur at the new clearwell/substation/pumping plant area due to the vegetation removal required. Vegetation clearing in this area would include removal of 45 to 55 trees (refer to Table 3.6-4 in Section 3.6, and Map C-OWTP-2 for tree and shrub locations). As shown on Map C-OWTP-2, vegetation would be preserved along the site's Camino Pablo and Manzanita Drive frontage. This perimeter vegetation would generally screen views toward the site interior, including the new above-ground facilities. The District would also replace the gate north of Manzanita with a gate similar in appearance to the main entry gate to the WTP. Implementation of Measures 3.3-2a

through 3.3-2c, in addition to tree-related mitigation measures (3.6-1a through 3.6-1d), would reduce the visual impact to a less-than-significant level.

### ***Walnut Creek WTP – Alternative 1 or 2***

Modifications are proposed at two locations at the Walnut Creek WTP site (see Map D-WCWTP-1). The new filters, approximately 50 by 100 feet, would be installed on the east side of the site, adjacent to the existing filters near the existing operations building. The new filters would be low profile and comparable in appearance to the existing filters; as such, their addition would represent a minor change to the site's appearance.

The new Leland Pumping Plant No. 2 would be built adjacent to the recently constructed backwash water treatment system near the site's northern edge. The new pumping facilities would be housed in a concrete structure that would be 35 by 85 feet and about 19 feet tall. Two connecting underground pipes would also be installed at the pumping plant. The new pumping plant would be situated on a developed portion of the site, adjacent to two existing structures. The conceptual landscape plan for the Walnut Creek WTP, presented as Figure 3.3-WCWTP-4, would extend the landscaping pattern (clusters of drought-tolerant trees and shrubs) established as part of the recently completed backwash water treatment system. Given its comparable scale and proximity to existing facilities, the presence of the new pumping plant would not substantially alter the general appearance of the northern side of the Walnut Creek WTP site. Construction of the new facilities would not require the removal of any trees or shrubs. Implementation of Measures 3.3-2a through 3.3-2c would reduce the visual impact to a less-than-significant level.

### ***Sobrante WTP – Alternative 1 or 2***

As shown on Map D-SOBWTP-1, the improvements proposed at the Sobrante WTP site would be essentially the same under Alternative 1 or 2. Map D-SOBWTP-2 provides a cross-section of the backwash water recycle system facilities on the western side of the WTP.

Several modifications (e.g., improvements to the ozonation system) are proposed within existing buildings located within developed portions of the main part of the WTP; these changes would not be visible to the public and would not affect the site appearance. West of the access drive from Amend Road, the proposed chlorine contact basin (a buried, 92-foot-diameter concrete tank) would be installed about 100 feet outside and northeast of the existing WTP fenceline. The proposed underground tank site is relatively flat and undeveloped. Tank construction would not require the removal of any trees; however, pipeline installation would require removal of several ornamental trees, and some established ornamental grasses would be removed. Because this visual change would be relatively minor and would not be highly noticeable, it would not substantially alter the visual character found in this part of the Sobrante WTP site.

As noted on Map D-SOBWTP-1, the two existing backwash water settling basins, located at the western side of the plant, would be converted to backwash water equalization basins, and a new filter-to-waste equalization basin would be constructed adjacent to these basins. Paved access would be added along the west side of the basins. In addition, two high-rate sedimentation units

would be installed adjacent to the basins near the southern edge of the parcel. These structures would be prefabricated, epoxy-painted steel structures approximately 50 feet long, 20 feet wide, and approximately 15 feet high. Construction of these facilities would require removal of some mature vegetation, including approximately 10 trees and ornamental shrubs situated along a portion of the site's Valley View Road frontage (refer to Map C-SOBWTP-1 for the location of tree/shrub removal). The removal of this mature vegetation would be a noticeable change that would alter the visual character of the western part of the plant. The new/converted structures would be noticeable within the context of their visual setting.

Figure 3.3-SOBWTP-5 shows the conceptual landscape plan for the Sobrante WTP. Proposed landscaping would include clusters of drought-tolerant shrubs as well as screening and specimen trees along the site's Valley View Road frontage. Low shrubs and groundcover would also provide aesthetic enhancement of the site and the adjacent streetscape. As the landscaping becomes established and matures, the new plant material would create visual interest and provide considerable screening of the new structures. Over time, the proposed landscaping would integrate the new structures' appearance with the overall site landscape. Implementation of Measures 3.3-2a through 3.3-2c, in addition to tree-related mitigation measures (3.6-1a through 3.6-1d), would reduce this impact to a less-than-significant level.

### ***Upper San Leandro WTP – Alternative 1 or 2***

Map D-USLWTP-1 shows the layout of proposed improvements at the Upper San Leandro WTP under Alternative 1 or 2. The proposed modifications would include physical changes within two existing structures. These changes would not be visible and would therefore not alter the site's appearance. The locations of the proposed filter-to-waste basin and pumping plant are shown on Map D-USLWTP-1. The pumping station and equalization basin would be above-ground structures. Two liquid oxygen tanks, approximately 12 feet in diameter by 50 feet long, on 2 foot high supports, would be installed in a paved area, immediately adjacent to the existing ozone generator building and chemical building. The addition of these tanks would represent a minor, incremental physical and visual change within this developed portion of the site.

A 75-foot-diameter steel equalization basin is proposed near the northwest corner of the site. The above-ground basin would be 18 feet tall. The dimensions of the new pumping plant would be approximately 25 by 35 and 15 feet tall. As shown on the Figure 3.3-USLWTP-1 aerial photo, the new basin and pumping plant would be situated adjacent to two existing detention basins. These structures would also lie within close proximity to two existing tanks as well as other nearby equipment. The general appearance and scale of the new facilities would not be dissimilar to the appearance of these existing facilities and would therefore not substantially alter the site's existing visual character. Project construction would require the removal of 15 to 25 mature trees, many of which are redwoods. A number of mature trees would be preserved at this site area. Proposed tree removal would alter the existing visual character found at the northwest corner of the Upper San Leandro WTP; however, this effect would not substantially alter the site's overall appearance. Therefore, this impact is considered less than significant.

### ***Orinda-Lafayette Aqueduct***

Construction of the tunnel entry shaft for the Orinda-Lafayette Aqueduct, situated within the southeast portion of the Orinda Sports Field, and the exit shaft near St. Stephens Drive would require ground disturbance and minor vegetation (grass) clearing. The Orinda-Lafayette Aqueduct would be installed below grade and would not be visible to the public. The alignment for this project can be found on Maps C-OLA-1 through C-OLA-3. When completed, the tunnel shaft would be a low-profile concrete structure, about 16 by 16 feet and 1 foot tall.

A minor visual effect would occur with the construction of the Orinda-Lafayette Aqueduct adjacent to the Lafayette WTP, resulting in the removal of two oak trees located along Mt. Diablo Boulevard at the eastern edge of the site, near the WTP exit drive. The visual changes resulting from construction of this project are minimal and are addressed by implementation of tree-related mitigation measures (3.6-1a through 3.6-1d). Therefore, this visual impact is considered less than significant.

### ***Ardith Reservoir and Donald Pumping Plant***

The improvements proposed at the Ardith Reservoir and Donald Pumping Plant site, portrayed on Map D-ARRES-1, include relocating the Donald Pumping Plant to a lower elevation and constructing a partially buried concrete reservoir on the adjacent cleared, graded pad. The relocated pumping plant would be approximately 65 by 30 feet and 13 feet tall (above-ground height ranges from 2 to 7 feet) (Map D-ARRES-2 shows a profile drawing). The 110-foot-diameter concrete Ardith Reservoir would be partially buried, with a bottom elevation of 720 feet above sea level. The tank would extend about 22 to 25 feet above grade. A 10-foot-wide paved access road would encircle the tank, connecting to the existing access road. The new tank would be partially buried so as to reduce its visibility. In addition, the structure would be located at a disturbed site area that consists of a cleared and graded pad. The District constructed this pad in 1960 in conjunction with the Donald Pumping Plant, anticipating future construction of a relatively large-scale tank. Construction of the tank and the relocated pumping plant would require vegetation clearing, including the removal of 30 to 35 trees (mostly mature eucalyptus; refer to Table 3.6-4 in Section 3.6). The majority of trees on the site, including numerous mature trees situated along the site perimeter, would be preserved.

The introduction of a new, partially buried tank on the site would noticeably alter the existing visual conditions. However, in light of current site development, including the presence of the Donald Pumping Plant, and because the majority of tree cover would be preserved, these visual changes would not substantially alter the site's intrinsic visual character.

Figure 3.3-ARRES-5 presents a conceptual landscape plan for the Ardith Reservoir/Donald Pumping Plant site. Proposed landscaping would include several clusters of trees at the top of the slope just west of the new pumping plant building. Large shrubs would be placed along the western edge of this building to provide additional screening. A mix of trees and shrubs would be added to the area of existing vegetation adjacent to Ardith Drive upslope from the new Ardith Reservoir. The new vegetation would fill in holes in the existing vegetation improving the screening for views from Ardith Drive. As the landscaping becomes established and matures, the

new plant material would create visual interest and provide considerable screening of the new structures. Over time, the proposed landscaping would integrate the new structures' appearance with the overall site landscape. Implementation of Measures 3.3-2a through 3.3-2c, in addition to tree-related mitigation measures (3.6-1a through 3.6-1d), would reduce the visual impact to a less-than-significant level.

### ***Fay Hill Pumping Plant and Pipeline Improvements***

The WTTIP proposes to upgrade the existing underground Fay Hill Pumping Plant and an associated pipeline segment as shown on Map D-FHPP-1. More powerful pumping units would be installed at the pumping plant and about 500 feet of pipe would be installed in Rheem Boulevard. The above-ground physical changes that would result from pump and equipment installation and pipeline construction are very minor. Construction at the pumping plant would require the removal of one or two pine trees, which would not substantially affect the site's visual character because other nearby mature trees would remain. These changes in the site's appearance would not be highly noticeable from onsite or offsite locations. Therefore, the visual impact is considered less than significant.

### ***Fay Hill Reservoir***

The proposed modifications at Fay Hill Reservoir, depicted on Map D-FHRES-1, involve the replacement of an existing rectangular-shaped reservoir structure with two approximately 80-foot-diameter, cylindrical tanks that would be installed within the footprint of the existing reservoir. The new tanks would have low-profile dome roofs. Map D-FHRES-2 is a cross-section of the new reservoir. Installing the replacement tanks and constructing the paved perimeter access road would require the removal of one or two pine trees. Given the presence of an existing reservoir and the substantially unchanged stand of pine trees around the site's perimeter, the proposed modifications would represent a minor, incremental change in the site's appearance. Consequently, the visual impact is considered less than significant.

### ***Glen Pipeline Improvements***

The proposed Glen Pipeline Improvements would be installed underground and therefore would not be visible. Project construction would not result in the removal of any trees. While installation of the pipeline segment that crosses a tributary to Happy Valley Creek could result in minimal disturbance to the root zone of trees and riparian vegetation (see Map C-GLENPL-3), any potential damage would be addressed by implementation of Measures 3.6-1a through 3.6-1d. Therefore, visual changes resulting from construction of this pipeline project would be minimal. This visual impact is considered less than significant.

### ***Happy Valley Pumping Plant and Pipeline***

Proposed modifications at the Happy Valley Pumping Plant site would involve the installation of a new pumping plant facility on an undeveloped site. Mixed oak woodland and grasses occupy the pumping plant site, which is located in an established residential neighborhood. Map D-HVPP-1 depicts the proposed site plan for the Happy Valley Pumping Plant. Map D-HVPP-2 shows a

profile of the proposed pumping plant. Modifications would include new underground pipelines, perimeter fencing, and paved access from Lombardy Lane. The paved access drive would be approximately 12 feet wide, with a fenced gate set back approximately 18 feet from the roadway. The pumping plant structure would be approximately 30 by 50 feet and approximately 15 feet tall. The new structure would be set back more than 50 feet from the edge of Lombardy Lane.

An existing, visually prominent oak tree situated at the site's north side would be preserved. However, project construction would require the removal of two oak trees (refer to Map C-HVPP-1). Figure 3.3-HVPP-3 presents the conceptual landscape plan proposed for the Happy Valley Pumping Plant site. As shown in the conceptual landscape plan, the large oak tree is located between the public roadway and the new pumping plant. The proposed project landscape concept calls for drought-tolerant shrubs and groundcover to be clustered outside of the oak tree's dripline, near the edge of the site. The new landscaping would provide additional screening, particularly along the site's street frontage. The new planting would complement the existing tree cover onsite. As the landscaping becomes established, it would create visual interest and provide additional screening of the new structures. Over time, the proposed project landscaping would integrate the appearance of the new facility into the overall landscape setting. Implementation of Measures 3.3-2a through 3.3-2c, in addition to tree-related mitigation measures (3.6-1a through 3.6-1d), would reduce this impact to a less-than-significant level.

### ***Highland Reservoir and Pipelines***

Map D-HIGHRES-1 depicts the proposed site plan for the Highland Reservoir. Map D-HIGHRES-2 shows a cross-section of the proposed reservoir. Proposed modifications at this site involve the installation of a new reservoir adjacent to the Lafayette Reservoir Recreation Area Rim Trail on an undeveloped hillside occupied by numerous mature oaks. The approximately 135-foot-diameter concrete Highland Reservoir would be partially buried, with a bottom elevation of 532 feet above sea level. The tank would extend approximately 3 to 30 feet above finished grade. A 10-foot-wide paved access road and 8-foot-tall security fencing would encircle the tank. A gate and approximately 40- by 60-foot-wide paved area would be situated at the east side of the tank.

As shown on Map C-HIGHRES-1, the Highland Reservoir inlet/outlet pipeline (and the Lafayette Reclaimed Water Pipeline) would follow an alignment traversing open space from Mt. Diablo Boulevard through the watershed before terminating at the outlet tower in Lafayette Reservoir. In addition, an overflow pipeline would extend underground approximately 800 feet from the new Highland Reservoir to the Lafayette Reservoir. The new pipelines would not be visible to the public.

Construction of the tank would require vegetation clearing, including the removal of 30 to 35 oak trees (with dbh 18 inches or greater) at the reservoir site (refer to C-HIGHRES-1). Figure 3.3-HIGHRES-4, the proposed conceptual landscape plan, shows native tree and shrub planting in the area between the trail and the new reservoir. As it matures, the project landscaping would partially screen the new structure, providing a measure of aesthetic integration with the surrounding landscape setting.

The introduction of a new, partially buried tank on the site and the removal of up to 35 mature trees would change the visual conditions considerably. Figures 3.3-HIGHRES-5 and 3.3-HIGHRES-6 show a close-range “before” and “after” view of the new tank structure as seen from the adjacent recreation trail. As shown in the simulation, the proposed project would add prominent new built structures that would appear in strong visual contrast to the natural landform and vegetation pattern. These changes would substantially alter the site’s undeveloped oak woodland hillside appearance. Even with implementation of Measures 3.3-2a through 3.3-2c and Measures 3.6-1a through 3.6-1e, this visual impact would remain significant.

Construction of the proposed Highland Reservoir Inlet/Outlet Pipeline would require vegetation clearing, including the removal of 25 to 30 pine trees. Construction of the proposed overflow pipeline would require a minor amount of vegetation clearing near the reservoir shoreline. As seen from nearby trail locations, the tree removal could, to varying degrees, be a noticeable visual change. However, because a substantial number of mature trees would remain along the pipeline corridor, it is expected that the tree removal associated with proposed pipeline and aqueduct construction would represent an incremental change that would not substantially alter the area’s general appearance. Implementation of Measures 3.3-2a through 3.3-2c, in addition to tree-related mitigation measures (3.6-1a through 3.6-1d), would reduce the visual impact for the Inlet/Outlet Pipeline to less than significant.

### ***Lafayette Reclaimed Water Pipeline***

Potential impacts resulting from installation of the Lafayette Reclaimed Water Pipeline are covered within Lafayette WTP, Orinda-Lafayette Aqueduct, and the Highland Reservoir and Pipeline impact discussions.

### ***Leland Isolation Pipeline and Bypass Valves***

The proposed Leland Isolation Pipeline and Bypass Valves would be located primarily underground; above-ground physical changes that would result from installation of the pipeline and bypass valves are very minor. The location of these facilities is shown on Maps C-LELPL-1 and C-LELPL-2. Construction could require removal of two trees at the Danville Pumping Plant, which would remove some of the screening of the pumping plant site from the Iron Horse Trail. Implementation of Measure 3.3-2b, in addition to tree-related measures (3.6-1a through 3.6-1d), would reduce the visual impact at the Leland Bypass Valves to a less-than-significant level.

### ***Moraga Reservoir***

As shown on Map D-MORRES-1, the proposed Moraga Reservoir project calls for replacing the existing rectangular-shaped, open-cut reservoir with a concrete tank that would be installed within the footprint of the existing reservoir. As shown on profile drawing Map D-MORRES-2, the new tank would have a low-profile dome roof and paved perimeter access. In addition, new piping would be installed from the reservoir to a new valve pit and drop inlet situated at the southwest corner of the site, near the Claudia Court and Draeger Drive intersection.

Installing the replacement tank and constructing paved perimeter access would require the removal of 4 to 6 trees on the eastern side of the site. Construction of the new valve pit at the southwest corner of the site would require only minor disturbance and no tree removal. Given the presence of an existing reservoir facility on the site and the mature trees and shrubs that would remain around the site's perimeter, the proposed modifications would represent a relatively minor, incremental visual change that would not substantially alter the site's appearance. Therefore, this impact would be considered less than significant.

### ***Moraga Road Pipeline***

The proposed Moraga Road Pipeline would be installed underground and therefore would not be visible. Project construction would result in vegetation clearing in the Lafayette Reservoir Recreation Area, including the removal of approximately 150 to 190 trees (refer to Table 3.6-4 in Section 3.6 and Maps C-MORPL-1 through C-MORPL-3). As seen from nearby trail locations, the tree removal could be a noticeable visual change. However, because a substantial number of mature trees would remain along the pipeline corridor, it is expected that the tree removal associated with proposed pipeline construction would be an incremental change that would not substantially alter the area's general appearance. The tree removal would not generally be visible from the residential area to the northeast due to intervening vegetation. Implementation of Measure 3.3-2b, in addition to tree-related mitigation measures (3.6-1a through 3.6-1d), would reduce the visual impact to a less-than-significant level.

### ***Sunnyside Pumping Plant***

As shown on Map D-SUNPP-1, the proposed Sunnyside Pumping Plant project calls for installing a new pumping plant and pipelines on a sloping, undeveloped site adjacent to Happy Valley Road. Modifications would include a new transformer, switchgear, and paved access. The pumping plant structure would be about 50 by 30 feet and approximately 20 feet tall and would be built near the base of an embankment. Map D-SUNPP-2 shows a cross-section of the proposed pumping plant. The new transformer and switchgear would lie immediately west of the pumping plant, on a paved apron connected to the access drive. The structures would be approximately 5 and 9 feet tall, respectively.

Project construction would require vegetation clearing, including the removal of 13 pine and redwood trees along the site's northern edge. A number of mature conifer trees would be preserved in this general area. The conceptual landscape plan for the Sunnyside Pumping Plant site, presented as Figure 3.3-SUNPP-3, shows several new conifer trees clustered on the north side of the pumping plant structure. In addition, an informal grouping of broad-leaf evergreen trees is proposed for screening purposes along the south and east edges of the new facility. Clusters of evergreen shrubs and groundcover and two deciduous specimen trees would accent this landscape planting.

The new facility would lie near the base of a roadside embankment in a location that is not generally visible to the public. Over time, the landscaping proposed as part of the project would provide considerable screening, particularly along the facility's south and east sides. As it matures, the landscaping would also enhance the visual integration of the proposed facility with

the surrounding landscape setting. Implementation of Measures 3.3-2a through 3.3-2c, in addition to tree-related mitigation measures (3.6-1a through 3.6-1d), would reduce the visual impact to a less-than-significant level.

### ***Tice Pumping Plant and Pipeline***

As shown on Map D-TICEPP-1, the proposed Tice Pumping Plant and Pipeline project calls for installing a new pumping plant and pipelines on an undeveloped, partially wooded site adjacent to a recreation trail and Olympic Boulevard. Map D-TICEPP-2 is a cross-section of the proposed pumping plant. Modifications would include a new transformer, switchgear, control valve vault, and paved access. The pumping plant structure would be about 30 by 70 feet and 24 feet above-ground and would be built into the base of a slope. The toe of this hillside would be excavated and a 19-foot-tall retaining wall constructed along part of the site's southern boundary to provide a level pad for the new transformer and switchgear. The transformer would be approximately 10 by 12 feet and 10 feet tall and the switchgear would be 10 by 10 feet and 10 feet tall. A paved area, approximately 100 feet long and 25 to 40 feet wide, would extend from the north side of the new pumping plant structure. For security purposes, 8-foot-tall fencing would be installed along the north and east edges of this paved area.

Project-related earthwork and grading would require vegetation clearing, including the removal of about 10 trees. The conceptual landscape plan for the Tice Pumping Plant is presented as Figure 3.3-TICEPP-3. The proposed landscape concept calls for clusters of drought-tolerant, native trees and shrubs, and cobbles to be installed near portions of the new facility. The new planting would complement the existing vegetation pattern. Pipeline installation is not expected to require the removal of any trees and would be buried.

Figures 3.3-TICEPP-4 and 3.3-TICEPP-5 show close-range “before” and “after” views of the new Tice Pumping Plant as seen from the adjacent recreation trail. As illustrated in the simulation, the proposed project would introduce built features, including a 24-foot-tall building, a 19-foot-tall retaining wall, and fencing, on a currently undeveloped, partially wooded hillside. These changes would substantially alter the site's visual character. However, as it matures, the proposed landscaping would provide considerable screening and visual integration with the surrounding landscape setting (refer to the Figure 3.3-TICEPP-5 simulation). Implementation of Measures 3.3-2a through 3.3-2c, in addition to tree-related mitigation measures (3.6-1a through 3.6-1d), would reduce the visual impact to less than significant.

### ***Withers Pumping Plant***

Proposed modifications at the Withers Pumping Plant site would consist of a pump plant building, transformer, and switchgear (refer to Map D-WITHPP-1). A cross-section drawing of the proposed pumping plant is shown on Map D-WITHPP-1. The new pumping plant would be installed near the bottom of a partially wooded slope, approximately 100 feet downhill and northeast of the existing Grayson Reservoir. The pumping plant building would be 30 by 50 feet and approximately 15 feet tall, with paved access on all sides. The structure would be built into the slope, and a retaining wall would be constructed around most of its perimeter. The new

transformer and main switchgear would be installed immediately southeast of the pumping plant building on a level paved pad. These project components would be approximately 8 by 8 feet and 10 feet tall and 2 by 8 feet and 9 feet tall, respectively.

Project construction would require vegetation clearing, including the removal of 35 to 40 trees (refer to Map C-WITHPP-1 for tree and shrub removal locations). Figure 3.3-WITHPP-3 shows the conceptual landscape plan proposed for the Withers Pumping Plant site. Proposed landscaping would include the installation of drought-tolerant trees and shrubs on the hillside near the new facility. The new planting would complement the existing site landscaping and, over time, would provide visual screening. Implementation of Measures 3.3-2a through 3.3-2c, in addition to tree-related mitigation measures (3.6-1a through 3.6-1d), would reduce the visual impact to less than significant.

### ***Mitigation Measures***

#### **Measure 3.3-2a:**

- The District will implement landscaping plans prepared for the following WTTIP projects: Lafayette WTP (Alternative 1), Orinda WTP (Alternative 1 or 2), Walnut Creek WTP (Alternative 1 or 2), Sobrante WTP (Alternative 1 or 2), Ardith Reservoir and Donald Pumping Plant, Happy Valley Pumping Plant, Highland Reservoir, Sunnyside Pumping Plant, Tice Pumping Plant, and Withers Pumping Plant.
- For each project (with the exception of the Fay Hill Pumping Plant), the District will plant native vegetation and/or construct earth berms around all proposed above-ground facilities to provide screening, consistent with the requirements set forth in Measure 3.6-1. Landscaping will include revegetation of disturbed areas to minimize textural contrasts with the surrounding vegetation.
- The District will replace any landscaping at the WTTIP project sites that is removed or destroyed during construction consistent with landscape plans. New plants would include grasses, shrubs, and trees typical of the surrounding area. The District will consult with the appropriate jurisdiction when developing final landscaping plans. For disturbance of natural, non-landscaped areas, see Measure 3.6-3c in Section 3.6, Biological Resources.
- The District will also install additional landscaping: (1) north of Manzanita Drive at the Orinda WTP to provide additional screening of existing ponds or new above-ground facilities, and (2) along Mt. Diablo Boulevard at the southeastern edge of the Lafayette WTP under Alternative 2 near the exit drive.
- Implement Measure 3.6-1b in Section 3.6 regarding pruning.
- For each project listed in the first bullet (with the exception of Highland Reservoir), the District will coordinate with and involve neighborhood representatives during the development of final landscaping plans.
- The contractor will be required to warrant landscape plantings for one year after project completion.

**Measure 3.3-2b:** For each project (with the exception of the Fay Hill Pumping Plant and pipelines in roadways), the District will ensure that its contractors restore disturbed, graded areas to a natural-appearing landform.

**Measure 3.3-2c:** The District will use design elements to enhance the aesthetic appearance of proposed facilities and to integrate them with the existing visual environment. Proposed facilities will be painted or include appropriate concrete admixtures to achieve low-glare, earth-tone colors that blend with the surrounding terrain and visual setting. For each project, colors will be selected based on site-specific conditions with the goal of (1) reducing the visual contrast between new facilities and the surrounding natural landscape setting and/or (2) integrating the facility appearance with the neighboring built environment. Concrete structures need not be painted; however, integral coloring should be employed, as noted above, where structures are seen from sensitive community viewpoints.

- At the Lafayette WTP, landscaped berms may be incorporated into the final site and landscape plans at proposed clearwell sites in order to screen views from the Walter Costa Trail.
- At the Orinda WTP backwash water facility use textures, colors and materials that will blend with existing filter plant buildings.
- For the Tice, Withers, Happy Valley, and Sunnyside Pumping Plants, new pump structures and buildings will include architectural treatment and design elements (such as pitched roofs, roof overhangs, or ornamental window or trim detail) to enhance the appearance of new facilities.
- For the Lafayette WTP, Orinda WTP, Happy Valley and Tice Pumping Plants, the design of new walls, gates, and fencing will include aesthetic architectural treatment where facilities are located near public trails, residences, or scenic roadways.

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**Impact 3.3-3: Effects on views from the surrounding area, including public roadways, public trails, and open space and residential areas.**

***Lafayette WTP***

The Lafayette WTP is located in the City of Lafayette Hillside Overlay District (City of Lafayette Municipal Code). The intent of the overlay district is to preserve hills and ridges within the City in as near a natural state as feasible by regulating development on hillsides and ridgelines. The Lafayette WTP is not on a hillside or ridge. The discussion below characterizes the effects on views of the Lafayette WTP property from the surrounding area. Implementation of Measures 3.3-2a through 3.3-2c would help minimize impacts to views at this facility.

**Alternative 1**

Under Alternative 1, views of the Lafayette WTP from some locations in the surrounding area would be changed. Views from a limited segment of Highway 24, a designated state scenic highway, would include a fleeting glimpse of the proposed project. Figures 3.3-LWTP-5 and 3.3-LWTP-6 show “before” and “after” views of the project (without landscaping and with

landscaping at five years of maturity) as seen from Highway 24. The visual simulations indicate that motorists' views could encompass a portion of the new pumping plant building, paved access, and perimeter fencing. The visible project elements would be seen adjacent to dense roadside vegetation, against a landscape backdrop. In addition, a small area cleared of vegetation might be visible along the south (right) side of the recreation trail. This view of the project would be fleeting and would last for several seconds or less. As demonstrated in the visual simulation, within five years the landscaping proposed as part of the project would largely screen views of the new pumping plant facilities (refer to Figure 3.3-LWTP-4 for the Lafayette WTP conceptual landscape plan). With implementation of Measures 3.3-2a through 3.3-2c, this project would not substantially alter the visual character of the scenic Highway 24 corridor.

People using the Walter Costa Trail would have close-range, foreground views of the project. Figures 3.3-LWTP-7 and 3.3-LWTP-8 present visual simulations of the proposed project as seen from the Walter Costa Trail. From this close-range location, the new pumping plant building would appear prominently in the foreground. As shown in the simulation images, the new building would be seen beyond existing and new security fencing within the context of foreground and background landscape vegetation. The lines, form, and texture of these new built features would contrast noticeably with the surrounding landscape setting. As a result, the presence of these new project components would alter the visual character experienced from this segment of the trail. In addition, portions of the new clearwells, new chlorine contact basin, and backwash water recycle system might also be partially visible in the foreground from a limited area along the trail. However, because the structures would be several feet or less in height, the clearwell structures would not appear visually prominent when seen from the trail. Proposed shrub plantings between the trail and the new facilities would provide substantial screening. The project would not substantially affect views from the trail toward the creek and general area. To varying degrees, the project would affect the visual character along approximately 500 to 600 feet of the Walter Costa Trail, including a shorter segment that would need to be realigned near the proposed pumping plant building. (For additional existing trail views, refer to Photos L2 and L3 in Figure 3.3-LWTP-2.)

New project structures proposed at the Lafayette WTP, including those located in the western and central portions of the site, would generally not be visible from Mt. Diablo Boulevard because of screening provided by intervening vegetation. Mature trees would be removed in limited areas along Mt. Diablo Boulevard, as shown on Map C-LWTP-1. Map C-LWTP-1 includes tree removal that would occur for the Lafayette Reclaimed Water Pipeline Project. As seen from Mt. Diablo Boulevard, the substantial number of remaining trees along the site perimeter would continue to screen views of WTP facilities. However, in the immediate project vicinity, the loss of these trees would noticeably affect motorists' views from Mt. Diablo Boulevard. In light of the City of Lafayette's policies that recognize this roadway's scenic quality, the City's tree protection policies, and the Hillside Overlay District designations, the effects associated with tree removal along Mt. Diablo Boulevard are considered significant. Measures 3.3-2a through 3.3-2c would reduce the visual impact to a less-than-significant level.

## **Alternative 2**

Proposed modifications at the Lafayette WTP under Alternative 2 would not involve the introduction of prominent above-ground features on undeveloped portions of the site. As shown on Map C-LWTP-2, construction of the Lafayette Reclaimed Water Pipeline and the Orinda-Lafayette Aqueduct would require the removal of mature trees in limited areas. The loss of these trees could noticeably affect motorists' views from Mt. Diablo Boulevard. In light of the City of Lafayette's policies cited above, the effects associated with tree removal along Mt. Diablo Boulevard are considered significant. Measure 3.3-2a through 3.3-2b would reduce the visual impact to a less-than-significant level.

## **Orinda WTP**

### **Alternative 1**

Under Alternative 1, views of the Orinda WTP from some locations in the surrounding area would be altered. Views from Camino Pablo (a designated scenic route) would encompass portions of the backwash water recycle system. Due to the presence of dense roadside vegetation, the project would only be visible from a relatively short segment of designated scenic route. Figures 3.3-OWTP-6 and 3.3-OWTP-7 show close-range "before" and "after" views of the project (without landscaping and with landscaping at five years of maturity) as seen from Camino Pablo. From this location, portions of the new building would appear prominently during the initial period following construction. However, existing vegetation would partially screen the new structure. As shown in the Figure 3.3-OWTP-6 simulation, the new building would appear along the roadside within the context of foreground built elements, including traffic signals and meter boxes. In terms of the visual character experienced from Camino Pablo, the new building would not appear dissimilar to the existing chemical building (refer to Photo O4, Figure 3.3-OWTP-2). As indicated in the Figure 3.3-OWTP-7 simulation, within five years the proposed landscaping would substantially screen the building and storage tank as seen from Camino Pablo. With implementation of Measures 3.3-2a through 3.3-2c, the visual impact to the character of views experienced from Camino Pablo would be reduced to less than significant.

Views from Manzanita Drive would be affected by the proposed project. Figures 3.3-OWTP-8 and 3.3-OWTP-9 are visual simulations showing a view of the new UV disinfection building as seen looking south from Manzanita Drive near the Orinda WTP entry road. The simulations indicate that a portion of the new building would be visible from this roadway location. The new structure would appear against a wooded hillside backdrop, and existing landscaping in the foreground would partially screen it from view. EBMUD would plant some additional vegetation to increase the screening after project completion. The new building would not be dissimilar in scale to the existing filter gallery building that is also visible from Manzanita Drive (refer to Photo O5, Figure 3.3-OWTP-3). As illustrated in the Figure 3.3-OWTP-9 simulation, within five years the combination of existing vegetation and proposed landscaping would substantially screen the new building. With implementation of Measures 3.3-2a through 3.3-2c, the visual impact to the character of views experienced from Manzanita Drive would be reduced to less than significant.

## **Alternative 2**

On the portion of the Orinda WTP situated south of Manzanita Drive, Alternative 2 proposes the same facilities and would result in the same visual effects as those described for Alternative 1. In addition, Alternative 2 proposes modifications north of Manzanita Drive, including the installation of a new 220-foot-diameter clearwell and relatively low-profile electrical substation (with structures up to approximately 10 feet tall). These structures could be visible from a limited area of Manzanita Drive. The existing washwater settling basins are partially visible from a limited section of Manzanita Drive, where there is a break in the vegetation at the site access drive (refer to Photo O7, Figure 3.3-OWTP-3). A fleeting glimpse of the proposed new facilities might be available at this viewpoint; however, roadside landscaping and vegetation would generally screen public views of these new facilities from both Manzanita Drive and Camino Pablo. Vegetation clearing in this area would include removing 45 to 55 trees (refer to Table 3.6-4 in Section 3.6 and Map C-OWTP-2 for tree and shrub locations); however, vegetation would be preserved along the site's Camino Pablo and Manzanita Drive frontage. It is expected that this perimeter vegetation would generally screen views toward the site interior, including the new above-ground facilities. Implementation of Measures 3.3-2a through 3.3-2c would reduce the visual impact to a less-than-significant level.

## ***Walnut Creek WTP – Alternative 1 or 2***

Views from the Briones–Mt. Diablo Trail would be affected by the proposed Walnut Creek WTP project. Figures 3.3-WCWTP-5 and 3.3-WCWTP-6 are visual simulations showing the new pumping plant as seen looking south from the trail. A comparison of the “before” and “after” images indicates that a portion of the new pumping plant would be visible. The new structure would appear along the skyline next to (left of) the existing decant building. From this viewpoint, which is about one-quarter mile away, the new building would be comparable in scale and general appearance to the existing building. In this respect, the project would represent a relatively minor, incremental change in visual conditions from this segment of the trail. In addition, as indicated in the Figure 3.3-WCWTP-6 simulation, within five years the proposed landscaping would substantially screen the new pumping plant building and the existing decant building as seen from this portion of the Briones–Mt. Diablo Trail. From more distant locations, intervening topography and vegetation would generally screen views of the new facility.

Figures 3.3-WCWTP-7 and 3.3-WCWTP-8 present a second simulation view of the proposed Leland Pumping Plant No. 2. Looking west from a distance of less than a quarter mile away, this view shows the project from Alfred Avenue, a nearby residential street. A comparison of the “before” and “after” images indicates that a portion of the new pumping plant would be seen at the top of the slope. The new structure would appear against a partial landscape backdrop, beyond the existing basin structure. The new building would contrast with the natural hillside landscape in line and form. The project would introduce a new built form to the hillside, although it would be partially screened by existing residential landscaping in the foreground. To a degree, the project would alter visual conditions in this location during the initial period following construction. However, as illustrated in the Figure 3.3-WCWTP-6 simulation, within five years

the landscaping installed by the District as part of the Walnut Creek Expansion Project will have matured, completely screening views of the new pumping plant building.

Neither the proposed project nor the recently installed site landscaping would obstruct distant ridgeline views that are currently available from this location. Views of the new filters would generally be screened by intervening vegetation, topography, and/or development. To the extent that they could be seen from places along the Acalanes Ridge, the new filters would not be particularly noticeable because they would appear within the context of the existing adjacent filters; as such, their effect on visual conditions would be minor and incremental. Therefore, the new filters would not substantially alter views as seen from the surrounding area. Implementation of Measures 3.3-2a through 3.3-2c would reduce visual impacts of the proposed Walnut Creek WTP and Leland Pumping Plant No. 2 to a less-than-significant level.

### ***Sobrante WTP – Alternative 1 or 2***

The proposed Sobrante WTP project could affect views from Amend Road. The proposed chlorine contact basin would be installed about 100 feet outside and northeast of the fence-line at the main part of the plant. Tank and pipeline construction would require the removal of several ornamental trees and potential removal of some established ornamental (pampas) grasses. The majority of trees in this area of the site would be preserved. The vegetation removal could be visible from nearby portions of Amend Road (refer to Photo S7, Figure 3.3-SOBWTP-3). In addition, these changes might be noticeable from a few residences along the north side of Amend Road. Because the site modifications would occur more than 1,000 feet from the roadway, and because the project does not involve the installation of any above-ground features in this part of the site, it is expected that the visual changes would not be highly noticeable from Amend Road and nearby residences; therefore, the project would not substantially alter the existing visual character found in this part of the Sobrante WTP site.

Improvements proposed at the western side of the plant would affect views from Valley View Road. Facility construction would require removing established landscaping, including approximately 10 oak, pine and ornamental trees and shrubs along a portion of the site's Valley View Road frontage (refer to Map C-SOBWTP-1 for the location of proposed tree/shrub removal). Figures 3.3-SOBWTP-6 and 3.3-SOBWTP-7 show close-range "before" and "after" views of the project (without landscaping and with landscaping at five years of maturity) as seen from Valley View Road near D'Avila Way. As shown in the Figure 3.3-SOBWTP-6 simulation, when seen from this roadway area, portions of the converted basins and perimeter fencing would initially be noticeable in the foreground. The removal of mature landscaping would also result in a visible change for Valley View Road motorists. In the initial period following construction, the new structures would contrast with the landscape setting in terms of their line and form. As shown in the Figure 3.3-SOBWTP-7 simulation, within five years the landscaping proposed as part of the project would substantially screen the new structures from public view. As the landscaping becomes established and matures, the new plant material would create an aesthetic enhancement, helping to integrate the facility's appearance with the surrounding setting. Implementation of Measures 3.3-2a through 3.3-2c would reduce the visual impact on the western side of the plant to less than significant.

### ***Upper San Leandro WTP – Alternative 1 or 2***

All of the physical modifications at the Upper San Leandro WTP are proposed within the site's interior, and mature stands of trees along the site's perimeter would be substantially preserved; as a result, changes at the site would not be particularly visible to the public, and the project would not cause a substantial effect on existing views from the surrounding area. Therefore, the visual impact is considered less than significant.

### ***Orinda-Lafayette Aqueduct***

Construction of the Orinda-Lafayette Aqueduct tunnel entry shaft would include a minor amount of disturbance within the southeast portion of the Orinda Sports Field (refer to Photos O10 and O11, Figure 3.3-OWTP-4). When completed, the tunnel shaft would be a low-profile concrete structure, about 16 by 16 feet and 1 foot tall. These changes would be relatively minor and would not substantially affect public views in the area. Therefore, the visual impact is considered less than significant.

### ***Ardith Reservoir and Donald Pumping Plant***

Figures 3.3-ARRES-6 and 3.3-ARRES-7 show close-range “before” and “after” views of the proposed Ardith Reservoir and Donald Pumping Plant project (without landscaping and with landscaping at five years of maturity) as seen from Ardith Drive, adjacent to the project site. After construction, the new tank and perimeter paved access would initially be visible from this location (as illustrated in Figure 3.3-ARRES-6). However, as illustrated in the Figure 3.3-ARRES-7 simulation, in less than five years existing and proposed landscaping would completely screen views of the facilities from Ardith Road. Fleeting glimpses of portions of the new tank and pumping plant might be available from a few nearby residences to the north or northwest; however, a combination intervening topography, existing vegetation, and proposed landscaping would generally provide substantial screening of the project from these locations. Implementation of Measures 3.3-2a through 3.3-2b would reduce the visual impact to less than significant.

### ***Fay Hill Pumping Plant and Pipeline Improvements***

The above-ground physical changes proposed at the Fay Hill Pumping Plant and Pipeline Improvements site (including the removal of one or two trees) would be very minor and would not be particularly noticeable from nearby locations, including the adjacent shopping center parking lot and the Moraga Way and Rheem Boulevard roadways (refer to Photos F5 and F6, Figure 3.3-FHPP/MORPL-2). Therefore, the visual impact is considered less than significant.

### ***Fay Hill Reservoir***

The proposed modifications at Fay Hill Reservoir could result in minor effects on views from some public roadway and residential locations. These visual changes would generally be seen from a distance of about one-half mile or more. Figure 3.3-FHRES-3 is a “before” and “after” view of the Fay Hill Reservoir as seen from Natalie Drive, a residential street about a half mile to the north of the project site. From this vantage point, the project site appears along the hilltop near the center of the photo. A comparison of the existing view and the visual simulation

indicates that the project-related visual changes would barely be perceptible from this location. The simulation depicts a slight thinning in the stand of pine trees around the site's perimeter. In addition, the new tank would be slightly less visible along the skyline than the existing reservoir. As illustrated in the Figure 3.3-FHRES-3 simulations, these changes would not substantially affect views from the surrounding residential area. Therefore, the visual impact is considered less than significant.

### ***Glen Pipeline Improvements***

The proposed Glen Pipeline would be buried in roadways and would not be visible to the public following construction. Although some damage to trees could occur during installation of the pipeline, no trees are proposed for removal. With implementation of Measures 3.6-1a through 3.6-1d, potential tree damage would not substantially affect views. These tree-related measures ensure that trees are monitored and replaced if necessary. Therefore, this visual impact is considered less than significant.

### ***Happy Valley Pumping Plant and Pipeline***

The proposed installation of a new Happy Valley Pumping Plant on an undeveloped wooded site would affect views from a short segment of Lombardy Lane, a narrow, winding residential street. Visual simulations (Figures 3.3-HVPP-4 and 3.3-HVPP-5) show close-range views of the new pumping plant from Lombardy Lane looking southwest. As shown in the Figure 3.3-HVPP-4 simulation, the roof of the new pumping plant and portions of the new access drive, fence, and gate would be visible from this location. The new building's roof would appear against a backdrop of dense vegetation. The existing landform and vegetation would partially screen the new pumping plant building. In views from Lombardy Lane, a large oak tree would appear prominently in the foreground. Figure 3.3-HVPP-5 shows the Happy Valley Pumping Plant with proposed landscaping after approximately five years. The landscaping includes drought-tolerant evergreen shrubs clustered on the northern side of the new facility. As illustrated in this simulation, within five years the proposed planting would provide considerable visual screening. It is expected that a combination of existing trees and shrubs and proposed landscaping would generally screen views from adjacent or nearby residences. With implementation of Measures 3.3-2a through 3.3-2c, the visual impact is considered less than significant.

Regarding the Happy Valley Pipeline, the pipeline would be buried in roadways. Although some damage to trees could occur during installation of the pipeline (refer to Maps C-HVPP-1 through C-HVPP-3), no trees are proposed for removal. With implementation of Measures 3.6-1a through 3.6-1d, potential changes in the roadway from root damage would not substantially affect views. These tree-related measures ensure that trees are monitored and replaced if necessary. Therefore, this visual impact of the Happy Valley Pipeline is considered less than significant.

### ***Highland Reservoir and Pipelines***

The Highland Reservoir and Pipelines project is located within the City of Lafayette Hillside Overlay District and within the 250-foot setback area for a class II ridgeline. City policies preclude development within this setback, although the Highland Reservoir and Pipelines project

would be exempt from this policy pursuant to Section 53091 of the California Water Code. The discussion below characterizes the effects on views of the Highland Reservoir and Pipelines project area.

The proposed installation of a new Highland Reservoir on an undeveloped hillside would affect views from a variety of places within the Lafayette Reservoir Recreation Area, including points along the adjacent Rim Trail. Construction of the partially buried concrete tank would require the removal of 30 to 35 oak trees (with dbh 18 inches or greater) at the reservoir site. The pipelines and construction access associated with this project would require the removal of 65–75 oak and pine trees. Refer to Map C-HIGHRES-1 at the end of Chapter 2.

The introduction of a partially buried tank on the site and the associated tree removal would represent a considerable visual change to existing landscape conditions. Figures 3.3-HIGHRES-5 and 3.3-HIGHRES-6 show close-range “before” and “after” views of the new tank structure as seen from the adjacent recreation trail. From this trail location, the tank would appear prominently in the foreground. New security fencing enclosing the tank and perimeter paving would also appear prominently. As shown in the simulations, the new tank would be seen against the skyline with a partial landscape backdrop. In terms of their line, form, and texture, these new built features would contrast noticeably with the surrounding setting when viewed at close range. As a result, these new project components would alter the visual character experienced from this segment of the trail. The oak tree removal would also be noticeable and would adversely affect the quality of views from this trail segment and from the trail vista point. Grading required for tank construction would also contrast with the surrounding natural landform. Figure 3.3-HIGHRES-6 demonstrates that the landscaping proposed as part of the project would partially screen the new structure, providing a measure of aesthetic integration with the surrounding landscape setting. However, the tank structure would still be noticeable and somewhat prominent in relationship to the natural landscape.

Figures 3.3-HIGHRES-7 and 3.3-HIGHRES-8 present a second simulation view of the proposed Highland Reservoir as seen from a recreation trail in the Lafayette Reservoir Recreation Area. Looking toward the northwest, this view shows the project from the Big Oak Trail at a distance of over one-half mile. A comparison of the “before” and “after” images indicates that the new tank would be seen beyond the reservoir in the cleared area toward the right side of the view. The tank would appear against a landscape backdrop. As seen from this viewpoint, the tank would be noticeable, although it would not be visually prominent. To some degree, its form and the graded terrain would contrast with the surrounding natural landscape. The removal of mature oak trees from the site would also be a noticeable visual change that would adversely affect this trail view. As demonstrated by the Figure 3.3-HIGHRES-8 simulation, within five years the proposed landscaping would provide some additional screening.

Given the degree of visual contrast between proposed project features and the natural landscape setting, and in light of City policies regarding hillside and tree protection as well as District policies regarding visual quality at recreation sites, the effect on trail views is considered significant and unavoidable, even with implementation of Measures 3.3-2a through 3.3-2c.

### ***Lafayette Reclaimed Water Pipeline***

Potential impacts resulting from installation of the Lafayette Reclaimed Water Pipeline are included within the discussions of Lafayette WTP Alternatives 1 and 2, Orinda-Lafayette Aqueduct, and the Highland Reservoir pipeline.

### ***Leland Isolation Pipeline and Bypass Valves***

The proposed Leland Isolation Pipeline and Bypass Valves would be located primarily underground; above-ground physical changes that would result from installation of the pipeline and bypass valves are very minor. The location of these facilities is shown on Maps C-LELPL-1 and C-LELPL-2. As described in the previous section, construction could require removal of two trees at the Danville Pumping Plant, which would remove some of the screening of the pumping plant site. This could affect public views from the Iron Horse Trail. Tree-related mitigation measures (3.6-1a through 3.6-1d) and Measure 3.3-2b would reduce the visual impact to a less-than-significant level.

### ***Moraga Reservoir***

Replacing the existing Moraga Reservoir with a new covered reservoir and installing a new valve pit could affect views from some nearby locations in the surrounding area. The new tank would have a low-profile dome roof and paved perimeter access. For the most part, the proposed changes would take place within the interior of the site. Because mature trees and shrubs along the site's perimeter would be preserved, the modifications would not generally be noticeable. Installation of the valve pit at the southwest corner of the site would require only minor disturbance and no tree removal. The modifications proposed at the Moraga Reservoir site would represent a relatively minor and incremental visual change that would not substantially affect public views in the area. Therefore, the visual impact would be considered less than significant.

### ***Moraga Road Pipeline***

The entire Lafayette Reservoir Recreation Area is within a City-designated Hillside Overlay District. The Moraga Road Pipeline alignment traverses ridgelines designated by the City as Class III and Class II ridges. City policies preclude development within 250 feet of a Class II ridge, although the Moraga Road Pipeline would be exempt from this policy pursuant to Section 53091 of the California Water Code. The discussion below characterizes the effects on views of the Moraga Road Pipeline area.

The proposed Moraga Road Pipeline would be installed underground and therefore would not be visible. As discussed under Impact 3.3-2, above, construction would result in vegetation clearing in the Lafayette Reservoir Recreation Area, including the removal of approximately 150 to 190 trees. As seen from nearby trail locations, the tree removal could result in a noticeable visual change. However, because numerous mature trees would remain along the pipeline corridor, the tree removal would represent an incremental change that would not substantially affect trail views. From the nearby residential area to the northeast, the tree removal would not generally be

visible due to intervening vegetation. With the implementation of Measures 3.3-2a through 3.3-2b, this visual impact would be less than significant.

### ***Sunnyside Pumping Plant***

Because it is screened by topography and vegetation, the proposed Sunnyside Pumping Plant site is not very visible to the public. Figures 3.3-SUNPP-4 and 3.3-SUNPP-5 show close-range “before” and “after” views of the project from a vantage point along Happy Valley Road at the site entry road. The Figure 3.3-SUNPP-4 simulations show that a small portion of the pumping plant roof would be visible from this location (seen toward the center of the image). Because only a small portion of the structure is visible and because the view is fleeting, the facility would barely be noticeable from Happy Valley Road. As demonstrated by the Figure 3.3-SUNPP-5 simulation, in five years the proposed landscaping would almost completely screen the Sunnyside Pumping Plant from Happy Valley Road. Portions of the new pumping plant might be visible from the neighboring residences situated to the east and north; however, a combination of existing vegetation and proposed landscaping would generally provide substantial screening of the project from these locations. With the implementation of Measures 3.3-2a through 3.3-2c, this visual impact would be less than significant.

### ***Tice Pumping Plant and Pipeline***

The proposed installation of the Tice Pumping Plant near the base of an undeveloped hillside would affect views from nearby locations, including Olympic Boulevard and the adjacent recreation trail. The introduction of a new pumping plant facility on the site and the removal of 10 mature trees would represent a considerable visual change to existing conditions. See Map C-TICEPP-1 regarding the location of tree removal as well as potential tree damage along the pipeline route. Although some damage to trees could occur during installation of the pipeline, no trees are proposed for removal. Tree-related mitigation measures (3.6-1a through 3.6-1d) address this potential damage, and therefore, no long-term visual effects are expected to result.

Figures 3.3-TICEPP-4 and 3.3-TICEPP-5 show “before” and “after” views of the new tank structure as seen from the adjacent recreation trail. From this location, the new pumping plant building would appear prominently in the foreground. The new transformer and switchgear structures, security fencing, and retaining wall would also appear prominently. However, the scale of the new pumping plant structures would not be dissimilar from or incompatible with the existing buildings and structures near the Olympic/Tice Valley Boulevard intersection. The new facility would appear against a landscape backdrop. The form and texture of these new built features would contrast noticeably with the surrounding landscape setting. As a result, the presence of these new project components would alter the visual character experienced from this segment of the recreation trail and adjacent roadway. The removal of mature trees from the site would also be highly noticeable and would adversely affect the quality of trail and roadway views in the immediate area. Figure 3.3-TICEPP-5 demonstrates that, within five years, the proposed landscaping would substantially screen the new pumping plant, providing a measure of aesthetic integration with the surrounding setting. With implementation of Measures 3.3-2a through 3.3-2c, the visual impact would be less than significant.

### ***Withers Pumping Plant***

Proposed site development would be visible from a limited area along Reliez Valley Road, a designated scenic route, and from a few residences along the northeast side of Reliez Valley Road. Figures 3.3-WITHPP-4 and 3.3-WITHPP-5 are visual simulations showing a close-range view of the new pumping plant as seen looking southeast from Reliez Valley Road near the site entry road. As shown in the simulations, a portion of the new pumping plant would be visible. The new structure would appear against a landscape backdrop, with part of the existing Grayson Reservoir visible against the skyline. Existing vegetation would partially screen the new pumping plant building as well as part of the reservoir. The Figure 3.3-WITHPP-5 simulation shows the Withers Pumping Plant with landscaping proposed as part of the project, which would include the installation of drought-tolerant trees and shrubs on the hillside near the new facility. As shown in this simulation, the proposed planting would complement the existing site landscaping and, within five years, considerable visual screening would be provided. With implementation of Measures 3.3-2a through 3.3-2c, the visual impact would be less than significant.

### ***Mitigation Measure***

**Measure 3.3-3:** Implement Measures 3.3-2a through 3.3-2c, as detailed above.

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### **Impact 3.3-4: Effects on a scenic vista.**

The majority of WTTIP projects would not be seen within the context of a scenic vista (i.e., a distant view encompassing valued natural or built landscape features such as ridgelines, water bodies, or landmark structures) once construction was complete. However, as discussed below and under Impact 3.3-3, the new Highland Reservoir has the potential to disrupt or obstruct a scenic vista that is currently available to the public. The pipelines and construction access associated with this project would require the removal of 65–75 oak and pine trees, and the tank would require removal of 30-35 large-diameter oak trees. Refer to Map C-HIGHRES-1 at the end of Chapter 2.

To varying degrees, the Highland Reservoir and associated tree removal would be visible from places along public trails in the Lafayette Reservoir Recreation Area. Figures 3.3-HIGHRES-7 and 3.3-HIGHRES-8 present “before” and “after” views of the proposed Highland Reservoir as seen from a vantage point along the Big Oak Trail, at a distance of over one-half mile. A comparison of the “before” and “after” images indicates that the new tank would be visible beyond the reservoir in the cleared area toward the right side of the view. The tank would appear against a landscape backdrop. From this viewpoint, the tank would be noticeable, although it would not appear visually prominent. To some degree, its form and the graded terrain would contrast with the surrounding natural landscape. The removal of mature oak trees from the site would also result in a noticeable visual change that would adversely affect views from this trail. As demonstrated by the Figure 3.3-HIGHRES-8 simulation, within five years proposed landscaping would provide a measure of additional screening. Given the degree of visual contrast between proposed project features and the natural landscape setting, and in light of City policies

regarding hillside and tree protection as well as District policies regarding visual quality at recreation sites, even with the addition of new replacement trees and landscape screening, the effect on trail views is considered significant and unavoidable.

### ***Mitigation Measure***

**Measure 3.3-4:** Implement Measures 3.3-2a through 3.3-2c, above, for Highland Reservoir.

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### **Impact 3.3-5: New sources of light and glare.**

#### ***Project Construction***

Most project facilities are proposed to be constructed during daytime, weekday hours. The only exceptions to the daytime weekday hours for construction would be the Orinda-Lafayette Aqueduct (Alternative 2) and the pipeline segment that crosses the Lafayette Reservoir Recreation Area entrance/exit road for the Highland Inlet/Outlet Pipeline and Lafayette Reclaimed Water Pipeline projects. The pipeline crossing construction work would occur for two to four nights and would be performed at night to minimize conflicts with recreation traffic. Tunnel construction would occur 24 hours per day, seven days a week, at tunnel shafts (primarily the entry shaft at the Orinda Sports Field north of the Orinda WTP), and limited maintenance and inspection work would occur on weekend days. With installation of the sound barriers at these locations pursuant to Measure 3.10-1d (in Section 3.10, Noise and Vibration), existing intervening vegetation and topography, and implementation of Measure 3.3-5a, below, the potential temporary visual effects associated with the use of nighttime construction lighting would be less than significant.

#### ***Project Operations***

The District would install low-impact, vandal-resistant, motion-sensor lights for nighttime use during operations at some of the facility sites, including the new facilities at all of the WTPs (except at Lafayette WTP under Alternative 2). EBMUD would also install low-impact, vandal-resistant, motion-sensor lights at the Fay Hill and Ardith Reservoirs and at the Happy Valley, Sunnyside, Tice, and Withers Pumping Plant sites. New lighting would be focused on specific areas to minimize or avoid light spill onto adjoining properties. Because proposed exterior lighting would be motion-sensor lighting, it would only be activated in the event that maintenance workers need to access the facility at night. Under normal operations, new exterior lighting would be turned off at the end of the workday. Given its infrequent use, and the design of new lighting to avoid light spill on adjoining properties, new lighting proposed for the WTTIP projects is not expected to create substantial new sources of light and glare. Therefore, the project would not have a substantial effect on existing nighttime visual conditions at the facility sites or in surrounding areas.

### **Mitigation Measures**

**Measure 3.3-5a (Applies to the Orinda-Lafayette Aqueduct and pipeline crossing at the recreation area entrance road):** To the extent possible, the District will ensure that lighting used during nighttime construction is directed downward and oriented such that no light source is directly visible from neighboring residential areas.

**Measure 3.3-5b (Applies to all facilities where permanent exterior lighting will be installed):** The District will ensure that new lighting utilizes cutoff shields and nonglare fixture design.

**Measure 3.3-5c (Applies to all facilities where permanent exterior lighting will be installed):** To the extent possible, the District will ensure that all permanent exterior lighting is directed onsite and downward. In addition, new lighting will be oriented to ensure that no light source is directly visible from neighboring residential areas and will be installed with motion-sensor activation. In addition, highly reflective building materials and/or finishes will not be used in the designs for proposed structures, including fencing and light poles. In accordance with Measure 3.2-1b, above, landscaping will be provided around proposed facilities. This vegetation will be selected, placed, and maintained to minimize offsite light and glare in surrounding areas.

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### **Program-Level Elements**

To varying degrees, the program-level improvements proposed as part of the WTTIP could result in visual impacts.

#### ***Lafayette WTP***

Construction of the additional high-rate sedimentation units and UV disinfection building would occur in the central, developed portion of the Lafayette WTP site (see Map D-LWTP-1). The appearance of these new facilities would not be dissimilar to existing facilities located throughout this part of site. In this respect, the programmatic changes proposed under Alternative 1 would represent an incremental visual change that would not substantially alter the site's appearance, although construction of the proposed UV disinfection building could require removal of some riparian vegetation along Lafayette Creek. The installation of these new facilities would not substantially affect views from the surrounding area provided that, when these facilities are built, the vegetation along the site's perimeter would provide a level of screening that is comparable to or greater than existing visual conditions in 2006.

#### ***Orinda WTP***

Program-level facilities at the Orinda WTP under Alternative 1 would be similar to project- and program-level facilities under Alternative 2 (see Maps D-OWTP-1 and D-OWTP-2). The high-rate sedimentation unit would be installed south of Manzanita Drive in an area that is east and uphill of the site access drive. The new facility would be situated between the existing parking lot and Manzanita Drive. The new facility would not be dissimilar to existing facilities located at the

Orinda WTP and therefore would not substantially affect the site's appearance. However, depending on the degree of vegetation removal required for construction, views from Manzanita Drive could be affected.

The visual effects associated with the Alternative 1 program-level facilities north of Manzanita Drive, within the existing washwater settling basin area, are discussed under the project-level analysis of Alternative 2.

To the north, a new UV disinfection building and new chlorine contact basin would be installed in the Orinda Sports Field parking area along Camino Pablo; the locations shown on Map D-OWTP-1 are set back about 60 feet from the roadway. The Orinda Sports Field would be replaced by a new clearwell, which could be approximately 350 feet in diameter. The clearwell would be set back more than 100 feet from Camino Pablo and would be situated near the northern edge of the Orinda Sports Field area. Construction of the UV disinfection building and chlorine contact basin would result in the removal of some existing trees. In addition, there would likely be some vegetation removal required to accommodate the pipeline construction connecting the Orinda WTP with the new northernmost clearwell. The installation of the clearwell (which would require substantial excavation), chlorine contact basin, and UV disinfection building would considerably alter the appearance of this portion of the site, particularly during the construction period. To some extent, the new facilities would affect views from Camino Pablo, a designated scenic corridor. Changes in this part of the site could also affect views from a limited number of residences along the west side of Camino Pablo.

Following construction these facilities would be largely below grade, but could include low-profile, above-ground features. With incorporation of appropriate mitigation measures, including preparation of site-specific landscape plans and aesthetic treatment of proposed new structures (similar to Measures 3.3-2a through 3.3-2c), these visual impacts are expected to be less than significant.

### ***Walnut Creek WTP***

Under Alternative 1 or 2, the additional Walnut Creek WTP facilities would include high-rate sedimentation units and UV disinfection building. These new facilities would be installed near the existing filters and clearwell (see Map D-WCWTP-1). These new facilities would be comparable in general appearance and scale to the existing facilities found at the Walnut Creek WTP. Therefore, the new structures would not substantially alter the site's appearance. However, to varying degrees, the new structures might be visible from the surrounding area, including locations within the Acalanes Ridge Open Space and along the Briones–Mt. Diablo Trail. These impacts on public views could be reduced to a less-than-significant level through implementation of mitigation measures similar to those proposed for the project-level components described above.

### ***Leland Reservoir Replacement***

Replacement of the Leland Reservoir could result in the removal of landscaping, which would change the visual character of the site. This project could also potentially affect public views from

the surrounding area. These impacts likely could be reduced to a less-than-significant level with implementation of measures similar to Measures 3.3-2a through 3.3-2c, but further study would be required following completion of conceptual design.

### ***New Leland Pressure Zone Reservoir and Pipeline***

Current plans call for siting a new reservoir on an undeveloped hillside site owned by Caltrans (refer to Maps B7 and C-NLELRES-1). This site, located south of Rudgear Road, has low-density residential development to the north and east, public open space to the south, and I-680 to the west. This portion of I-680 is a designated state scenic highway. A pipeline would be constructed to connect the new tank with existing District facilities at Rudgear Road and Danville Boulevard in a residential area just west of I-680.

This site has undergone topographic alteration. Construction at this site could affect views of open ridgelines as well as views from I-680, public trails, and nearby residences. Implementation of mitigation, including careful facility siting, backfilling, site restoration, aesthetic color treatment, and appropriate landscaping, could reduce these impacts; however, visual impacts at this site could remain significant and unavoidable.

### ***St. Mary's Road/Rohrer Drive Pipeline***

This pipeline would be installed underground and therefore would not be visible. Map B6 shows the alignment of the St. Mary's Road/Rohrer Drive Pipeline. Project construction could require vegetation clearing, including tree removal (refer to the discussion in Section 3.6, Biological Resources). These impacts could be reduced to a less-than-significant level through implementation of measures similar to Measures 3.3-2a through 3.3-2c.

### ***San Pablo Pipeline***

The pipeline alignment would be constructed almost entirely within open space and watershed lands (see Map B5). A portion of the proposed alignment follows Old San Pablo Dam Road, which is partly paved. This pipeline would be installed underground and therefore would not be visible. Project construction could require vegetation clearing, including tree removal (refer to the discussion in Section 3.6). These impacts could be reduced to a less-than-significant level through implementation of measures similar to Measures 3.3-2a through 3.3-2c.

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