

4.6 AESTHETICS AND SCENIC RESOURCES

The scenic quality or character of an area consists of the landscape features and social environment from which they are viewed. The landscape features that define an area of high visual quality may be natural, such as mountain views, or man-made, such as city skyline. To assess the quality of visual resources in the project area, this section describes the overall visual character and distinct visual features on or in the view shed of the Livermore Site and Site 300.

4.6.1 Scenic Resources Policies

The Landscape Architecture Master Plan for LLNL provides guidance for development at LLNL (LLNL 2002d). Because there are no strict standards at LLNL for matching exterior building color or style, the landscape architecture planning process is the only means of creating cohesiveness in image. The Landscape Architecture Master Plan is intended to ensure that all site improvements are architecturally compatible with their immediate surroundings and that other aesthetic qualities, such as temperature, wind, and glare are moderated.

The Livermore Site is within Alameda County. In addition, the western 1,100 feet of the Livermore Site is within the city of Livermore. Most of Site 300 is within San Joaquin County, with a small portion in Alameda County. The surrounding cities and counties have no planning jurisdiction for the site because LLNL is a Federal facility owned by DOE. Nevertheless, as a good neighbor policy, LLNL does consider local planning policies, to the extent practicable, in its land decisions. An overview of the relevant scenic resource policies of the surrounding jurisdictions is provided below.

Alameda County

East County Area Plan

The East County Area Plan of the Alameda County General Plan presents Alameda County's intent regarding future development and resource conservation in the East County area (Alameda County 1994). The East County Area Plan provides specific visual resource goals and policies as well as specific implementation programs to achieve the goals and policies. The East County Area Plan also provides specific guidance as to preservation of sensitive view sheds and scenic corridors. Policies relevant to the Livermore Site or Site 300 are summarized in Table 4.6.1-1.

TABLE 4.6.1–1.—Visual Resource Policies of the East County Area Plan Relevant to the Livermore Site or Site 300

Trees	
Policy 110	Alameda County shall require that developments are sited to avoid or, if avoidance is infeasible, to minimize disturbance to large stands of mature, healthy trees and individual trees of notable size and age.
Policy 111	Alameda County shall not allow any structure to exceed the height of the tree canopy in woodland areas.
Landscaping	
Policy 114	Alameda County shall require the use of landscaping...to enhance the scenic quality of the area and screen undesirable views.
Policy 115	In all cases appropriate...landscaping and screening shall be required to minimize the visual impact of development...To the maximum extent practicable, all exterior lighting must be located, designed, and shielded so as to confine direct rays to the parcel where lighting is located.
Utilities	
Policy 120	Alameda County shall require that utility lines be placed underground whenever feasible. When located aboveground, utility lines and supporting structures shall be sited to minimize their visual impact.

Source: Alameda County 1994.

Scenic Route Element of the Alameda County General Plan

The Alameda County Board of Supervisors adopted the scenic route element of the Alameda County General Plan in May 1966. The East County Area Plan recommends an update to the scenic route element but this task has not been completed. The scenic route element serves as a guide for establishment of programs and legislation for the development of a system of scenic routes. A primary goal of the element is the preservation and enhancement of scenic qualities and natural scenic areas adjacent to and visible from scenic routes. The element contains objectives, definitions, policies, standards, and implementation measures (Alameda County 1966).

Scenic routes are defined as consisting of three elements: the right-of-way (ROW), the adjacent scenic corridor, and areas extending beyond the scenic corridor. Scenic corridors are described in two ways: (1) areas that extend beyond a scenic route ROW and are of sufficient scenic quality to be acquired by state or local jurisdictions, and (2) areas to which development controls should be applied to preserve and enhance nearby views or maintain unobstructed distant views along a scenic route and provide a pleasant route of travel (Alameda County 1966).

The following roadway segments in the vicinity of the Livermore Site are designated as scenic routes in the scenic route element of the Alameda County General Plan:

- I-580
- Vasco Road
- Patterson Pass Road (from Vasco Road to the San Joaquin County border)
- Tesla Road (from Vasco Road to the San Joaquin County border)
- Greenville Road (from I-580 to Tesla Road)

- Altamont Pass Road (from I-580 to Route 239)
- Cross Road (from Patterson Pass Road to Tesla Road)
- Flynn Road (from Patterson Pass Road to I-580)
- Mines Road

Figure 4.2.2.1–2, in Section 4.2.2.1, illustrates the scenic routes designated in the Alameda County scenic route element.

The visual resource preservation policies contained in the Alameda County scenic route element are similar to those described above for the East County Area Plan but are specific to designated scenic routes. These policies are summarized below.

- **Provide for normal uses of land and protect against unsightly features.** In both urban and rural areas, normally permitted uses of land should be allowed in scenic corridors, except that panoramic views and vistas should be preserved and enhanced by supplementing normal zoning regulations with special height, area and side-yard regulations and by providing architectural and site design review.
- **Use landscaping to increase scenic qualities of scenic route corridors.** Landscaping should be designed and maintained in scenic route corridors to provide added visual interest, to frame scenic views, and to screen unsightly views.
- **Use underground utility distribution lines when feasible and make overhead lines inconspicuous.** New, relocated, or existing utility distribution lines should be placed underground whenever feasible. When it is not feasible to place lines underground, they should be inconspicuous from the scenic route. Poles of an improved design should be used wherever possible. Combined or adjacent ROWs and common poles should be used wherever feasible.
- **Control tree removal.** As a means of preserving the scenic quality of the county, no mature trees should be removed without permission from the local jurisdiction.

City of Livermore

Livermore Community General Plan

The Livermore Community General Plan is the comprehensive, long-term general plan for the physical development of the city and any land outside city boundaries relevant to its long-range planning (City of Livermore 1975). The plan specifies a number of natural and man-made visual amenities that should be preserved including some near the Livermore Site and Site 300 (Table 4.6.1–2).

**TABLE 4.6.1–2.—Amenities Designated for Preservation in the
*Livermore Community General Plan***

Natural Amenities	Man-made Amenities
Ridgelines	Vineyards (i.e., Wente Winery and Concannon Winery)
Grasslands	Other agriculture
Corral Hollow	Buildings of historic or architectural interest (i.e., Tesla historical town site and coal mines)
	Scenic highways, roads, and corridors

Source: City of Livermore 1975.

Scenic Route Element of the Livermore General Plan

The scenic route element of the Livermore Community General Plan is designed to guide the preservation and enhancement of scenic values along streets and highways in the Livermore Valley. It also aims to preserve and enhance scenic values that are of outstanding quality or that provide access to important scenic, recreational, cultural, or historic points. Furthermore, the scenic route element provides a comprehensive plan and expands the scenic route plans of Alameda County and the California Department of Transportation within the Livermore planning area. The following roadway segments in the vicinity of the Livermore Site are designated as scenic routes in the city of Livermore's scenic route element (Figure 4.2.2.1–2) (City of Livermore 1975):

- I-580
- Greenville Road
- Tesla Road
- Altamont Pass Road
- Patterson Pass Road (east of Greenville Road)
- Flynn Road

The policies in the scenic route element of the city of Livermore Community General Plan are similar to those contained in the East County Area Plan (Alameda County 1994) and scenic route element of the Alameda County General Plan (Alameda County 1966). These policies address the use of landscaping to increase the scenic qualities of scenic corridors and encourage the use of underground utilities and the preservation of mature trees (City of Livermore 1975).

Scenic Highways Element of the San Joaquin County General Plan

The San Joaquin County Board of Supervisors adopted the scenic highways element of the San Joaquin County General Plan on October 19, 1978. The purpose of the element is to establish scenic routes in the county and guide the preservation and enhancement of scenic qualities and natural scenic areas adjacent to and visible from scenic routes (San Joaquin County 1978).

San Joaquin County recognized the value of scenic resources surrounding a 16-mile portion of I-580 and I-5 between Stanislaus and Alameda counties. In 1974, the county adopted a scenic corridor zone, designed to give aesthetic protection to county-designated scenic highways. Later in 1974, this 16-mile segment of I-580 and I-5 received official designation as a state scenic highway. No other highways or roadways within San Joaquin County have been identified as scenic. Figure 4.2.2.1–2 shows the location of a segment of the I-580 state scenic highway corridor within San Joaquin County.

4.6.2 Visual Character of the Project Area

Regional Character

Hills and mountains that define the regional view shed and provide open space around the development on the valley floor ring the Livermore Valley of eastern Alameda County, where the Livermore Site is located. The terrain in the vicinity of the sites ranges from relatively flat land to gently rolling hills. The hills east and south of the Livermore Site gradually become steeper as they trend eastward to form the Altamont Hills of the Diablo Range. Wind turbines north and south of the Altamont Pass punctuate the eastern horizon and have become part of the eastern valley landscape identity.

Site 300 is located in the Altamont Hills of the Diablo Range. This area is largely grasslands and low shrubs in areas ranging in topography from gently rolling hills to steeply sloping ridges and drainages. View sheds in the area around Site 300 are severely constrained by topography.

Livermore Site

The Livermore Site has a campus-like or business park-like setting with buildings, internal roadways, pathways, and open space. Portions of the site along the western and northern boundaries remain largely undeveloped and serve as security buffer zones. A row of eucalyptus and poplar trees surrounds much of the developed portion of the Livermore Site and screens most ground-level views of the facility. Onsite buildings range in height from 10 feet to approximately 110 feet. A 9-foot chainlink and barbed wire security fence surrounds the Livermore Site. The most prominent buildings in the public view shed are the administrative buildings off of East Avenue in the southwest corner of the site, the Sunshine building in the western portion of the site, and NIF in the northeast corner. These buildings are visible from locations along adjacent roads.

The area surrounding the Livermore Site is a mixture of rural and pastoral uses and urban development. SNL/CA is located immediately south of the Livermore Site. Rural residences and grazing land are the primary visual features to the east. Detached residences occupy the area west of the Livermore Site, giving the area a suburban character. A small area of commercial use occupies lands immediately southwest of LLNL. A mixture of vineyards and residential uses surrounds the commercial area, although residential development is currently underway and the visual character of the area is shifting from pastoral to suburban. The area north of the Livermore Site to I-580 is industrial, primarily one- and two-story industrial buildings, business parks, and the Union Pacific railroad line that traverses the area. This area is visually similar with the research, business, and industrial character of the Livermore Site.

Site 300

The main gate and the GSA of Site 300, including a number of buildings, roads, and infrastructure, are foreground and middle-ground features in view from Corral Hollow Road, which forms the southern boundary of Site 300. Vegetative screening and topography partially obscure many of the features associated with the GSA. The majority of Site 300 is obscured from view by topography.

The surrounding area is primarily undeveloped open space or rural, with some exceptions. Fireworks America is adjacent to and northeast of Site 300. Although the sign at the entrance to the facility is visible from Corral Hollow Road, structures associated with this facility are

obscured by topography. The SRI International Testing Facility is approximately 0.6 mile south of Site 300 and is not visible from Corral Hollow Road.

Carnegie State Vehicular Recreation Area, located south of the western portion of Site 300, is used by off-road vehicles. The park includes dirt trails on the surrounding hillsides and a ranger station, picnic areas, and several contoured riding areas in the valley floor adjacent to Corral Hollow Road. These features are all visible from Corral Hollow Road. The high degree of modification is substantially out of character with the surrounding open space and rural features of the area.

4.6.3 Sensitive Views in the Surrounding Area

Locations of visual sensitivity are defined in general terms as areas where high concentrations of people may be present or areas that are readily accessible to large numbers of people. They are further defined in terms of several site-specific factors including

- Areas of high scenic quality (i.e., designated scenic corridors or locations)
- Recreation areas characterized by high numbers of users with sensitivity to visual quality (i.e., parks, preserves, and private recreation areas)
- Important historic or archaeological locations

No visually sensitive locations are defined on the Livermore Site or Site 300. The visual sensitivities of areas surrounding the Livermore Site and Site 300 are described below.

Livermore Site

Sensitive views around the Livermore Site include residential areas and scenic routes or visual amenities designated by the city of Livermore or Alameda County, as described in Section 4.6.1, Scenic Resources Policies.

The Livermore Site is not visible from several designated scenic resource areas (e.g., Wente and Concannon wineries, Tesla historical town site, Altamont Pass Road, Cross Road, and Mines Road) and is only minimally visible from several other designated scenic resource areas as a result of distance or intermittent topography. The Livermore Site is relatively distant from I-580 (approximately 1.5 miles) and views are obstructed by vegetation and development. Only the tallest onsite building on the Livermore Site is intermittently visible from this highway. The Livermore Site is not visible from most of Flynn Road but does occupy the middle-ground views from the western end of Flynn Road. As a result of distance, the facilities are visually indistinct and are consistent with surrounding development. The view of the Livermore Site from Tesla Road is almost completely obstructed by intervening topography.

The Livermore Site is prominently visible from residences near and motorists traveling along Vasco Road. Vegetation that surrounds the Livermore Site obstructs or partially screens most views of the facilities from this area (Figure 4.6.3–1). The buffer zone provides visual separation between the Livermore Site and surrounding viewers.

The Livermore Site is also visible from residences and vineyards to the southwest, and to motorists traveling north on Vasco Road (Figure 4.6.3–2). The security buffer area and vegetation provide partial screening of the Livermore Site from this view. In addition, residential and vineyard development in this area is currently taking place and will further screen views of the facilities.

The Livermore Site is prominent in views from most of Greenville Road. Although Greenville Road follows the eastern boundary of the Livermore Site, views from this portion of the road are heavily screened by vegetation. Views from Greenville Road south of the Livermore Site are more panoramic due to the elevated viewing perspective, but are partially screened by the rolling topography (Figure 4.6.3–3). The Livermore Site is visually distinct in the foreground and middle-ground, but is visually consistent with the overall pattern of development in the view shed.

The Livermore Site is also prominent in views from the western portions of Patterson Pass Road from Vasco Road to Flynn Road. Views from Patterson Pass Road adjacent to the Livermore Site, similar to those described for Vasco Road, are largely screened by vegetation and are separated from viewers by a security buffer area (Figure 4.6.3–2). Views toward the west from the lower reaches of Patterson Pass Road are similarly obstructed by vegetation. Views of the facilities from the higher reaches of Patterson Pass Road are obstructed by topography.

Site 300

Sensitive views around Site 300 include the Carnegie State Vehicular Recreation Area and scenic routes designated by Alameda County or San Joaquin County, as described in Section 4.6.1.



Source: Original.

FIGURE 4.6.3–1.—View of the Livermore Site Looking Southeast from Patterson Pass Road and Vasco Road



Source: Original.

FIGURE 4.6.3–2.—View of the Livermore Site Looking Northeast from Vasco Road



Source: Original.

FIGURE 4.6.3–3.—View of the Livermore Site Looking North from Greenville Road

Site 300 is not within the view shed of any of the designated scenic corridors except for a very short section of Tesla Road at the eastern end of Alameda County. Tesla Road becomes Corral Hollow Road at the San Joaquin County boundary. Corral Hollow Road follows the southern boundary of Site 300 and affords views of the site, but is not designated as a scenic corridor. Corral Hollow Road, which is adjacent to and south of Site 300, is the nearest public roadway with a view of the site. The view of Site 300 from Corral Hollow Road is of parking areas and several single-story structures in the GSA (Figure 4.6.3-4). The remainder of the view of Site 300 from Corral Hollow Road consists of rolling hillsides and a few scattered small structures on the hilltops. Other than the GSA, the facilities of Site 300 are not apparent in landscape views from publicly accessible viewpoints; however, a 3-foot-high wire fence surrounding Site 300 is visible from Corral Hollow Road, along the site's southern boundary.

Site 300 can be seen from the Carnegie State Vehicular Recreation Area, which lies directly south. Building 899, a single-story structure, and its surrounding light posts are visible from the recreation area. From the picnic area near the park entrance, the view of Site 300 consists primarily of undeveloped hillsides.



Source: Original.

FIGURE 4.6.3-4.—View of Site 300 Looking North from Corral Hollow Road