

3.1 - Aesthetics, Light, and Glare

3.1.1 - Introduction

This section describes the existing aesthetics, light, and glare setting and potential effects from project implementation on visual resources and the site and its surroundings. Descriptions and analysis in this section are based on site reconnaissance by FirstCarbon Solutions, as well as review of the City of Fremont General Plan, the Fremont Municipal Code, and the proposed Warm Springs/South Fremont Community Plan.

3.1.2 - Environmental Setting

Regional Setting

The Mission Hills are the primary backdrop to the Fremont area and form a continuous ridgeline from Interstate 680 (I-680) south through Milpitas. Notable peaks in the Mission Hills above Fremont include Mission Peak (2,517 feet), Mt. Allison (2,638 feet), and Monument Peak (2,594 feet).

The City of Fremont is characterized as a large, mostly developed suburban community with heavy industrial and commercial areas located in the western part of the City along the Interstate 880 (I-880) corridor and residential areas located towards the east. The southwest portion of Fremont, where the project site is located, contains industrial and commercial land uses, undeveloped land, and bay-related features (marshes, creeks, levees, etc.)

Community Plan Area

The 879-acre Warm Springs/South Fremont Community Plan area is characterized by large-parcel developed and undeveloped commercial and industrial properties.

The most prominent land use within the plan area is the 5.4 million square-foot Tesla Motors auto manufacturing plant. The plant grounds occupy approximately 209 acres. North and south of the plant are large undeveloped properties totaling 108 acres and 52 acres, respectively. Union Pacific Railroad controls the vacant land north of the Tesla Motors plant. Thermo Fisher Scientific recently purchased 22.3 acres to the south of Tesla and is constructing a 275,000 square-foot industrial design and manufacturing facility. Tesla recently purchased the remaining vacant land to the south of its facility.

The Warm Springs/South Fremont Bay Area Rapid Transit (BART) Station is under construction at the southwest quadrant of the South Grimmer Boulevard/Warm Springs Boulevard intersection. The station is projected to open in 2015 and would serve as the southern terminus of the BART system until the extension to San Jose (Berryessa) is completed, which is anticipated to occur in 2018.

The western and northern portions of the Community Plan area along Fremont Boulevard contain older, industrial development. The northeastern portion of the Community Plan area along Osgood Road contains a mix of newer and older commercial and industrial uses. The southeastern portion of the Community Plan area contains newer research and development and industrial uses along Reliance Way and Corporate Way.

Large, undeveloped parcels are located in the center of the Community Plan area along the South Grimmer Boulevard corridor.

The Community Plan area is bisected by the Union Pacific Railroad Warm Springs and Milpitas Subdivisions—two parallel rail lines. The Warm Springs Subdivision is currently used for freight operations, while the Milpitas Subdivision ceased freight operations several years ago and is currently being converted to the BART alignment. The Warm Springs Rail Yard is located at the southern end of the Community Plan area, adjacent to the east side of the Tesla Motors plant. The Warm Springs Subdivision continues south through Milpitas and San Jose.

Major roadways serving the plan area include Fremont Boulevard, South Grimmer Boulevard, Warm Springs Boulevard/Osgood Road, and Mission Boulevard. Freeway access to I-880 is available at the Fremont Boulevard and Mission Boulevard interchanges. Freeway access to I-680 is available at the Mission Boulevard and Durham Road/Auto Mall Parkway interchanges.

Appendix I provides photographs of the Community Plan area.

Surrounding Land Uses

The following is a summary of the visual attributes of surrounding land uses. Exhibit 3.1-1 depicts views from key vantage points.

West

I-880, a multi-lane freeway, serves as the western boundary of the plan area. West of the freeway are business park, commercial, and industrial uses. These land uses contain one- and two-story buildings characterized by contemporary architecture. Views of the plan area from land uses to the west are mostly obstructed by the presence of existing buildings.

North

Commercial and industrial uses along the south side of Auto Mall Parkway form the northern boundary of the plan area. Further north are commercial, industrial, and residential uses. Views of the plan area from land uses to the north are mostly obstructed by the presence of existing buildings.

East

I-680, a multi-lane freeway, serves as the eastern boundary of the plan area. East of the freeway are single-family residential uses. Though these homes are at a higher elevation than the project site, most would have obstructed views of future development because of existing sound walls along I-680.

South

Mission Boulevard (State Route 262 [SR-262]) forms the southern boundary of the plan area. South of the roadway are commercial uses. Located between the plan area and Mission Boulevard are existing commercial one- and two-story commercial and industrial buildings. Views of the plan area from land uses to the south would be obstructed by the presence of existing buildings.



View of residential area on east side of I-680 looking from the Research Avenue cul-de-sac.



View of Community Plan area from residential area on east side of I-680.



View of Osgood Road looking north from the Community Plan area.



View of I-880 looking south from the Tesla Motors plant.

Source: FirstCarbon Solutions, 2013.



Exhibit 3.1-1 Surrounding Land Uses

State Scenic Highways

The California Scenic Highway Mapping System classifies I-680 as an “Officially Designated” State Scenic Highway between Mission Boulevard (SR-262) in Fremont and the junction with State Route 24 in Walnut Creek. The California Scenic Highway Mapping System identifies “wooded hillsides and valleys” as the scenic attributes of the 1-680 corridor.

I-880 is not classified as an “Eligible” or “Officially Designated” State Scenic Highway within Alameda County.

Light and Glare

The proposed project site contains numerous sources of light and glare. Examples of light and glare include streetlights, freestanding lights, building-mounted lights, illuminated signage, reflective building material, and vehicular headlights. Surrounding areas also include numerous sources of light and glare, including two major freeways. In addition, Tesla, located in the southern portion of the plan area is illuminated 24 hours a day using street lamps.

3.1.3 - Regulatory Framework

State

California Scenic Highway Program

The California Scenic Highway Program is intended to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler’s enjoyment of the view. A scenic corridor is the land generally adjacent to and visible from the highway and is identified using a motorist’s line of vision. The corridor protection program seeks to encourage quality development that does not degrade the scenic value of the corridor. Minimum requirements for scenic corridor protection include:

- Regulation of land use and density of development
- Detailed land and site planning
- Control of outdoor advertising (including a ban on billboards)
- Careful attention to and control of earthmoving and landscaping
- Careful attention to design and appearance of structures and equipment

Local

City of Fremont

General Plan

The City of Fremont General Plan sets forth the following goals and policies in the Community Character Element related to aesthetics, light, and glare:

- Goal 4-1 and Policies 4.1-1, 4.1-4, 4.1-5, 4.1-7, and 4.1-10 promote a strong civic identity, well-kept neighborhoods, distinctive centers and work places, attractive transportation corridors, and high-quality public spaces.

- Goal 4-3 and Policies 4.3-1, 4.3-2, 4.3-3, 4.3-6, 4.3-7, 4.3-9, 4.3-11, 4.3-12, 4.3-13, and 4.3-14 call for well-designed building and site plans that promote architectural excellence and visual interest.
- Goal 4-4 and Policies 4.4-1, 4.4-2, 4.4-3, 4.4-5, and 4.4-6 sets forth objectives concerning high quality streets, sidewalks, parks, plazas, civic buildings, and other public spaces that contribute to Fremont’s sense of place and visual quality and appropriate levels lighting.
- Goal 4-5 and Policies 4.5-1, 4.5-2, and 4.5-10 call for the protection and enhancement of Fremont’s aesthetic and visual character through design techniques such as visual buffers or screening, landscaping, and public art.

3.1.4 - Methodology

FirstCarbon Solutions (FCS) evaluated potential project impacts on aesthetics, light, and glare through site reconnaissance and review of applicable plans and policies. FCS personnel visited the project site in April 2013 and documented site conditions and relationships to surrounding land uses with photographs. FCS personnel also reviewed aerial photographs, topographical maps, street maps, project plans, and elevations to identify surrounding land uses and evaluate potential impacts from future development that occurs pursuant to the Community Plan. The City of Fremont General Plan and the Fremont Municipal Code were reviewed to determine applicable policies and design requirements for the proposed project.

3.1.5 - Thresholds of Significance

According to Appendix G, Environmental Checklist of the CEQA Guidelines, aesthetics impacts resulting from the implementation of the proposed project would be considered significant if the project would:

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

3.1.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Scenic Vistas

Impact AES-1: Development and land use activities contemplated by the Community Plan would not have a substantial adverse effect on a scenic vista.

Impact Analysis

The proposed Community Plan identifies potential new development and redevelopment of properties to accommodate up to 11,521,526 square feet of light industrial, research and development, office, retail and hotel uses, up to 4,000 residential units, and an elementary school; refer to Table 2-4 in Section 2, Project Description. Development of individual sites would vary in intensity and height based upon the targeted use and location within the plan area. The Community Plan would include associated infrastructure improvements and public facility needs, as well as transportation and circulation network improvements.

The General Plan identifies hillsides and shorelines as scenic resources. The Mission Hills are located east of the Community Plan area on the opposite side of I-680. Views of the hills are available from public roadways such as South Grimmer Boulevard, Warm Springs Boulevard, and Fremont Boulevard. Although the Community Plan contemplates mid-rise development within the plan area that may obscure some view of the Mission Hills, it also envisions a grid-pattern network of new streets (e.g., Innovation Way) that would create new view corridors, particularly along east-west streets. Additionally, occupants of new multi-story buildings would have views of the Mission Hills. When the new view opportunities are accounted for, it would outweigh the loss of existing view opportunities.

Regarding views of the plan area from surrounding land uses, most of these areas would have obstructed views. For example, as shown in Exhibit 3.1-1, the residential area on the east side of I-680 has mostly obstructed views of the Community Plan area due to the presence of existing structures and sound walls. Likewise, commercial and industrial areas to the west, north, and south are generally located at the same elevation as the Community Plan area (40 to 80 feet above mean sea level) and the presence of existing development limits views of scenic resources such as shorelines and hillsides. As such, views of these resources would not be obstructed.

Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

State Scenic Highways

Impact AES-2: Development and land use activities contemplated by the Community Plan would not degrade scenic resources within the viewshed of a State Scenic Highway.

Impact Analysis

The eastern portion of the Community Plan area abuts I-680, which is an “Officially Designated” State Scenic Highway. The California Scenic Highway Mapping System identifies “wooded hillsides and valleys” as the scenic attributes of the I-680 corridor.

The 879-acre Community Plan area contains urban, built-up uses and undeveloped properties contemplated for urban development. There are no billboards facing I-680 within the Community Plan area. Moreover, there are no wooded hillsides or valleys within the Community Plan area.

The proposed Community Plan identifies potential new development and redevelopment of properties to accommodate up to 11,521,526 square feet of light industrial, research and development, office, retail and hotel uses, up to 4,000 residential units, and an elementary school. Development of individual sites would vary in intensity and height based upon the targeted use and location within the plan area. The Community Plan would include associated infrastructure improvements and public facility needs, as well as transportation and circulation network improvements.

Generally, these end uses and infrastructure improvements would be consistent with the existing urban development within the Community Plan area and surroundings and, therefore, would not significantly alter the viewshed from I-680. Furthermore, it would not result in the alteration of the identified scenic attributes of the I-680 viewshed, specifically wooded hillsides or valleys. Finally, the Community Plan does not propose any billboards or other freeway-oriented displays that are recognized as incompatible with a designated State Scenic Highway. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Visual Character

Impact AES-3: Development and land use activities contemplated by the Community Plan would not degrade the visual character of the Community Plan area or its surroundings.

Impact Analysis

The proposed Community Plan identifies potential new development and redevelopment of properties to accommodate up to 11,521,526 square feet of light industrial, research and

development, office, retail and hotel uses, up to 4,000 residential units, and an elementary school. Buildout of the Community Plan would alter the visual character within the plan boundaries. However, this change in and of itself is not considered significant unless the quality of viewscape is substantially diminished.

This impact analysis will assess the proposed project's potential visual character impacts in several ways, including assessment of the existing visual conditions, evaluation of the proposed Community Plan's development standards and design guidelines for land use and development, and the visual compatibility of the project with its surroundings. Each subject will be discussed separately.

Existing Visual Conditions

As previously discussed, the Community Plan area contains various developed industrial and commercial areas, in addition to the Warm Springs/South Fremont BART station and Thermo Fisher Scientific facility, which are under construction at the time of this writing. The Community Plan area also contains several large undeveloped properties that are contemplated for future urban development. There are no significant natural features (creeks, ridgelines, forested areas, etc.) within the Community Plan area. As such, the Community Plan area can be characterized as committed to urban use.

Visual Images

Exhibit 3.1-2 and Exhibit 3.1-3 depict various visual images of the potential buildout of the Community Plan area. Each image is summarized below:

- Exhibit 3.1-2 provides a ground-level image of the proposed Innovation Way corridor looking east towards the Warm Springs/South Fremont BART station.
- Exhibit 3.1-3 provides an image of the proposed bicycle/pedestrian connection between Innovation Way and the Warm Springs/South Fremont BART station.

Development Standards and Design Guidelines

The proposed Community Plan sets forth development standards and design guidelines that would apply to new development within the plan area.

The following eight principles have guided the preparation of the Community Plan:

- Innovation Hub: Warm Springs/South Fremont will be a test-bed of 21st century innovation by enabling synergistic investment in a setting of high performance public realm and a neighborhood hub where creative people can intermingle and share ideas.
- Focused Intensity: Focused growth, integrated with access to transit options, will encourage healthier, more sustainable and affordable living and working environments.
- Diversity of Uses: A diversity of uses, conveniently located near each other will promote a socially vibrant, pedestrian focused neighborhood where people are the most important ingredient.

- Well-Loved Public Places: People love and are attracted to places that offer high quality destinations that are safe and vibrant and accessible to all.
- Health and Recreation: Weaving recreation and outdoor activities throughout the Warm Springs/South Fremont District will encourage more people to spend more time outside, promoting healthier life styles.
- Ease of Movement: Multiple, connected circulation paths make all forms of movement easier and more convenient.
- Visually Interesting Urban Fabric: People are inspired by and drawn to visually interesting urban forms that graciously respond to context and human scale.
- Ecological Health: The presence of a regenerative network of interconnected urban and natural systems will establish an ecologically healthy district

The Community Plan area is subdivided into 10 Planning Areas. Density targets for each Planning Area are summarized in Table 2-4 in Section 2, Project Description. The Community Plan establishes minimum and maximum site area requirements to reserve a minimum amount of land area for the development of preferred land uses and also ensure that no single land use would dominate the Warm Springs/South Fremont district or any particular land use area.

The Community Plan sets forth transportation development goals in Chapter 4. It includes guidelines for design of street networks, bicycles, pedestrians, and transit facilities.

In summary, the Community Plan proposes a combination of guidelines and standards that would enable the new development and land activities contemporary design to be visually compatible with the Community Plan's vision for the project site and surrounding land uses.

Visual Compatibility with Surrounding Land Uses

The Community Plan area is surrounded by urban uses on all sides. Surrounding land uses include I-680, I-880, commercial retail, single family residential, office, and Mission Boulevard (SR-262). All of the surrounding land uses are characterized by contemporary development.

The proposed Community Plan would maintain consistency with the surrounding commercial, industrial, and residential uses in terms of end uses and design characteristics and, therefore, would be visually compatible.

Conclusion

Although buildout of the Community Plan would result in the fundamental and irreversible change in the visual character of the 879-acre plan area, the development and land use activities contemplated would achieve a high-quality design that would be visually compatible with surrounding land uses. Moreover, it would facilitate the development of the Community Plan area to higher-and-better uses as envisioned by the City of Fremont General Plan. As such, impacts would be less than significant.



Source: Perkins + Will , 2013.



Exhibit 3.1-2 Innovation Way Visual Image



Source: Perkins + Will, 2013.



Exhibit 3.1-3 BART Bicycle/Pedestrian Linkage Visual Image

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Light and Glare

Impact AES-4: Development and land use activities contemplated by the Community Plan would not create new sources of light and glare that may adversely affect views.

Impact Analysis

The Community Plan area and its surrounding areas currently contain several sources of light and glare, including but not limited to street lighting along I-680, I-880, Fremont Boulevard, Mission Boulevard, South Grimmer Boulevard, and Osgood Road/Warm Springs Boulevard; illuminated signage; building-mounted lighting; and freestanding exterior lighting. Note that the Community Plan contains several facilities that are illuminated during the nighttime and early morning hours (e.g., Tesla Motors plant).

The proposed Community Plan identifies potential new development and redevelopment of properties to accommodate up to 11,521,526 square feet of light industrial, research and development, office, retail and hotel uses, up to 4,000 residential units, and an elementary school. These new uses would provide many of the same types of light and glare as the existing uses within the Community Plan area, including street lighting, illuminated signage, building-mounted lighting, and freestanding exterior lighting. Moreover, many of these uses would be illuminated during the nighttime and early morning hours for safety and security purposes.

The Community Plan sets forth various design standards that call for measures to minimize the adverse impacts. For example, Section 3 identifies “pedestrian scaled lighting” along new and improved roadways, which would serve to limit the potential for lighting to spill over onto neighboring properties.

Additionally, land use activities within the Community Plan area would be subject to the underlying zoning district development standards, which establish standards for light and glare. For example, the Fremont Municipal Code prohibits “sky-reflected glare” from floodlights within industrial zoning districts and states that “exterior lighting shall be diffused or concealed in order to prevent illumination of adjoining properties” within commercial zoning districts.

In summary, the Community Plan area contains numerous existing sources of light and glare (including during nighttime and early morning hours) and the development contemplated by the Community Plan would not substantially alter this existing condition. Furthermore, the Community Plan and Municipal Code set forth standards for new sources of light and glare that are intended to

prevent nuisance lighting or excessively illuminated properties. As such, impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.