Initial Study/Addendum

to the Final Program Environmental Impact Report
for the North San José Development Policies Update
(SCH# 2004102067)

Sign Code Amendments, 101 Tech Sign Project and River View/Irvine Residential Signs Project

April 2015

File No. HA 12-008-01
PP15-007
PDA07-090-06

Prepared by:

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

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SECTION 1.0 INTRODUCTION AND PURPOSE

The California Environmental Quality Act (CEQA) recognizes that between the date an environmental document is completed and the date the project is fully implemented, one or more of the following changes may occur: 1) the project may change; 2) the environmental setting in which the project is located may change; 3) laws, regulations, or policies may change in ways that impact the environment; and/or 4) previously unknown information can arise. Before proceeding with a project, CEQA requires the lead agency to evaluate these changes to determine whether or not they affect the conclusion in the environmental document.

In 2005, the City of San Jose certified the North San Jose Development Policies Final Update Program Environmental Impact Report (NSJ FPEIR). The certified NSJ FPEIR analyzed the environmental impacts from development of 26.7 million square feet of new industrial/office/R&D building space, 1.7 million square feet of new neighborhood serving commercial uses, and the addition of 32,000 new dwelling units in the North San José area (also referred to as Rincon de los Esteros Redevelopment Area). Policies and design guidelines for the North San José Development Area were subsequently adopted to guide development within the area. This Initial Study/Addendum evaluates the project specific environmental impacts for three projects that were not addressed in the previously certified NSJ FPEIR. The proposed Sign Code Amendments, 101 Tech Sign, and River View Residential Signs Projects are minor technical changes related to the previously considered full development of the North San Jose Area Development Policy.

In December 2014, the San José City Council directed City staff to undertake environmental review for several modifications to the Sign Code that would apply to properties in the North San José Development Area. This was in response to interest from office/industrial/R&D users to have a greater visual presence of their on-site uses in this employment center area of the City and from larger, high density residential developments to have taller freestanding signs near their multi-storied buildings. The proposed changes to the Sign Code would allow for: 1) office/R&D businesses with freeway frontage that meet minimize size, frontage length, and design standards to install a freeway sign; and 2) residential developments with one hundred residential units or more that meet size and design standards to install freestanding signs with a maximum height of up to twenty feet. Current residential sign regulations allow residential signs on these properties up to 15 feet in height.

In addition to the Sign Code Amendments, a specific freeway sign project (HA 12-008-01) on an office/R&D site in North San José is evaluated in this Initial Study/Addendum. In conformance with the NSJ FPEIR, a Site Development Permit was previously approved for an industrial development on a 12.9-acre site (101 Tech Office/R&D site), located at the terminus of Atmel Way in the City of San Jose. The 101 Tech Office R&D site has under 500 feet of local surface street frontage and over 1,000 feet of frontage along US Highway 101 (US 101). To identify and improve visibility of site occupants, the project proposes a revision to the existing Site Development Permit to allow installation of a freestanding sign adjacent to US 101. Title 23 of the City's Municipal Code (Sign Code) does not allow signs adjacent to freeways on office/R&D properties. Implementation of the project would, therefore, require an amendment to the City's Sign Code, as outlined above.

This Initial Study/Addendum also evaluates a specific residential sign project (PDA 07-090-06) on a 26.80-acre property approved for high-density residential development in North San José, located at

the intersection of N. 1st Street and River Oaks Parkway (River View/Irvine Property). The project proposes two residential signs, up to 20 feet in height, on a property being developed with over 1,000 residential units. Title 23 of the City's Municipal Code (Sign Code) currently allows signs on residential properties that are 15 feet in height, maximum. Implementation of the project would, therefore, require an amendment to the City's Sign Code, as previously outlined above.

The project components analyzed in this Initial Study/Addendum include evaluation of proposed Sign Code amendments that would apply to office/R&D and residential properties in North San Jose. It also evaluates project-level environmental impacts from installation of a freeway sign at the proposed location, which was not addressed in the previously prepared Addendum for the 101 Tech property and project-level environmental impacts from installation of two residential signs at the River View/Irvine property, along the N. 1st Street frontage.

The CEQA Guidelines §15162 state that when an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

    a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

    b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

CEQA Guidelines §15164 state that the lead agency or a responsible agency shall prepare an Addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in §15162 (see above) calling for preparation of a subsequent EIR have occurred.

Given the proposed project description and knowledge of the project area (based on the proposed project, site specific environmental review completed for the 101 Tech Office/R&D project, available information pertaining to the River View/Irvine property, and analyses completed in the NSJ FPEIR, the City has concluded that the Sign Code Amendments, 101 Tech Sign, and River View Residential Signs Projects would not result in any new impacts that have not been previously disclosed; nor would it result in a substantial increase in the magnitude of any significant environmental impact previously identified. For these reasons, a supplemental or subsequent EIR is not required and an Initial Study/Addendum to the NSJ FPEIR has been prepared for the proposed project.

This Initial Study/Addendum will be attached to the NSJ FPEIR, pursuant to CEQA Guidelines §15164(c). All documents referenced in this Addendum are available for public review in the Department of Planning, Building and Code Enforcement (PBCE) at San Jose City Hall, 200 East Santa Clara Street, during normal business hours.

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE, FILE NUMBER

The proposed Sign Code Amendments, 101 Tech Sign Project, and River View/Irvine Residential Signs Project include four components, as follows:

1) Municipal Code Title 23 Sign Code Amendment for Freeway Signs on Industrial and Research & Development Sites Public Project File Number PP15-007.

2) Municipal Code Title 23 Sign Code Amendment for Sign Heights on Residential Properties, Public Project File Number PP15-007.

3) 101 Tech Sign Site Development Permit Amendment, File Number HA 12-008-01.

4) River View/Irvine PDA07-090-06, Planned Development Permit Amendment, File Number PDA07-090-06

2.2 PROJECT LOCATION

The Sign Code Amendments for office/R&D and residential uses would apply within the 4,669-acre area covered by the North San Jose Area Development Policy (North San Jose Development Area. The North San Jose Development Area is located south of State Route 237 (SR 237), generally east of the Guadalupe River, and north and west of Interstate 880 (I-880) (refer to Figure 2.2-1). It also includes an area east of I-880 along Murphy Avenue as far as Lundy Avenue.

The 101 Tech Sign would be located on a 12.9 acre site in North San Jose at the terminus of Atmel Way, northwest of the Highway 101/Highway 87 interchange. The sign would be located on a site currently approved for up to 666,000 square feet (sf) of office/Research and Development (R&D) space. The proposed sign would be approximately 160 feet beyond the top of bank of the south side of the Guadalupe River, and approximately 1,900 feet east of Runway 30R-12L at the Norman Y. Mineta San Jose International Airport.

The River View/Irvine Residential Signs would be located on a 26.80-acre property with high-density residential development (currently being constructed) in North San José, located at the intersection of N. 1st Street and River Oaks Parkway. The signs would be located along the N. 1st Street frontage on a site currently approved for over 1,000 residential units.

A regional map showing both project sites is shown in Figure 2.2-1. Vicinity maps of the 101 Tech Sign and River View/Irvine project sites are shown on Figures 2.2-2, and 2.2-4, respectively. Aerial photographs of the sites and surrounding land uses are shown on Figures 2.2-3, and 2.2-5, respectively.

2.3 LEAD AGENCY CONTACTS

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2.4 PROPERTY OWNER/PROJECT APPLICANTS

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2.5 ASSESSOR'S PARCEL NUMBERS

101 Tech Site

The sign is proposed on an approximately 12.9-acre site comprised of APNs 101-03-008 and -007.

River View/Irvine Site

The signs are proposed on a 26.80-acre site, APN 097-06-058.

2.6 ZONING DISTRICT AND GENERAL PLAN DESIGNATIONS

Sign Code Amendments

Sites developed and located in the North San Jose Development Policy Area with the following General Plan designations that support office/R&D land uses could install a freeway sign for on-site uses with approval of a Development Permit: *Transit Employment, Combined Industrial/Commercial,* and *Industrial Park.*

Sites developed with over 100 multi-family residential units and located in the North San Jose Development Policy Area with any residential zoning designation (including A(PD) Planned Development) could install a freestanding monument sign five feet in height for each fifty units, up to a maximum 20 feet in height[1].

101 Tech Site

General Plan Land Use Designation: *Transit Employment Center, Industrial Core Employment Area*
Zoning Designation: *IP- Industrial Park*

River View/Irvine Site

General Plan Land Use Designation: *Industrial Park*
Zoning Designation: *A(PD) Planned Development,* file number PDC07-057

2.7 HABITAT PLAN DESIGNATIONS

101 Tech Site

Private Development Area:	Urban Development greater than or equal to two acres covered
Land Cover Designation:	Urban – Suburban
Development Zone:	Urban Development greater than two acres covered

[1] For example, a residential parcel with 100 units could have a 10 foot sign and a parcel with 200 units or more could have a 20 foot sign.

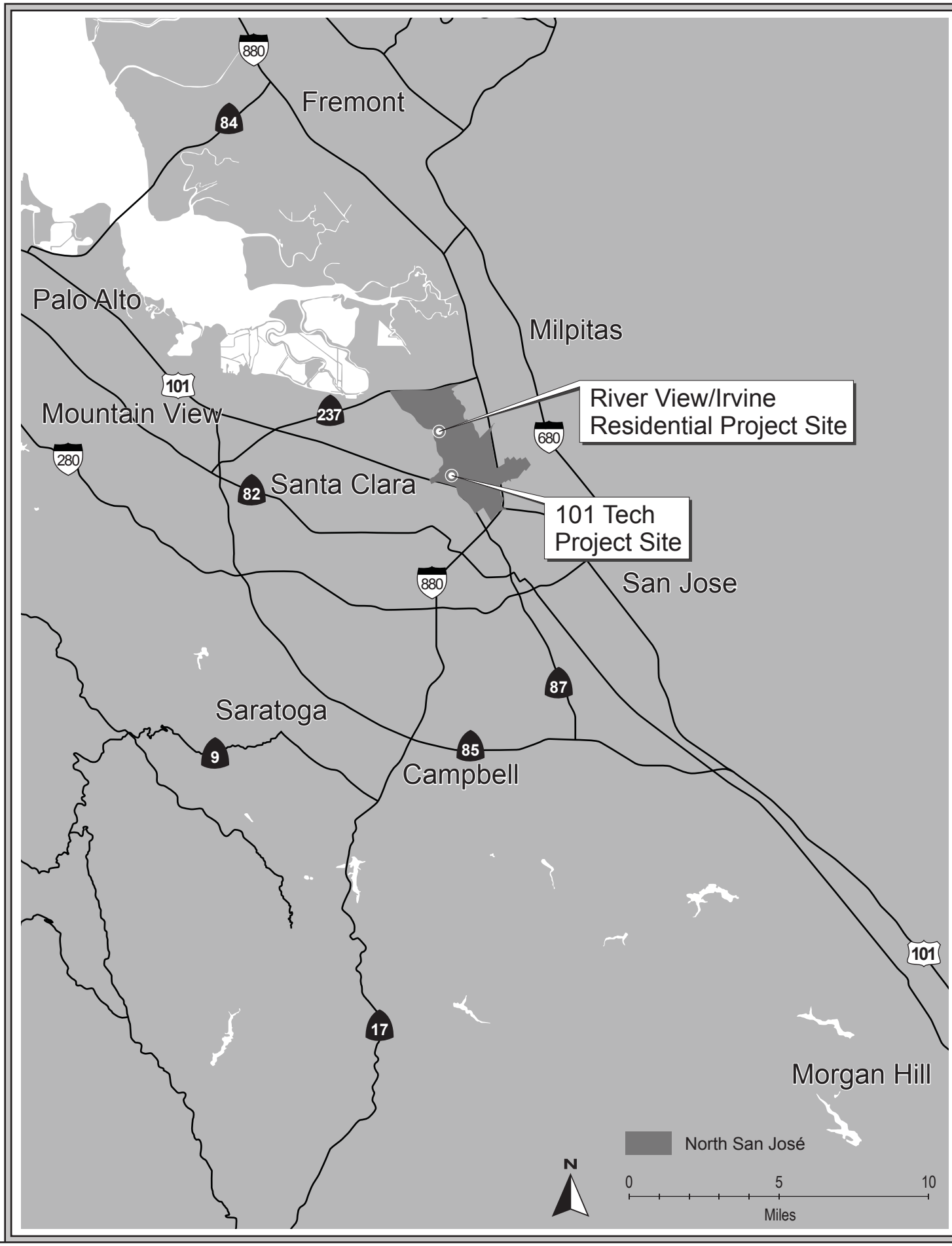
Fee Zone:	Urban Areas (No Land Cover Fee)
Owl Conservation Zone:	Burrowing Owl Occupied Habitat/Burrowing Owl Wildlife Survey

River View/Irvine

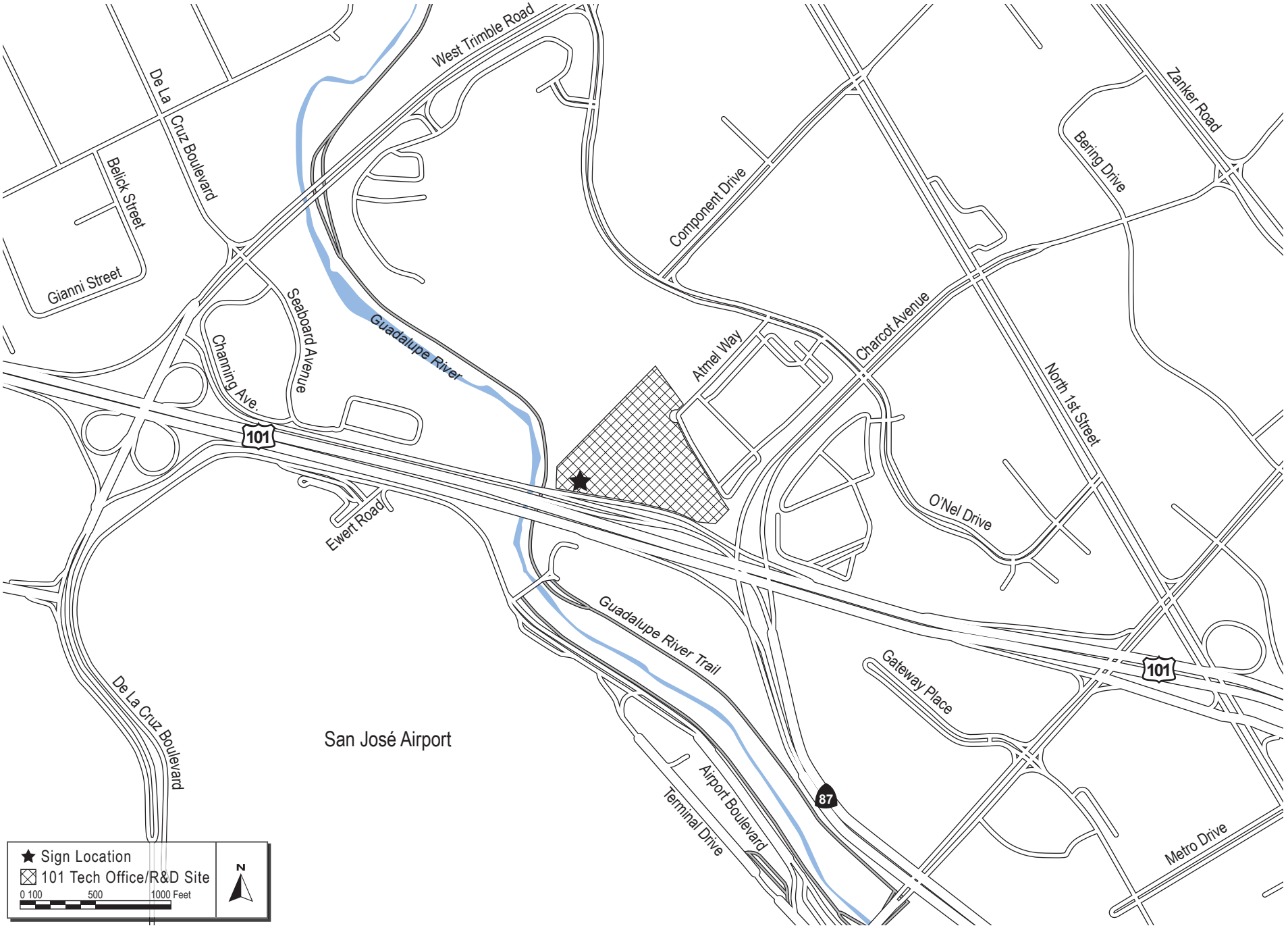
Private Development Area:	Urban Development greater than or equal to two acres covered
Land Cover Designation:	Urban – Suburban
Development Zone:	Urban Development greater than two acres covered
Fee Zone:	Urban Areas (No Land Cover Fee)
Wildlife Survey Area:	Tricolored Blackbird (5.2 Acres)
Category 1 Streams and Setbacks:	Ground truthing will determine actual riparian buffer needed (0.1 acres)

2.8 PROJECT-RELATED APPROVALS, AGREEMENTS AND PERMITS

- Sign Code Amendment (Municipal Code Title 23)
- Sign and Development Permit/Amendments (101 Tech Sign and River View/Irvine Residential Signs)



REGIONAL MAP FIGURE 2.2-1

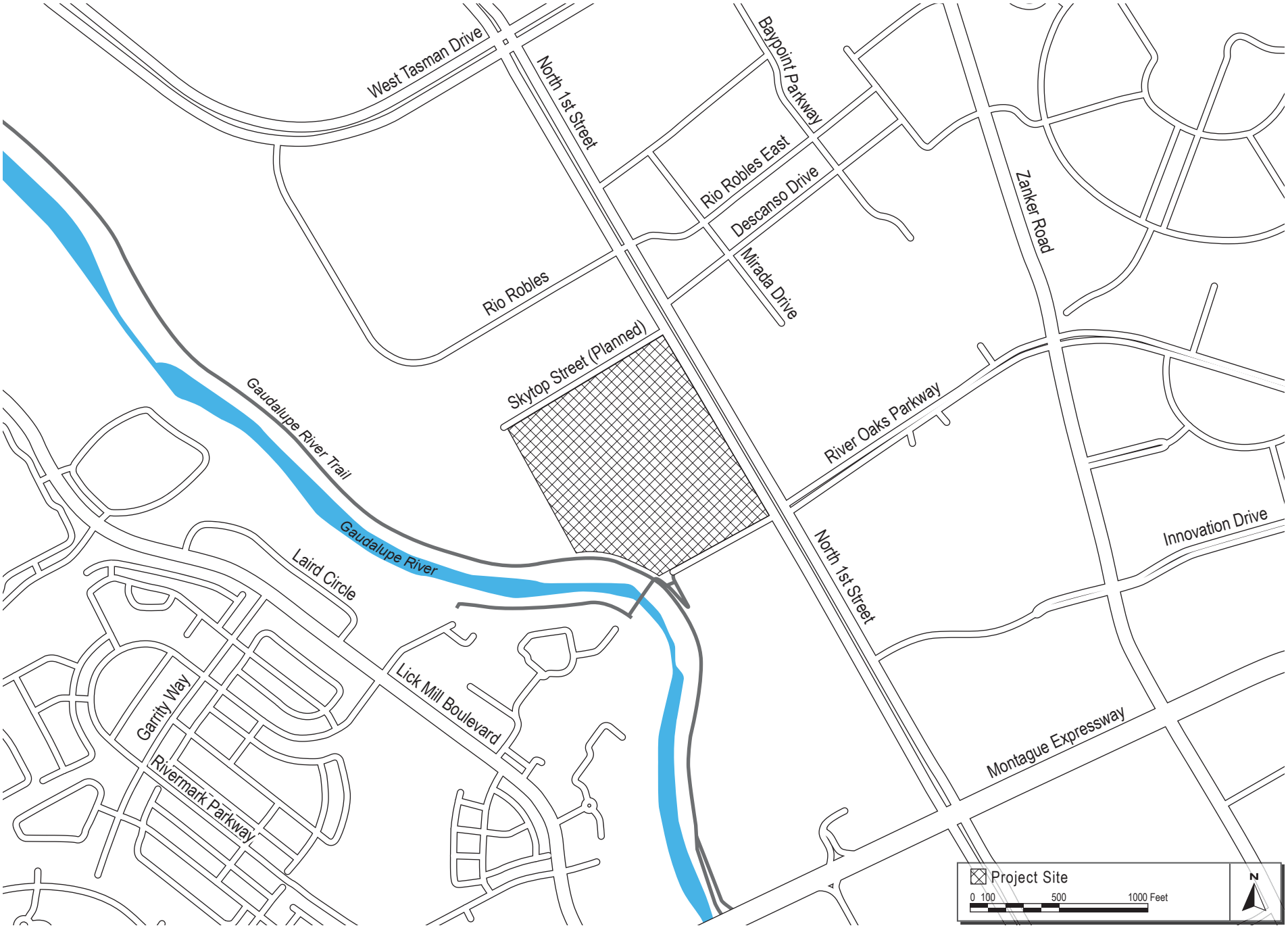


VICINITY MAP - 101 TECH SIGN SITE

FIGURE 2.2-2

AERIAL PHOTOGRAPH AND SURRROUNDING LAND USES - 101 TECH SIGN SITE

FIGURE 2.2-3



VICINITY MAP - RIVER VIEW / IRVINE SITE

FIGURE 2.2-4

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES - RIVER VIEW / IRVINE SITE FIGURE 2.2-5

SECTION 3.0 PROJECT DESCRIPTION

3.1 BACKGROUND INFORMATION

101 Tech Site

In 2012, a Site Development Permit (file number H12-008) was approved for a 12.9 acre site in North San Jose at the terminus of Atmel Way, northwest of the US Highway 101 (US 101)/State Route 87 (SR 87) interchange. The Site Development Permit allows development of the site with the 101 Tech Office R&D buildings which includes up to 666,000 square feet (sf) of industrial buildings. Prior to approval of the Site Development Permit, an Addendum was prepared to the Final Program Environmental Impact Report (FPEIR) for the North San Jose Development Policies Update (SCH #2004102067) (NSJ FPEIR) and FPEIR for the Envision San Jose 2040 General Plan (SCH #2009072096) (2040 General Plan FPEIR). The Addendum concluded that the NSJ FPEIR and 2040 General Plan FPEIR adequately addressed the environmental effects of the 101 Tech Office/R&D Project, and the project would not result in significant environmental effects that were not already identified in the FPEIRs.

The 101 Tech Office/R&D site has under 500 feet of local surface street frontage and over 1,000 feet of frontage along US Highway 101 (US 101). To improve visibility of site occupants, the project proposes a Site Development Permit Amendment to allow installation of a freeway sign adjacent to US 101. The sign faces would include up to 75 percent programmable electronic sign area. Title 23 of the City's Municipal Code (Sign Code) does not allow signs adjacent to freeways on office/R&D properties. Implementation of the project would, therefore, require an amendment to the City's Sign Code.

This IS/Addendum to the NSJ FPEIR evaluates environmental impacts from installation of a sign at the proposed location.

River View/Irvine Residential Site

In addition to the 101 Tech Sign, described above, this Initial Study/Addendum evaluates a specific residential sign project on a 26.80-acre property approved for high-density residential development in North San José, located at the intersection of N. 1st Street and River Oaks Parkway.[2] The project proposes two residential signs, up to 20 feet in height, on a property being developed with over 1,000 residential units. Title 23 of the City's Municipal Code (Sign Code) currently allows signs on residential properties that are 15 feet in height, maximum. Implementation of the project would, therefore, require an amendment to the City's Sign Code.

In 2012, the US Department of Transportation designated N. 1st Street as a National Highway System Route. Because the River View signs are proposed along the N. 1st Street Corridor, they would be designed in conformance to the California Outdoor Advertising Act and the Federal Highway

[2] The environmental effects of the residential development (PDC 07-057 and PD07-090) were addressed in an Addendum to the NSJ FPEIR in January, 2008.

Beautification Act (Acts) and all associated regulations including distance and orientation requirements for non-programmable signs.

This IS/Addendum to the NSJ FPEIR evaluates environmental impacts from installation of the residential signs along the N. 1st Street frontage.

Sign Code Amendments

This IS/Addendum addresses impacts from revisions to the Sign Code which would allow the proposed 101 Tech sign as well as freeway signs[3] at up to 16 other locations in the North San Jose Development Area which meet the criteria described in Section 3.2, below.

Currently, there are at least 16 potential sites in the City (including the 101 Tech project site) that meet the minimum acreage, freeway frontage and General Plan land use designation and could therefore benefit from the proposed Sign Code Amendment (as shown in Figure 3.2-1) if the sites were developed with office/R&D uses. Each of these 16 sites could potentially have a freeway sign that is up to 500 sf in sign area, including a maximum of 375 sf programmable component (the remaining 125 sf would be non-programmable). If maximally developed, the provisions of the proposed project including the Sign Code Amendment and additional signage developed in conformance with the amendment would increase the signage in the North San Jose Development Area by at least 8,000 square feet. Freeway signs within 1,000 feet of another sign would not be permitted, therefore, depending on the location of other signs in an area at the time a sign is proposed, a sign may or may not be permitted on a given site.

This IS/Addendum also evaluates a Sign Code Amendment that would allow residential signs up to a maximum of 20 feet in height (five feet more than currently allowed) on residentially zoned properties in the North San Jose Development Area.

Currently, there are at least 78 potential parcels in the City (including the River View project site) that could benefit from the proposed residential Sign Code Amendment (as shown in Figure 3.2-2) if the sites are located on residentially zoned property and developed with multi-family residential development with at least one building with more than 100 residential units. Each of these 78 parcels could potentially have a tall freestanding sign that is up to 20 feet in maximum height above grade.

Two projects, 101 Tech, and River View/Irvine could be potentially developed with freeway signs or taller freestanding residential signs with approval of the proposed Sign Code Amendments. These projects are analyzed in this Initial Study/Addendum based on existing acreage, land use designations, proximity and frontage to a freeway (for Office / R&D sites), and residential unit counts and type. There could be other sites in the future which, through redevelopment and reconfiguration of parcels, could benefit from the proposed Sign Code Amendments. Those projects that propose freeway signs would undergo separate subsequent environmental review analysis. Subsequent environmental review of taller residential signs would be limited to locations with conditions considered unique under CEQA (e.g. removal of a historic structure).

[3] As defined in Section 3.02.236 of the Sign Code, a freeway sign means a large freestanding sign oriented to and designed to be viewed from a freeway.

Previous Sign Code Amendments

The City Council previously adopted modifications to the Sign Code (Municipal Code Title 23) to provide appropriate signage for businesses in San Jose. The amendments in 2013 included provisions for signage at Large Shopping Centers and sign variance provisions for historic buildings.

In early 2015, the City Council amended the Sign Code for Large Outdoor Stadium Space to allow larger Attached Signs, Free Standing Programmable Electronic Signs, new types of signs called Scoreboard Sign, Flat Roof-Top Sign, freestanding Banner Signs and advertising pursuant to a sponsorship marketing plan. The Sign Code changes also included new definitions for an Airport Influence Area, Scoreboard Signs, Large Outdoor Stadium, and Sponsorship Marketing Plan. The environmental effects of large signs, including programmable electronic signs, were analyzed with reference to the Airport Influence Area, prior to adoption of the Sign Code amendment and Earthquakes Stadium Signs project.

A list of previously adopted Sign Code Amendments is provided in Appendix A.

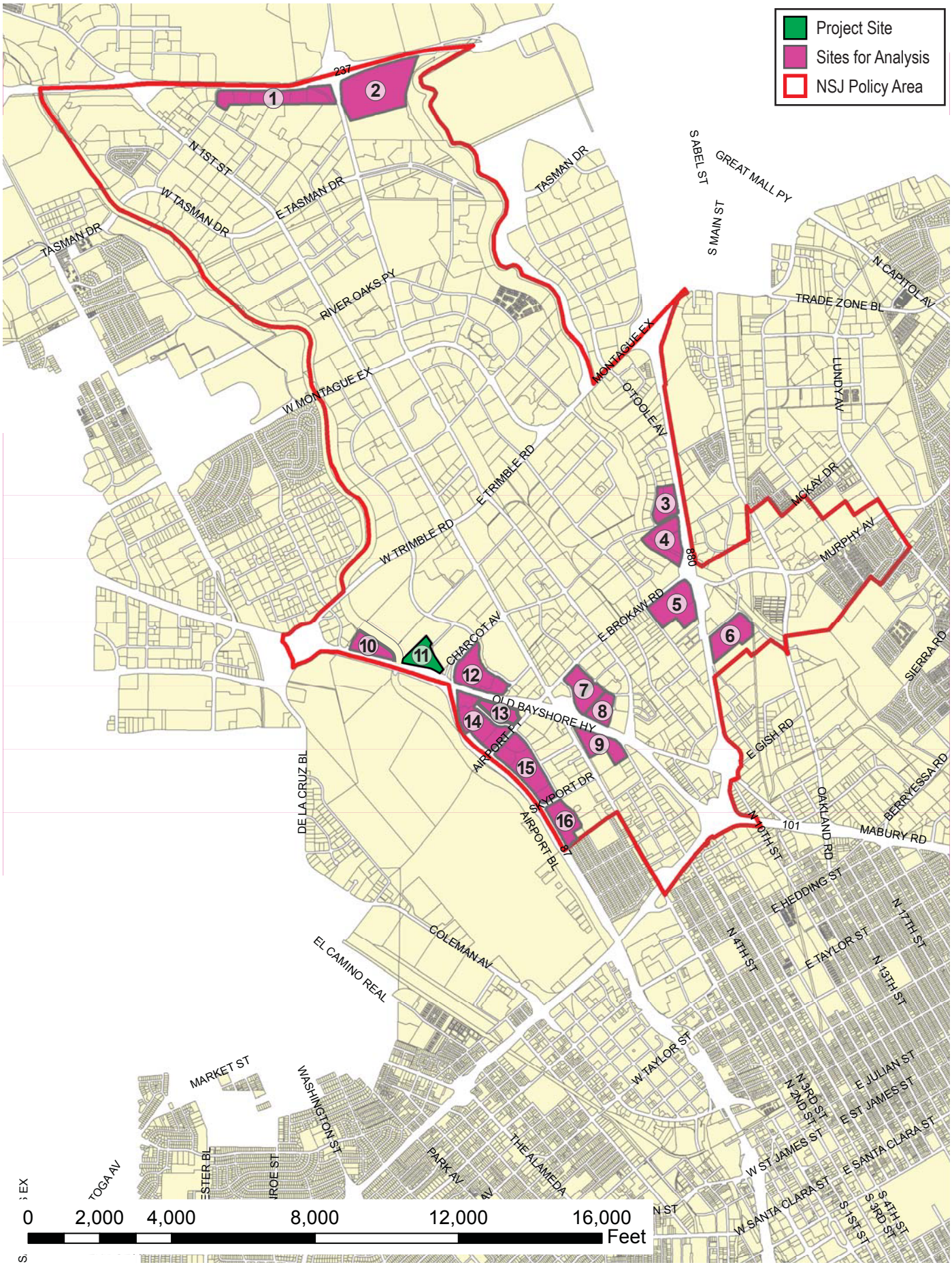
3.2 PROPOSED AMENDMENTS TO THE CITY OF SAN JOSE MUNICIPAL CODE TITLE 23 - SIGN CODE

The City's Sign Code provides for adequate opportunities for signage and the regulations are intended to prevent visual clutter. The sign regulations affect the development standards such as sign dimensions, type, quantity, use, and location to accommodate the City's diverse business community and also to provide opportunities for distinctive and aesthetic designs. Sign Code Amendments require City Council approval. This IS/Addendum evaluates two amendments to the Sign Code related to freeway signs and residential signs, specific only to the North San Jose Development Area. Both Sign Code Amendments are described in detail below.

3.2.1 Freeway Signs Code Amendment

Currently, the Sign Code allows freeway signs only on Shopping Center Sites that are at least 15 acres in size and adjacent to freeways as defined in the existing Sign Code. The Freeway Signs Code Amendment would allow freeway signs on parcels with a Zoning and General Plan land use designation that support office/R&D uses in the North San Jose Development Area which are over 10 acres in size, and which have over 800 linear feet of freeway frontage. General Plan designations that support office/R&D uses include *Transit Employment Center, Combined Industrial/Commercial, and Industrial Park.* Currently, there are 16 sites in the City that could benefit from the proposed Sign Code amendments as shown in Figure 3.2-1.

The freeways signs could include fixed (or non-programmable) and programmable electronic components. Non-programmable components could include internal lighting and halolighting of letters. The Freeway signs would be subject to the existing sign regulations, as detailed in Section 23.04.035 of the Sign Code, which includes regulations on quantity, size, height, location, operational standards, and orientation.



OFFICE/R&D SITES AFFECTED BY THE PROPOSED SIGN CODE AMENDMENT FIGURE 3.2-1

The California Outdoor Advertising Act and the Federal Highway Beautification Act (Acts) apply to signs located along primary highways and freeways, including future freeway signs which could be allowed in North San Jose with approval of the proposed Freeway Signs Code Amendment. The Acts generally do not regulate on-site signage in urban areas, but to be considered on-site signage a sign located within 660 feet of the highway right-of-way must generally be located within 1,000 feet of the location on which the related business is being conducted, or the entrance to such business. The Acts also specify that if an on-site sign is located within 660 feet of the highway right-of-way, and it is a message center display (programmable electronic sign), the sign cannot be located within 1,000 feet of another message center display on the same side of the highway. Further, the Acts generally prohibit signs within 300 feet of the point of intersection of a highway or highway and railroad lines, and signs that could prevent any traveler of the highway from having a clear view of approaching vehicles for a distance of at least 500 feet.

The distance between future freeway signs located within 660 feet of the freeway right-of-way would be consistent with the requirements of the State of California Outdoor Advertising Act which, as described above, requires 1,000 feet between programmable electronic signs along the same side of a freeway.

3.2.1.1 *Development Permit Provisions*

Title 23, Chapter 23.04, Part 1, Section 23.04.035 of the Sign Code requires approval of a Development Permit for all freeway signs, which allow for up to 75 percent programmable components on sign faces. Because the programmable components of the electronic freeway signs will be adjacent to freeways and visible to motorists, the project-specific environmental review will include a technical evaluation of safety hazards to motorists. For signs within the Airport Influence Area (AIA) and which may be visible to pilots and/or air traffic controllers, the project-specific environmental review will include a technical evaluation of safety hazards to pilots and/or controllers from illuminated programmable electronic and non-programmable components of freeway signs.

3.2.1.2 *Other Sections*

Changes to other sections of the Sign Code may be required as a part of the modifications that would allow freeway signs on office/R&D sites in North San Jose. These sections may include non-substantive changes such as cross references, definitions, or clarifications to regulations.

3.2.1.3 *Freeway Sign Technical Specifications*

Freeway signs allowed under the proposed Sign Code amendment may be required to include technical specifications similar to those outlined for the 101 Tech Sign as described below in *Section 3.3, 101 Tech Sign*. Signs within the Airport Influence Area or near a riparian corridor may be required to complete a lighting study.

3.2.2 Residential Signs Code Amendment

Section 23.04.320, *Signs on Residential Parcels,* of the City's Sign Code allows at least one freestanding sign on each residential parcel, or more under certain criteria. Freestanding signs are currently allowed up to five feet in height for each 50 units located on a subject site, up to a maximum height of 15 feet. The proposed Residential Signs Code Amendment would allow freestanding signs to be up to five feet in height for each 50 units located on a subject site, up to a maximum height of 20 feet. In other words, a residential parcel with 200 units or more could have a 20 foot sign for a building containing at least 200 units. The Residential Signs Code Amendment would apply to signs in the North San Jose Development Area, on parcels with any residential zoning designation that are/will be developed with residential development that includes at least one building with over 100 residential units. Zoning districts that support \ residential uses in North San Jose include, but are not limited to: *Planned Development, Medium Low Density Residential (8 dwelling units per acre [du/ac]), Medium Density Residential (8-16 du/ac), High Density Residential (25-50 du/ac),* and *Transit Corridor Residential (20+ du/ac).* Sites in the North San Jose area of the City that could benefit from the proposed Residential Signs Code Amendment are shown in Figure 3.2-2.

In 2012, the US Department of Transportation designated N. 1st Street as a National Highway System Route. Subsequently, any future residential signs proposed along the N. 1st Street corridor under the Residential Signs Code Amendment would be subject to regulations of the California Outdoor Advertising Act and the Federal Highway Beautification Act (Acts) and all associated operational regulations including distance/orientation requirements for non-programmable signs.

3.2.2.1 *Other Sections*

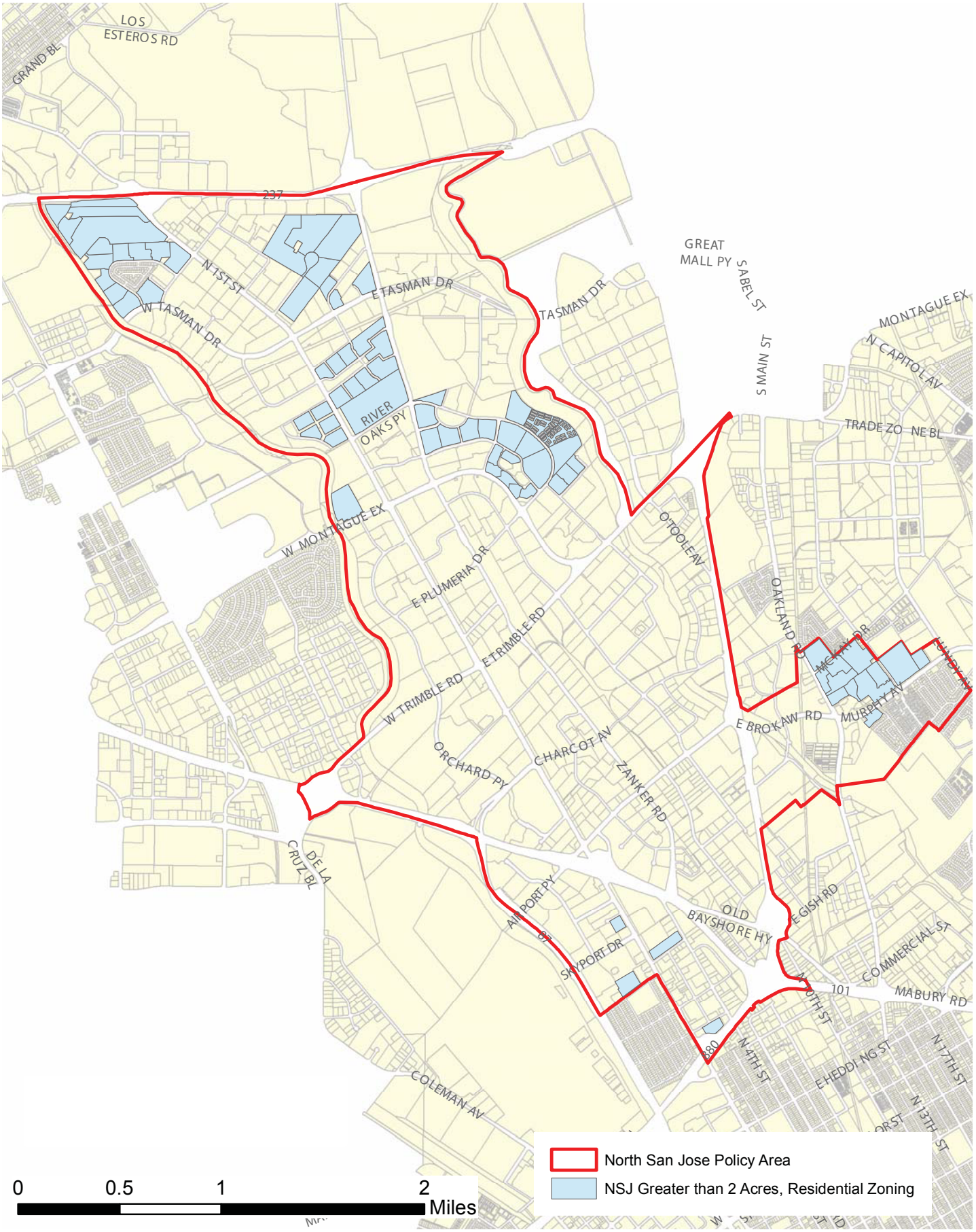
Changes to other sections of the Sign Code may be required as a part of the modifications that would allow taller freestanding signs on residential sites in North San Jose. These sections may include non-substantive changes such as cross references, definitions, or clarifications to regulations.

3.3 101 TECH SIGN

In addition to the Sign Code Amendments described above, this Initial Study/Addendum also evaluates a development permit (Site Development Permit Amendment file number HA13-090-06) that proposes to install a freeway sign that could only be allowed with approval of the Freeway Signs Code Amendment, described above in in *Section 3.2.1*.

The project-level component of the proposed project is to allow the installation of a double-sided, freestanding programmable electronic freeway sign at the permitted 101 Tech Office/R&D site (Site Development Permit file number H12-008) in North San Jose.

The City of San Jose follows State requirements of the *Outdoor Advertising Act* for distance between freeway signs, which requires that no message center display may be placed within 1,000 feet of



RESIDENTIAL PARCELS AFFECTED BY THE SIGN CODE AMENDMENT FIGURE 3.2-2

another message center display on the same side of the highway,[4] or further than 1,000 feet from the entrance to the site where business is being conducted, services are rendered, or goods are produced or sold.[5] There are no existing freeway signs within 1,000 feet of the proposed 101 Tech Sign location, and the sign would be located less than 1,000 feet from the future on-site business. The location of the 101 Tech Sign would be compliant with State regulations.

The programmable electronic component of the freeway sign would not exceed 75 percent of the total sign area, would be integrated with the overall sign, and would not exceed 375 sf in area (on a maximum 500 sf sign face). The non-programmable component of the sign would comprise the remaining 25 percent of the total sign area, or 125 sf. The project does not propose to illuminate the non-programmable portion of the sign. If illumination of the non-programmable portion of the sign is proposed in the future, this would require additional or supplementary analysis of lighting effects prior to approval of a revised Development Permit.

As shown in Table 3.3-1, the proposed sign would be located approximately 160 feet from the top of bank along the south side of the Guadalupe River (60 feet east of the 100-foot riparian setback area from the property line), 100 feet from the nearest US 101 travel lane, and approximately 1,900 feet east of Runway 30R-12L at the Norman Y. Mineta San Jose International Airport. Sign construction would take two to four weeks to complete and would require up to 37 cubic yards of soil off-haul. A map showing the proposed location of the sign is provided in Figure 3.3-1.

Table 3.3-1: Sign Distance from other Features in the Project Area

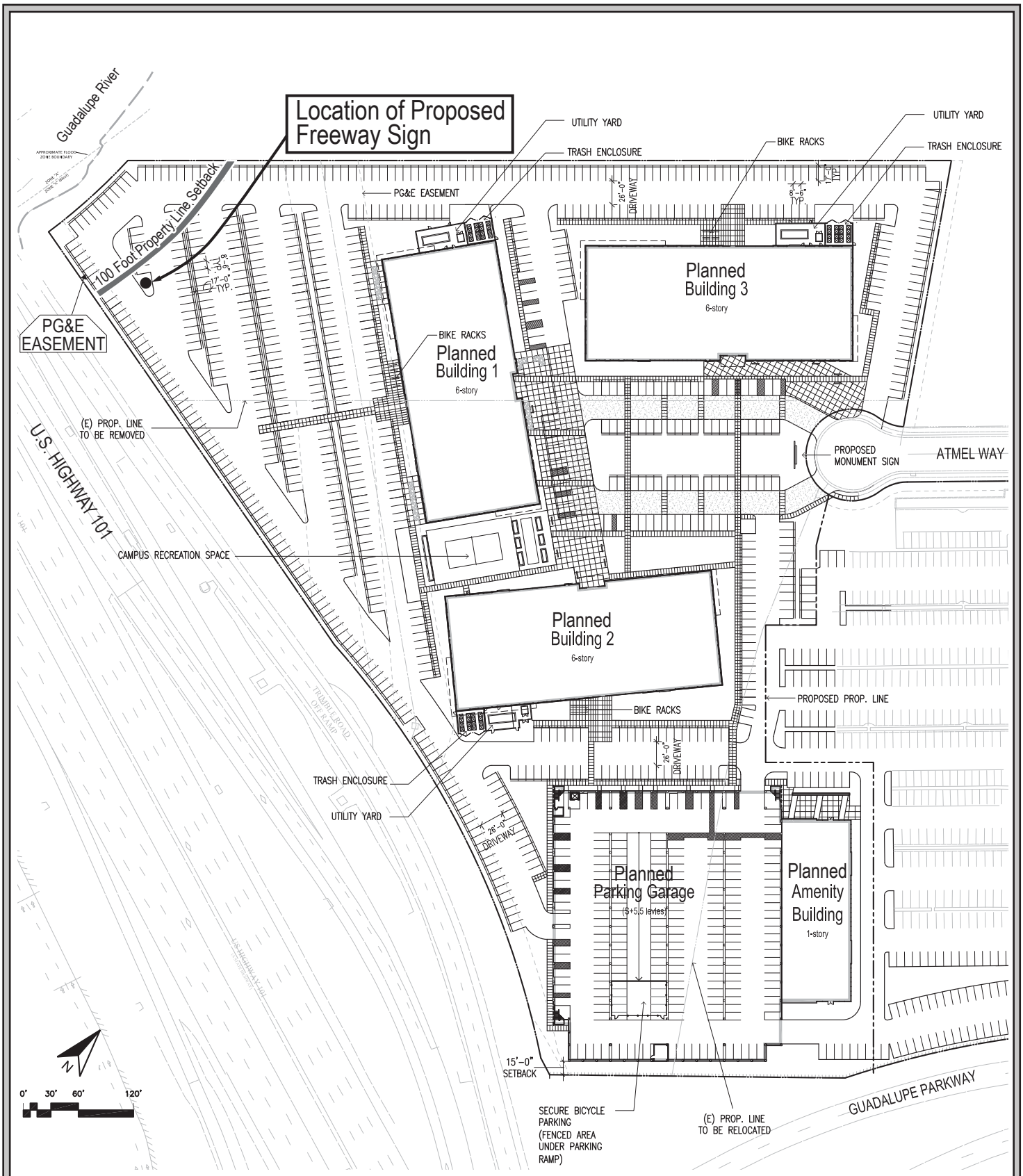
Feature	Approximate Distance of Sign From Feature
Nearest US 101 Travel Lane	100 feet
Western Property Line	106 feet
Guadalupe River Top-of-Bank (Inboard Side of the Levee)	160 feet
Nearest Runway (30R-12L) at the Norman Y. Mineta San Jose International Airport	1,900 feet

3.3.1 Sign Characteristics

The sign structure would be up to 60 feet in height and oriented to freeway lane views from northbound and southbound US 101. The programmable electronic component of the freeway sign would not exceed 75 percent of the total sign area, would be integrated with the overall sign, and would not exceed 375 sf in area for each sign face. The remaining 125 sf area of the sign would be non-programmable, and would not be lit at night.

The sign displays are expected to be center mounted on a single supporting column, but might require up to two supporting columns. The column used for the proposed structure would be a drilled shaft with a poured concrete footing. The column foundation would be five to six feet in

[4] California Transportation Agency (Caltrans). *Outdoor Advertising Act and Regulations 2014 Edition.* Section 5405(d)(1), Available at: http://www.dot.ca.gov/oda/download/ODA_Act_&_Regulations.pdf. Accessed on March 18, 2015.
[5] Ibid, Section 5472.4.



LOCATION OF PROPOSED SIGN FIGURE 3.3-1

diameter and would extend to a depth of 18 feet below the ground surface (bgs). The sign would have a decorative rectangular cover around the supporting column with a 130 sf footprint at the ground surface. The sign would include shaders to direct light downward to avoid attracting birds. A conceptual illustration of the proposed sign is shown in Figure 3.3-2.

3.3.2 Summary of 101 Tech Sign Operations

The illuminated double-sided sign would operate in accordance with applicable Federal and State regulations for signs near freeways, and would conform to the operational standards of the City's current Sign Code for electronic freeway signs, as specified in Section 23.02.905.

The City's Sign Code details regulations to avoid visual impairments to motorists. These regulations include limits on effects that give the appearance of movement (flashing, blinking, fading, etc.), audio, message transitions, message timing, and lighting (including ambient light, brightness, and other visual impairment issues such as message content).

In accordance with Section 23.02.905 (C)(1) of the Sign Code, the sign would not change more than once every eight (8) seconds. The brightness of the sign would result in a difference between the ambient light measurement and the operating sign light measurement of less than three tenths foot candles, with measurements taken at a distance of two hundred feet from the sign. The sign would use automatic dimming technology to adjust the brightness of the sign relative to ambient light.

In accordance with the California Vehicle Code, the brilliance of the sign would have a maximum light output not exceeding 1,000 times the minimum measured brightness in a driver's field of view, within ten degrees of that field of view. The sign would not be illuminated between the hours of 10:00 pm and 6:00 am (i.e. the programmable component of the sign would not be illuminated).

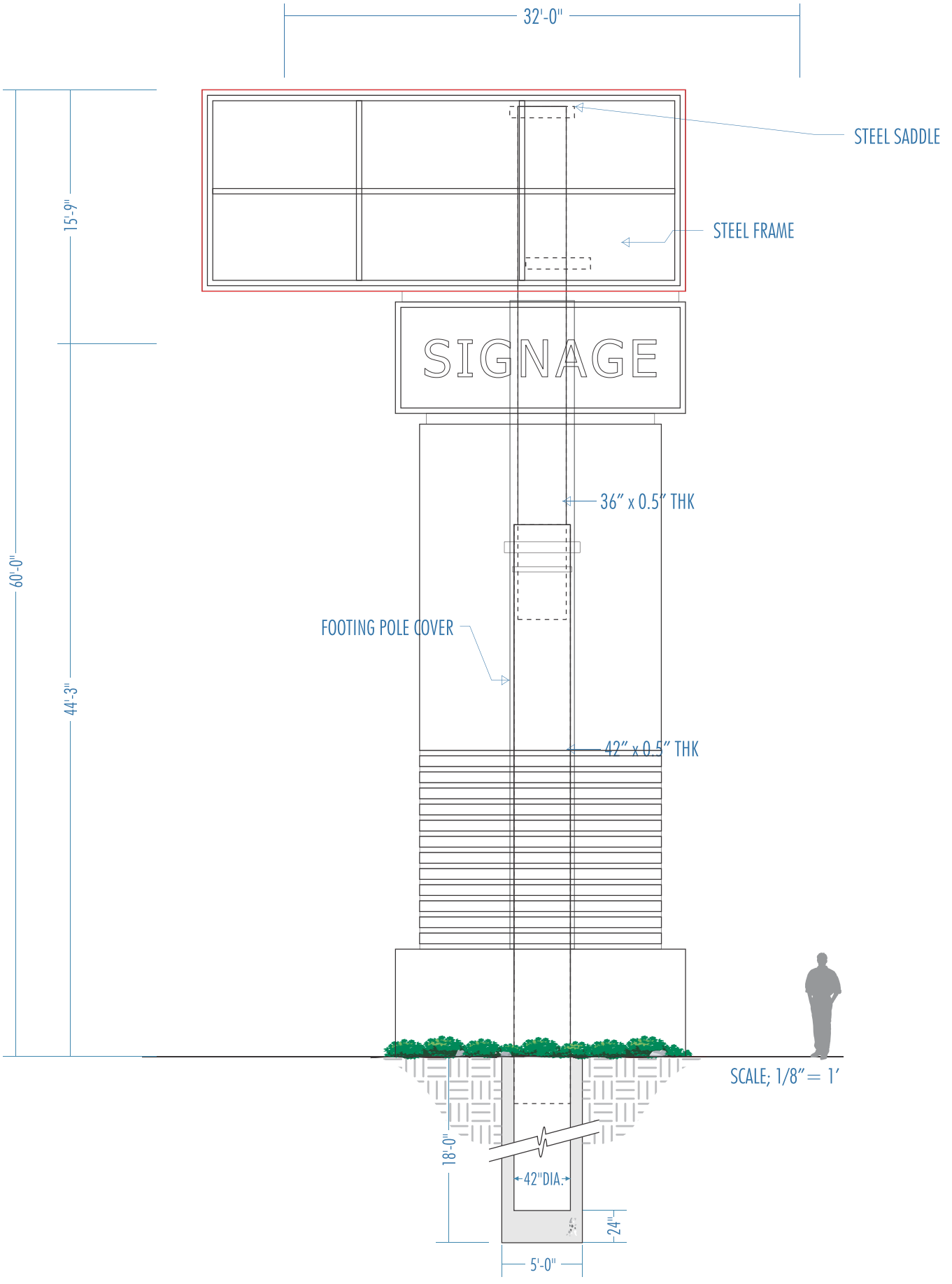
3.3.3 Technical Design Parameters

To support the general sign characteristics and operational elements described above, the 101 Tech Sign would be installed under the following detailed technical design parameters to conform to City, State, and Federal regulations:

- The sign brightness would be limited to 300 nits[6] (candela per square meter - cd/m^2) during the nighttime, and 4,500 nits during daytime.[7]. These brightness levels would only to be used as a temporary programmed level until the signage undergoes an onsite illuminance testing process which would make the sign brightness consistent with the City, State, and Federal regulations (referenced above).

- The freeway sign would have a dimming system so that the signage brightness can be adjusted onsite (described below)

[6] Nit – is a name also referred to as the unit cd/m^2. The term *nit* is loosely translated as "to shine." A desktop liquid crystal display (LCD computer screen) is equivalent to approximately 300 nits.
[7] The lighting terminology used in this Initial Study/Addendum are defined in Table 4.8-1 in *Section 4.8, Hazards and Hazardous Materials*.



CONCEPTUAL ILLUSTRATION OF THE PROPOSED ELECTRONIC SIGN FIGURE 3.3-2

- Sign brightness parameters will be adjusted to conform with Sign Code brightness requirements once the freeway sign is installed and operational on-site and after all of the site lighting for the 101 Tech Office/R&D Project is installed and operational, as this would affect the ambient light levels. To meet Sign Code brightness requirements, the brightness of the sign will be adjusted so that it does not contribute more than three-tenths footcandles above the ambient light level. A measurement of ambient light shall be taken at some point between thirty minutes past sunset and thirty minutes before sunrise with the sign turned off to a black screen to determine what the true ambient light level is in the project vicinity. A brightness reading of the freeway sign shall be taken with a light meter aimed directly at the sign and taken at 200 feet from the sign area being measured. Another measurement would be taken with the sign turned on to full white.

- There would be a system in place to dim the sign in the event of fog.

- The freeway sign will be equipped with sensors that modify the brightness of the sign in response to ambient lighting conditions. Adjustments to the sign brightness would occur gradually, to prevent a sudden change in perceptible brightness levels by pedestrians and motorists. The sign would dim slowly at dusk over a 45 minute fade rate, controlled by an astronomical time clock.

- The freeway sign will not include large areas of reflective elements and would have a contrast ratio of less than 30:1 to eliminate glare.

- The freeway sign will not display animated messages including flashing, blinking, fading, rolling, or any other effects that give the appearance of movement.

- The freeway sign will have a default mechanism that would cause the sign to revert immediately to a black screen in case of the sign malfunctioning.

- The programmable electronic component of the freeway sign would not exceed 75 percent of the total sign, would be integrated with the overall sign, and would not exceed 375 sf in area.

3.4 RIVER VIEW/IRVINE RESIDENTIAL SIGNS

Provisions of the Outdoor Advertising Act regulate the locations of sign displays, including the distance from intersections of highways and state-designated major arterials. The Act generally prohibits signs within 300 feet of the point of intersection of a major highway and railroad lines, and signs that could prevent any traveler from having a clear view of approaching vehicles for a distance of at least 500 feet. The N. 1st Street/Montague Expressway and N. 1st Street/Tasman Drive intersections are the nearest intersections of state-designated major arterials to the project site. The N. 1st Street/River Oaks Parkway (at the southern boundary of the River View property) is located approximately 1,850 feet north of the N. 1st Street/Montague Expressway intersection, and the N. 1st Street/Skytop Street (planned) intersection (at the northern boundary of the River View property) is 1,850 feet south of the N. 1st Street/Tasman Drive intersection. The River View/Irvine Residential Signs would not be located within 500 feet of the point of intersection of major arterials regulated by the Outdoor Advertising Act.

Section 23.04.320, *Signs on Residential Parcels,* of the City's Sign Code allows at least one freestanding sign on each residential parcel, or two freestanding signs on properties with residential buildings containing one-hundred residential units or more. Freestanding signs are currently allowed up to five feet in height for each 50 units located on a site, up to a maximum height of 15 feet.

The River View/Irvine Residential Signs would be located on a property with residential buildings containing one-hundred residential units or more. The River View/Irvine property is, therefore, allowed up to two signs. The proposed signs would be up to 20 feet in height, which would be consistent with the City's Sign Code with approval of the Residential Signs Code Amendment, which is evaluated as part of this Initial Study/Addendum (as described in Section 3.2.2).

Aside from the 20-foot height, the two River View/Irvine signs would be installed in conformance with existing requirements in the City's existing Sign Code. The Sign Code limits the area of each freestanding residential sign to one square foot of sign area for each eight linear feet of street frontage (up to a maximum of 32 sf in sign area), requires a minimum seven foot front setback from the property line, and requires separation of 10 feet or more between each respective sign.

3.5 SUBSEQUENT ENVIRONMENTAL REVIEW

This document provides CEQA clearance for changes to Title 23 (Sign Code Amendments) and for project-level CEQA clearance to allow the 101 Tech electronic programmable[8] freeway sign and River View/Irvine multi-family development residential monument signs, as described above. It evaluates the secondary effects that can be expected to follow from the proposed modifications to the Sign Code, at an appropriate level of specificity based upon what is reasonably foreseeable. This document does not provide CEQA clearance for freeway signs on other properties. Any future freeway signs would be evaluated under separate permits and CEQA clearance documents.

Per the Municipal Code Title 23, residential signs on sites with 100 or more residences per building are allowed illumination by external lighting, halolighting, and internal lighting if only the letters or symbols are illuminated (Section 23.04.320F(3)(c)). Only continuous lighting may be used. Residential signs within one hundred feet of a riparian area, river or creek are prohibited from being illuminated. Lighting allowed on residential signs is minimal and environmental review of taller residential signs, proposed in conformance with sign code regulations, would be limited unless there is a unique condition such as the presence of historic buildings, the sign is within 100 feet of a riparian area, etc.

Figure 3.2-1 identifies the properties where it is currently foreseeable that freeway signs could be installed with implementation of the proposed changes to Title 23, once they have project-level entitlement/CEQA clearance. If other existing office/R&D properties in the North San Jose Development Area are subdivided or reconfigured, those properties may also be able to install a

[8] As defined in Section 23.02.410 of the Sign Code, a programmable electronic sign is a type of animated sign capable of displaying words, symbols, figures, or images that can be electronically or mechanically changed by remote or automatic means. The elements may be internally illuminated or may be illuminated by reflected light. Programmable electronic signs includes sign display screens commonly known as liquid crystal display (LCD), plasma and digital displays, and their functional equivalents.

freeway sign with appropriate permits and CEQA clearance. Figure 3.2-2 identifies properties where taller signs could foreseeably be allowed with approval of the Residential Signs Code Amendment.

SECTION 4.0 SETTING, ENVIRONMENTAL CHECKLIST AND IMPACTS

This section describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, identifies environmental impacts that could occur if the proposed project is implemented.

The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of this section. Mitigation measures are identified for all significant project impacts. "Mitigation Measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines §15370).

This Initial Study/Addendum assumes the 101 Tech sign project and River View/Irvine Residential Signs project will comply with all applicable standard permit conditions which have been updated by the City since completion of the NSJ FPEIR. Therefore, where the NSJ FPEIR and standard permit conditions have different wording with the intent of mitigating the same impact, this Addendum incorporates the more recent standard permit condition language.

4.1 AESTHETICS

4.1.1 Setting

4.1.1.1 *Visual and Aesthetic Context of the North San Jose Development Area*

The predominant character of the visual and aesthetic environment in the North San Jose Development Area is that of a modern industrial neighborhood. Older industrial development is generally characterized by single-story buildings, some of which include warehouses. The industrial park developments built within the last 10 to 20 years along SR 237, I-880, US 101 and SR 87 and the major roadways of North First Street, Zanker Road, and Montague Expressway, include a higher percentage of multi-story office buildings (two to five stories or more) with substantially more surface parking and landscaping than older development. Residential land uses include the mobile home parks found on North First Street and Zanker Road, newer high density residential development built predominantly north of Montague Expressway and near Old Oakland Road, and older mixed densities between North First and North Fourth Street, south of US 101. Building architecture in the North San Jose Development Area varies widely. The visual resources in North San Jose are primarily a variety of urban buildings built within the last 40 to 50 years.

Views from Gateways and Freeways

The North San Jose Urban Design Guidelines identifies several important types of nodes and gateways in North San José. These include freeway crossings, street intersections at either end of the Core Area, and points where major thoroughfares cross the two waterways that bound North San José. Such locations are opportunities for public art, signage, and other features that help make people aware that they are entering a distinct district within the city. The North San Jose Urban Design Guidelines has two goals related to gateways including: 1) define North San Jose's character

by articulating local gateways such as river crossings and key intersections, and 2) articulate existing freeway exits as regional gateways to North San Jose by utilizing distinct signage or public art. Several intersections are specifically identified as gateways in the North San Jose Urban Design Guidelines including: US 101/Zanker Road, US 101/N. 1st Street, US 101/SR 87, US 101/Trimble Road, I-880/Brokaw Road, I- 880/Montague Expressway, I-880/Tasman Drive, SR 237/Zanker Road, and SR 237/N. 1st Street. Views from the gateways are typically of urban development with distant views of the foothills.

Gateways in the North San Jose Development Area identified in the City's General Plan include North First Street at SR 237 and near Charcot Avenue, Charcot Road at I-880, Airport Parkway east of SR 87, and Guadalupe Parkway east of US 101. Additionally, Brokaw Road at I-880 is designated as a gateway in the North San Jose Design Guidelines.

There are no rural scenic corridors within the North San Jose Development Area. Views of hillside areas from freeways are best seen from SR 237 and Montague Expressway, which run roughly east-west. Views of the foothills from surface streets are typically intermittent, as seen between buildings and trees on east-west roadways. Views from freeways in the North San Jose Development Area are shown below in Figures 4.1-1 through 4.1-4. Locations of the referenced properties (e.g., Property 1) are shown in Figure 3.2-1. Views from roadways adjacent to several residential properties in the North San Jose Development Area are shown in Figures 4.1-5 through 4.1-6.

4.1.1.2 *101 Tech Sign Project Site Aesthetics*

The 12.9-acre 101 Tech Office/R&D site is located in North San Jose at the terminus of Atmel Way, northwest of the US 101/SR 87 interchange. Currently, the 101 Tech Office/R&D site is a vacant and regularly mowed property, consisting of mostly low-growing, ruderal (weedy) vegetation. The site and surrounding area are flat, and as a result the property is only visible from the immediate area.

As shown in Figure 3.3-1, the proposed sign location is at the southwestern corner of the 101 Tech Office/R&D site, approximately 160 feet east from the top of the Guadalupe River levee and north of the travel lanes of US 101. Views of the site and proposed sign location from northbound US 101 are blocked by the SR 87/US 101 overcrossing and ramp until motorists are opposite the 101 Tech Office/R&D site. Views of the site and proposed sign location from the Guadalupe River Trail immediately to the west are primarily blocked by the levee near the US 101 overpass. The site is visible from the top of the levee where the river turns to the northwest and from the Guadalupe River trail when approaching from the northeast.

Surrounding Area

Adjacent to the northeastern boundary of the 101 Tech Office/R&D site, along the east side of Atmel Way is a surface parking lot that serves a two-story, office/R&D building with loading docks. To the north and northwest, the property is bound by several vacant parcels containing ruderal grassland. The site is bound by the Guadalupe River and Guadalupe River Trail to the west, SR 87 to the east, and US 101 to the south. Beyond US 101 is a parking lot and the San Jose Norman Y. Mineta International Airport.

Scenic Vistas

The 101 Tech Office/R&D project site is not located within a scenic view shed or along a State-designated scenic highway. Intermittent views of the Diablo Range foothills are available from the project site looking northeast. The views of the foothills are interrupted by existing buildings and urban development.

4.1.1.3 *River View/Irvine Residential Signs Project Site Aesthetics*

The 26.80-acre property is located in North San Jose at the intersection of N. 1st Street and River Oaks Parkway. Currently, the site is being developed with a high-density residential development. The proposed residential signs would be located on the property frontage along N. 1st Street, in a highly urbanized area of the City. The site and surrounding area are flat, and as a result the property is only visible from the immediate area (see Figures 4.1-8 through 4.1-10).

Surrounding Area

Two-story modern office/R&D buildings in a landscaped industrial campus development are present adjacent to the northern boundary of the River View/Irvine site. East of the site across N. 1st Street are multi-story buildings with articulated facades and vacant land that is regularly tilled. South of the site along N. 1st Street is a large parking lot, and west of the site is the Guadalupe River which flows between engineered earthen levees.

Scenic Vistas

The River View/Irvine project site is not located within a scenic view shed or along a State-designated scenic highway. Intermittent views of the Diablo Range foothills are available from the project site looking northeast. The views of the foothills across the vacant land adjacent to N. 1st Street are interrupted by existing buildings and urban development.

Westbound - Property 1

Eastbound - Property 1

Westbound - Property 2

Eastbound - Property 2

VIEWS FROM FREEWAYS IN THE NORTH SAN JOSE DEVELOPMENT AREA: SR 237 VIEWS FIGURE 4.1-1

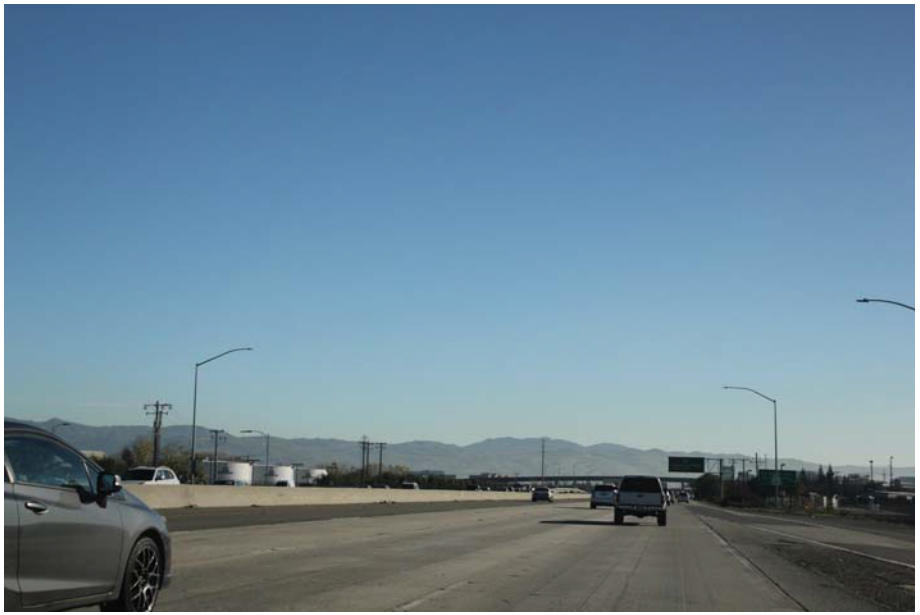
Southbound - Property 3

Southbound - Property 4

Northbound - Property 6

Southbound - Property 5

VIEWS FROM FREEWAYS IN THE NORTH SAN JOSE DEVELOPMENT AREA: I-880 VIEWS FIGURE 4.1-2



Southbound - Property 10 (Left)

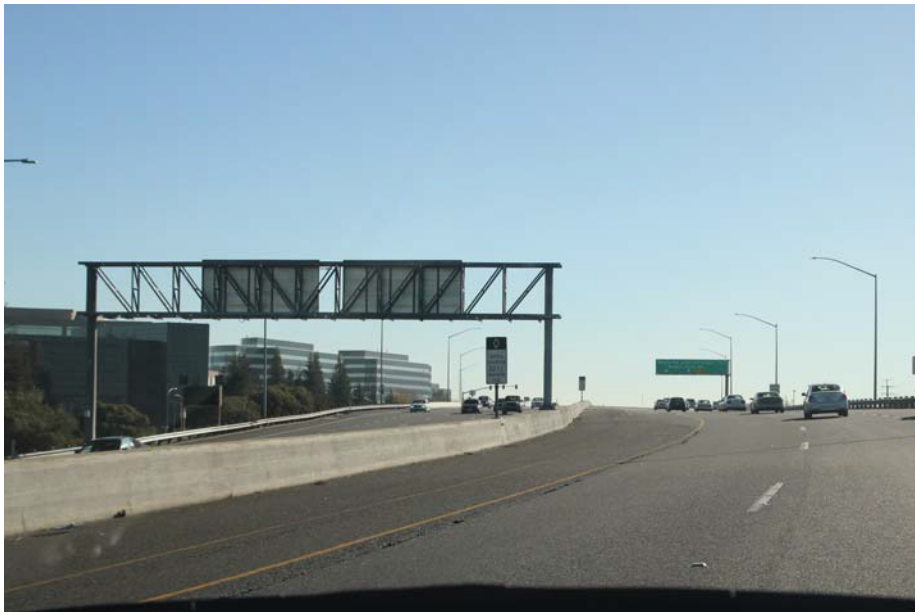
Northbound - Property 12

Southbound - Property 13

Northbound SR 87 Ramp - Property 10 & 11

VIEWS FROM FREEWAYS IN THE NORTH SAN JOSE DEVELOPMENT AREA: US 101 VIEWS FIGURE 4.1-3

Northbound - Property 14



Southbound - Property 14 & 15

Northbound Skyport Ramp - Property 15

Southbound - Property 15 (Left)

VIEWS FROM FREEWAYS IN THE NORTH SAN JOSE DEVELOPMENT AREA: SR 87 VIEWS FIGURE 4.1-4

PHOTO 1: Northbound N. 1st Street, at the N. 1st Street/Headquarters Drive intersection.

PHOTO 2: Southbound N. 1st Street, near the N. 1st Street/River Oaks Parkway intersection.

VIEWS OF RESIDENTIAL DEVELOPMENT FROM SURFACE STREETS IN THE NORTH SAN JOSE DEVELOPMENT AREA: N. 1ST STREET

FIGURE 4.1-5

PHOTO 3: Eastbound River Oaks Parkway, at the River Oaks Parkway/ Zanker Road intersection.

PHOTO 4: Looking north across Innovation Drive from a parking lot, near the Innovation Drive/Research Place intersection.

VIEWS OF RESIDENTIAL DEVELOPMENT FROM SURFACE STREETS IN THE NORTH SAN JOSE DEVELOPMENT AREA: RIVER OAKS PARKWAY AND INNOVATION DRIVE

FIGURE 4.1-6

4.1.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	☐	1,2,3
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	☐	1,2,3
3. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒	☐	1,2,3
4. Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	☐	☐	☐	☒	☐	1,2,3,4

NSJ FPEIR - Summary of Aesthetics Conclusions

The NSJ FPEIR discussed that while the appearance of the North San Jose area would be changed by implementation of the North San Jose Development Policies Update, there are few uninterrupted scenic vistas visible from the area and development in conformance with the City's design guidelines would not result in a substantial degradation of the visual character of the area or significantly affect a scenic vista. While lighting levels would incrementally increase, with fixtures that are designed to avoid spillover onto adjacent properties, redevelopment and development is unlikely to result in substantial new sources of light or glare that would affect views in the area. The NSJ FPEIR Land Use Section did not identify any significant impacts related to visual and aesthetic resources in the North San Jose Development Area.

4.1.2.1 *Aesthetic Impacts of the Sign Code Amendments*

Overview

The freeway signs could display only on-site commercial or noncommercial messages. The residential signs could display on-site commercial or non-commercial messages. Under the proposed Freeway Signs Code Amendment, a Development Permit and design review would be required for approval and construction of freeway signs.

Residential signs would be subject to design review approval by the Director of Planning, Building, and Code Enforcement, consistent with the standards for signage in residential zones. Part of this

review is making findings that the location, material, color and scale are compatible with architectural and landscape features and signs on the same parcel and adjacent properties (Section 23.02.1340).

Signs allowed under both Sign Code Amendments will be required to be compatible with the design of buildings on each site and in the immediate vicinity. The siting and design of signs will be subject to design review to ensure that the signs meet policies and standards in the General Plan, Sign Ordinance, and City's sign design guidelines in keeping with the character of the built environment on each site, and to contribute to a positive image of San Jose, specifically the employment and residential lands of the North San Jose Development Area.

The California Outdoor Advertising Act and the Federal Highway Beautification Act are both laws that apply to advertising signs along primary highways and freeways. The California Outdoor Advertising Act is implemented through regulations adopted by the California Department of Transportation (CalTrans). The provisions of the Acts, including distance/orientation requirements would be applicable to all future freeway signs which could be allowed with approval of the Freeway Signs Code Amendment. Additionally, N. 1st Street is a designated National Highway System Route, therefore, provisions of the Acts for non-programmable residential signs including distance/orientation requirements would be applicable to future signs along this corridor, which could be allowed with approval of the Residential Signs Code Amendment.

Impacts to Scenic Resources and State Scenic Highways
(Checklist Questions 1 and 2)

The North San Jose Development Area is not part of any scenic views or vistas, nor is a scenic corridor located within its boundaries. Allowing freeway signs on office/R&D properties in the North San Jose Development Area which are over 10 acres in size, and which have over 800 linear feet of freeway frontage would not result in a new impact to scenic views or resources. Allowing taller residential signs (maximum of 20 feet above grade instead of the currently allowed 15 feet) in the North San Jose Development Area adjacent to multi-storied residential buildings, would not result in a new impact to scenic views or resources.

There are no California Designated Scenic Highways within or adjacent to the North San Jose Development Area.[9] There are no scenic resources within a State scenic highway that would be affected by approval of the proposed Freeway or Residential Signs Code Amendments. **[Same as Approved Project (Less Than Significant Impact)]**

Impacts to the Visual Character of the Built Environment
(Checklist Question 3)

The North San Jose Development Area is recognized as an urban employment center accommodating high-tech companies. While development of freeway signs could intermittently block views of the hills from vehicles travelling on the freeways (primarily when viewed from eastbound SR 237 and

[9] Department of Transportation. *California Scenic Highway Mapping System.* Available at: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm. Accessed on December 12, 2014.

southbound US 101), the restricted sign sizes (no more than 500 sf), the speed of travelling vehicles (approximately 65 miles per hour), and the location of the signs adjacent to freeways in an urban environment would limit the visual effect of the signs to the overall character and quality of the North San Jose Development Area.

Approval of the freeway Sign Code Amendment could lead to freeway signs located in designated gateway areas. Properties 3 and 4 are located in the Charcot Avenue/I-880 gateway, Properties 11 and 12 are located adjacent to or near the Charcot Avenue/US 101 Gateway, and Properties 14 and 15 are be located along Airport Parkway where the road intersects with Guadalupe Parkway. Property 5 is located near I-880 at Brokaw Road and is designated as a gateway in the North San Jose Design Guidelines. Signs on these properties, as shown in Figure 3.2-1, would be oriented toward the freeways and depending on the sign locations, they could be visible from designated gateway areas.[10]

Pursuant to General Plan Policy CD-10.2, new public and private development adjacent to Gateways, freeways (including U.S.101, I-880, I-680, I-280, SR17, SR85, SR237, and SR87), and Grand Boulevards will be designed with high-quality architecture, use high-quality materials, and contribute to a positive image of San José. Furthermore, pursuant to General Plan Policy CD-10.3, development visible from freeways (including U.S.101, I-880, I-680, I-280, SR17, SR85, SR237, and SR87) will be designed to preserve and enhance attractive natural and man-made vistas. Design-level review in conformance to City Policies, required as part of approval of a Site Development Permit, will be completed for each freeway sign to avoid visual impacts to designated gateway areas.

Per the provisions of the Outdoor Advertising Act, signs within 1,000 feet of another sign would not be permitted, therefore, depending on the location of other signs in an area at the time a sign is proposed, a sign may or may not be permitted on a given site. Compliance to this provision would provide spacing between signs and prevent an overabundance of signs in a given area along the North San Jose freeways.

Signs allowed under the Residential Signs Code Amendment would be required to follow the same design parameters as outlined in Section 23.04.320 of the Municipal Code. The proposed Residential Signs Code Amendment would allow freestanding signs on residentially zoned properties with high density development to be up to five feet in height for each 50 units located on a subject site, up to a maximum height of 20 feet (five feet taller than currently allowed). In other words, a high density residential project with 200 units or more could have a maximum 20 foot tall monument sign in North San Jose. Allowing residential signs that are five feet taller than currently allowed would not result in a significant change to the visual character of the existing built environment because the signs would be an urban feature located on high-density urbanized property.

The signs that could be permitted with approval of the Sign Code Amendments would be complementary and compatible with the surrounding urban uses, serving the purpose of identifying office/R&D occupants and residential areas of the associated properties where the signs are located. The Sign Code Amendments, therefore, would not degrade or change the existing visual character or

[10] San Jose General Plan. *Scenic Corridors Diagram.* October 2011.

quality of the North San Jose Development Area or its surroundings. **[Same as Approved Project (Less Than Significant Impact)]**

Light and Glare Impacts
(Checklist Question 4)

Depending on factors such as brightness, size, reflectivity, and angle of viewing, lighting has the potential to cause glare, which in turn can result in a distraction or hazard to viewers. In addition, lighting "spillover" can cause adverse effects, such as when an unshielded light fixture causes areas to be lit that are intended to remain dark. The Sign Code Amendments would not change the lighting standards in the current Sign Code or City of San Jose Outdoor Lighting on Private Developments Policy 4-3 (which are intended to minimize light and spillover impacts).[11]

The Sign Code for programmable electronic signs currently limits the brightness of the sign relative to ambient light conditions, requires signs default to a black screen if the sign malfunctions, and requires programmable electronic freeway signs be located in such a manner to not adversely interfere with the visibility or functioning of traffic signals and traffic signage (also refer to Sections *4.4 Biological Resources, 4.8 Hazards and Hazardous Materials* and *4.16 Transportation* for more detailed discussions of programmable electronic sign illumination [light spillover] and luminance [brightness and glare]).

Per the Municipal Code Title 23, residential signs on sites with 100 or more residences per building are allowed illumination by external lighting, halolighting, and internal lighting if only the letters or symbols are illuminated (Section 23.04.320F(3)(c)). Additionally, only continuous lighting may be used. Residential signs located within one hundred feet of a riparian area, river or creek are prohibited from being illuminated. The lighting allowed on residential signs is minimal and placing a lit residential sign five feet higher than currently allowed in the North San Jose Development Area (at 20 feet instead of the currently allowed 15 feet), as proposed by the Residential Signs Code Amendment, would not create a new source of substantial light or glare.

Each freeway sign would require approval of a Development Permit which would include project-level environmental review, as needed, including an analysis of light and glare impacts. Residential signs would undergo design review during the sign permitting process. Programmable and non-programmable lighting on signs would be required to comply with the San Jose Outdoor Lighting on Private Developments Policy 4-3. Approval of the Sign Code Amendments, therefore, would not result in signs that create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. **[Same as Approved Project (Less Than Significant Impact)]**

[11] This City Council policy calls for private development to use energy-efficient outdoor lighting that is fully shielded and not directed skyward. Low-pressure sodium lighting is required unless a photometric study is done and the proposed lighting referred to Lick Observatory for review and comment. One of the purposes of this policy is to provide for the continued enjoyment of the night sky and for continuing operation of Lick Observatory, by reducing light pollution and sky glow.

4.1.2.2 *Aesthetic Impacts of the 101 Tech Sign Project*

Impacts to Scenic Resources and State Scenic Highways
(Checklist Questions 1 and 2)

The 101 Tech project site is not part of any scenic views or vistas, nor is it located along a scenic corridor. While the sign would incrementally modify views from US 101, the size and location of the sign along an urbanized freeway corridor would not result in a new impact to scenic views or resources. There are no California Designated Scenic Highways within or adjacent to the North San Jose Development Area.[12] The sign would be located on a flat parcel which is not a scenic resource. Approval of the sign at the proposed location would not damage a scenic resource located within a State scenic highway. **[Same as Approved Project (Less Than Significant Impact)]**

Impacts to the Visual Character of the Built Environment
(Checklist Question 3)

The project proposes to construct a sign that would support the 101 Tech Office/R&D Project which includes up to 666,000 sf of office/R&D development on the site. Existing conditions photographs of the project site were taken from US 101 and from the SR 87 connector ramp. These views of the project site were used to prepare photosimulations of the conceptual proposed sign, as it would appear in front of the planned 101 Tech Office/R&D buildings. The photosimulations show how the conceptual sign height and area would appear to motorists travelling along the freeway. The vantage points from which the photographs were taken (northbound from US 101 and the SR 87 connector ramp, and southbound from US 101), are shown in Figure 4.1-7. Daytime photographs of the existing conditions in the project area and the post-project photosimulations are shown in Figures 4.1-8 through 4.1-10.

The 'existing' views in Figures 4.1-8 through 4.1-10 show the built-out character of the project area which includes the SR-87 overpass, the US 101 freeway, and overhead utility lines. The existing views show the flat nature of the project site and surrounding areas, indicating that the proposed sign would be primarily visible in the immediate vicinity of the project site, including from the nearby US 101 freeway and SR 87 connector ramp. As shown in Figures 4.1-9 and 4.1-10, views of the hills are not present travelling northbound on US 101 or from the SR 87 connector ramp, and as shown in Figure 4.1-8, views of the hills are distant travelling southbound on US 101.

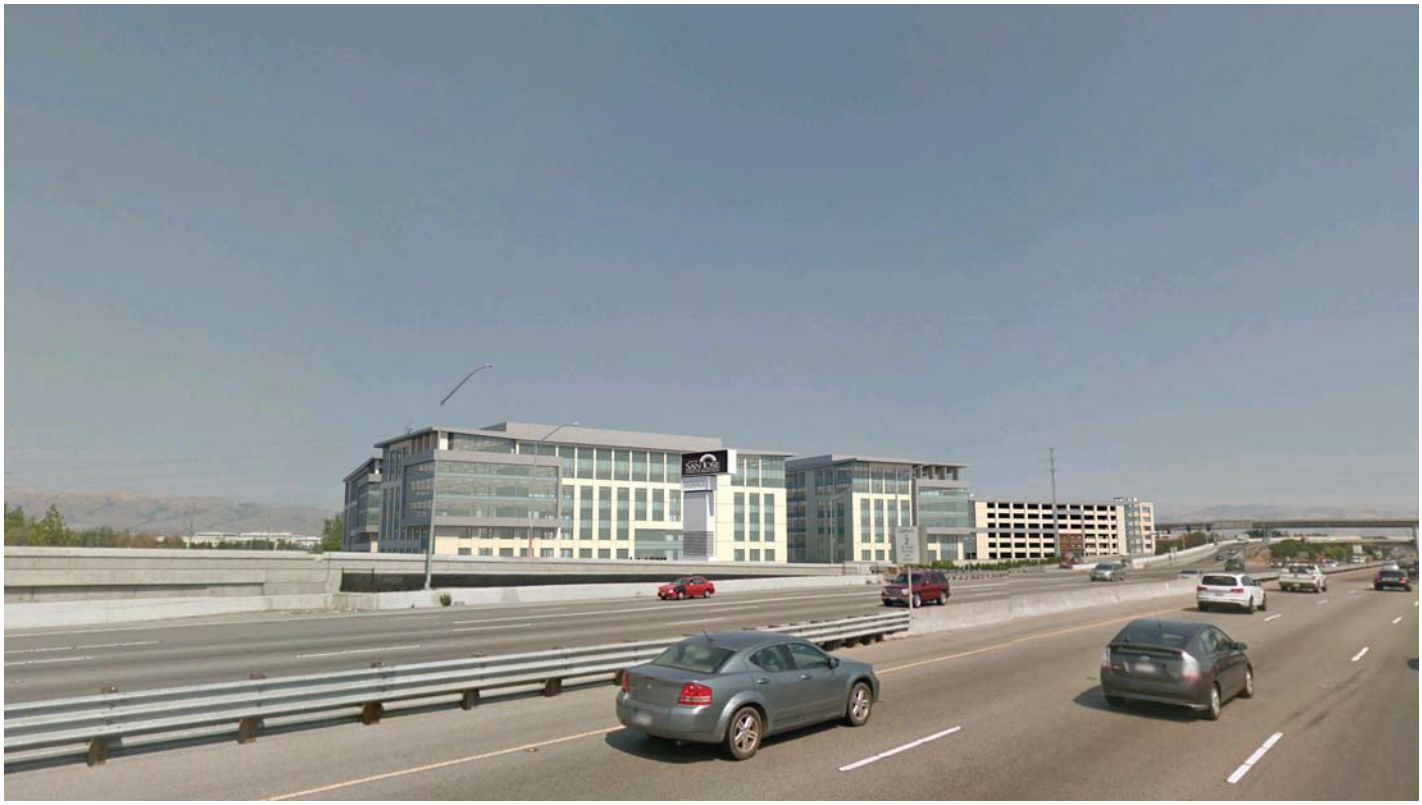
The intent of the freeway sign would be to identify the occupants of the planned 101 Tech Office/R&D development, therefore, the sign would only be installed once the planned 101 Tech Office/R&D buildings are constructed. As shown in Figure 4.1-8, the sign would have a lower height than the planned 101 Tech Office/R&D buildings (the planned Office/R&D buildings would be up to six stories, 99 feet to the top of a roof screen), and the sign would not result in additional blocked views of the distant hills beyond what would already be blocked by the planned Office/R&D Tech buildings. The sign would be compatible with the planned urban use for the site.

[12] Department of Transportation. *California Scenic Highway Mapping System.* Available at: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm. Accessed on December 12, 2014.

LOCATION OF PHOTOSIMULATION VIEWS

FIGURE 4.1-7

EXISTING



PROPOSED

PHOTOSIMULATION: VIEW FROM EASTBOUND US 101 FIGURE 4.1-8

EXISTING

PROPOSED

PHOTOSIMULATION: VIEW FROM WESTBOUND US 101 FIGURE 4.1-9

EXISTING

PROPOSED

PHOTOSIMULATION: VIEW FROM WESTBOUND US 101 ON-RAMP FROM SR 87 FIGURE 4.1-10

The sign is proposed approximately 1,000 feet west/northwest of the Guadalupe Parkway southbound lanes and may be visible to motorists peripherally from this City designated Gateway. As the sign is part of a development adjacent to US 101, it will be required to include high-quality materials and to enhance man-made vistas per General Plan policies CD-10.2 and CD-10.3.

While the sign would briefly obscure or modify views of the hills from vehicles travelling on southbound US 101, the sign size (60 feet tall and no more than 500 sf with a programmable maximum area of 375 square feet), the speed of travelling vehicles (approximately 65 miles per hour when not congested), and the location of the sign adjacent to the freeway in an urban environment would limit the visual effect of the sign to the overall character and quality of the area.

Even without development of the site with the planned 101 Tech Office/R&D project, the sign would be located in an area characterized by urbanized development including office/R&D development to the north, two major highways to the south and east (US 101 and SR 87, respectively), and the airport across US 101 to the south. The proposed sign would not result in new or more significant impacts to the visual character or quality of the site and its surroundings than disclosed in the NSJ FPEIR. **[Same as Approved Project (Less Than Significant Impact)]**

Light and Glare Impacts
(Checklist Question 4)

The proposed programmable electronic freeway sign would include two surfaces that would create a new source of light, compared to existing conditions. The sign would operate in conformance with existing requirements in the current Sign Code which are intended to minimize light and spillover impacts to the surrounding environment. The sign would implement automatic dimming technology to gradually adjust brightness levels relative to ambient light conditions.

A lighting analysis was completed for the project to evaluate the glare and safety hazards from the sign to aircraft pilots, air traffic controllers working in the nearby Airport Tower, and motorists. Sections *4.8 Hazards and Hazardous Materials* and *4.16 Transportation* summarizes the results and conclusions of the analysis. The analysis found that the sign would not result in substantial light or glare impacts to pilots, air traffic controllers, or motorists. A copy of the lighting analysis is included in Appendix D of this IS/Addendum. Lighting effects on the Guadalupe River corridor were also assessed based upon the proposed location and characteristics of the sign, and *Section 4.4 Biological Resources* summarizes the results of the evaluation.

The sign would include features that would make it consistent with City regulations on sign brightness and lighting policies, including the City's Outdoor Lighting Policy. A detailed discussion of the project's features which would reduce light and glare can be found in *Section 4.8, Hazards and Hazardous Materials.*

With the proposed maximum brightness and illuminance limitations, including conformance to existing Sign Code regulations for programmable electronic signs, the proposed sign would not result in new or more significant light or glare impacts than disclosed in the certified NSJ FPEIR. **[Same as Approved Project (Less Than Significant Impact)]**

4.1.2.3 *Aesthetic Impacts of the River View/Irvine Residential Signs Project*

Scenic Resources and State Scenic Highways, Visual Character, and Light and Glare Impacts
(Checklist Questions 1-4)

The proposed River View/Irvine residential signs would not be taller than the high-density residential buildings on the River View/Irvine site and would not, therefore, have a new adverse effect on a scenic vista. The residential signs would be located along the project frontage on N. 1st Street which does not support any scenic resources and would not include removal or damage to a scenic resource. The signs would be located in a highly urbanized area, and with implementation of the design compatibility requirements in the Sign Code, the project would not degrade the visual character or quality of the site or its surroundings. Per the Municipal Code Title 23, residential signs on sites with over 100 residences are allowed illumination by external lighting, halolighting, and internal lighting if only the letters or symbols are illuminated. With only minimal lighting allowed on the residential signs, the proposed signs would not adversely affect day or nighttime views in the area. The proposed signs would not result in new or more significant aesthetic impacts than disclosed in the certified NSJ FPEIR. **[Same as Approved Project (Less Than Significant Impact)]**

4.1.3 Conclusion

With conformance to existing Sign Code regulations for programmable electronic signs and for residential signs, and General Plan policies for development near gateways and freeways, the Sign Code Amendments allowing freeway signs on office/R&D sites and taller residential signs would not result in any new or more significant visual or aesthetic impacts than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

With the proposed maximum brightness and illuminance limitations, including conformance to existing Sign Code regulations for programmable electronic signs, the 101 Tech Sign would not result in any new or more significant visual or aesthetic impacts than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

With conformance to existing Sign Code regulations for residential signs, the River View/Irvine Residential Signs would not result in any new or more significant visual or aesthetic impacts than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.2 AGRICULTURAL AND FOREST RESOURCES

4.2.1 Setting

4.2.1.1 *Agricultural Context of the North San Jose Development Area*

The North San Jose Development Area was cultivated for over a hundred years for a variety of crops including orchards, field crops, and greenhouse-grown flowers. Today, the area has relatively little vacant land left, and what little remains is scattered. There are no Williamson Act contracts remaining within the North San Jose Development Area and no properties located adjacent to freeways are designated as farmland of any type on the 2012 Santa Clara County Important Farmland Map. There is one property in the North San Jose Development Area, the 35.1 acre Moitozo property, North of River Oaks Parkway between N. 1st Street and Zanker Road that is designated as *Unique Farmland* in the Santa Clara County Important Farmland Map (2012).

4.2.1.2 *101 Tech Sign Project Site Agricultural and Forest Resources*

The project site is designated as *Urban and Built-Up Land* in the Santa Clara County Important Farmland Map (2012)[13] and zoned for urban uses. The project site and adjacent properties are not zoned or used for agricultural or forestry/timberland purposes. The project site is not subject to a Williamson Act contract.

4.2.1.3 *River View/Irvine Project Site Agricultural and Forest Resources*

The project site is designated as *Urban and Built-Up Land* in the Santa Clara County Important Farmland Map (2012)[14] and zoned for urban uses. The project site is not zoned or used for agricultural or forestry/timberland purposes. The project site is not subject to a Williamson Act contract. The 35.1 acre Moitozo property is located opposite the project site, across N. 1st Street which, as previously mentioned, is designated as *Unique Farmland* in the Santa Clara County Important Farmland Map (2012).

[13] California Department of Conservation, Division of Land Resource Protection. *Santa Clara County Important Farmland 2012.* Published August, 2014. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/scl12.pdf. Accessed December 2, 2014.

[14] California Department of Conservation, Division of Land Resource Protection. *Santa Clara County Important Farmland 2012.* Published August, 2014. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/scl12.pdf. Accessed December 2, 2014.

4.2.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	☐	5
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	☐	5,6
3. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒	☐	6
4. Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	☐	2,3
5. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	☐	2,3

NSJ FPEIR - Agricultural and Forestry Resources Conclusions

The NSJ FPEIR disclosed that the approximately 30 acre Moitozo Property on the northeast corner of North First Street and River Oaks Parkway is designated as prime farmland (although the site has since been re-designated as *Unique Farmland)*. The property is zoned for residential and commercial development and the NSJ FPEIR did not identify any significant impacts from the loss of agricultural

land. The NSJ FPEIR did not specifically address the presence or absence of forest land, although based upon a review of information in the NSJ FPEIR, forest resources are not present in this urbanized, valley floor area of San Jose.

4.2.2.1 *Agricultural and Forest Impacts of the Sign Code Amendments*

The City's Sign Code applies to all land uses within the City, including urban and rural land uses. The proposed Freeway Signs Code Amendment, however, pertains only to office/R&D sites which are over 10 acres in size with over 800 linear feet of freeway frontage in the North San Jose Development Area. Up to 16 existing properties in the North San Jose Development Area could install a sign on their property with approval of the Freeway Signs Code Amendment. Other future properties might be able to install this type of sign if property is subdivided or reconfigured.

The Residential Signs Code Amendment only applies to residential sites in the North San Jose Area. As shown in Figure 3.2-2, a number of existing properties in the North San Jose Development Area could foreseeably install a taller freestanding sign with approval of the Residential Signs Code Amendment.

Agricultural Resources
(Checklist Questions 1, 2 and 5)

There is one property in the North San Jose Development Area designated as unique farmland: the 35.1 acre Moitozo property, North of River Oaks Parkway between N. 1st Street and Zanker Road. This property is not located within 250 feet of a freeway or planned for office/R&D uses. The land already has entitlements for planned residential and commercial uses. The Residential Signs Code Amendment would not result in conversion of this land from agricultural use, but rather any signs would be placed to support residential development that has already been approved for the site.

All 16 properties that could install a sign with approval of the Freeway Signs Code Amendment are designated as *Urban and Built-Up Land* in the Santa Clara County Important Farmland Map (2012)[15] and zoned for urban uses. With the exception of the Moitozo property, all properties in North San Jose that could install a sign with approval of the Residential Signs Code Amendment are designated as *Urban and Built-Up Land* in the Santa Clara County Important Farmland Map (2012)[16] and zoned for urban uses.

Approval of the Freeway Signs Code Amendment would allow installation of signs adjacent to the freeways in an urban area of the City, to identify tenants of buildings on sites zoned and used for office/R&D land uses. Approval of the Residential Signs Code Amendment would allow installation of incrementally taller signs in an urban area of the City on sites zoned and used for residential uses. Approval of the Sign Code Amendments would not allow signs to encroach on property used or

[15] California Department of Conservation, Division of Land Resource Protection. *Santa Clara County Important Farmland 2012.* Published August, 2014. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/scl12.pdf. Accessed December 2, 2014.
[16] California Department of Conservation, Division of Land Resource Protection. *Santa Clara County Important Farmland 2012.* Published August, 2014. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/scl12.pdf. Accessed December 2, 2014.

zoned for agricultural purposes, or result in the conversion of agricultural uses to non-agricultural uses. Implementation of the proposed Sign Code Amendments, therefore, would not result in new or more significant impacts to agricultural resources than identified in the NSJ FPEIR. **[Same Impact as Approved Project (No Impact/Less Than Significant Impact)]**

Forest Resources
(Checklist Questions 3, 4, and 5)

None of the Sign Code Amendment properties are zoned or used for forestry/timberland purposes.[17] Approval of the Sign Code Amendments would not allow signs to encroach on property used for forestry purposes, or result in the conversion of forest land to non-forest uses. All future signs would be required to conform to key policies in the City's Riparian Corridor Policy Study which requires that development be placed at least 100 feet from riparian zones or top-of-bank. The Sign Ordinance prohibits the illumination of residential signs located within 100 of a riparian corridor. Implementation of the proposed Sign Code Amendments, therefore, would not result in impacts to forestry resources. Implementation of the proposed Sign Code Amendments would not result in new or more significant impacts to forest resources than identified in the NSJ FPEIR. **[Same Impact as Approved Project (No Impact)]**

4.2.2.2 *Agricultural and Forest Impacts of the 101 Tech Sign Project*

Agricultural and Forest Resources
(Checklist Questions 1-5)

Given the existing urban conditions on and adjacent to the 101 Tech Office/R&D project site, and the site designation as *Urban and Built-Up Land* in the Santa Clara County Important Farmland Map, installation of the sign would not result in impacts to agricultural or forestry resources. The sign would be located 160 feet east of the Guadalupe River riparian corridor and would not impact trees in the riparian zone. The project would not result in new or more significant impacts to agricultural or forestry resources than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.2.2.3 *Agricultural and Forest Impacts of the River View/Irvine Residential Signs Project*

Agricultural and Forest Resources
(Checklist Questions 1-5)

Given the existing urban conditions on and adjacent to project site, and the site designation as *Urban and Built-Up Land* in the Santa Clara County Important Farmland Map, installation of the residential signs would not result in impacts to agricultural or forestry resources. The signs would be located over 500 feet from the Guadalupe River corridor and would not impact trees in the riparian zone. The signs would be a part of residential development already approved for the site, and would not result in impacts beyond what was evaluated in the NSJ FPEIR. The project would not result in new

[17] City of San Jose. Envision 2040 General Plan. *Figure 3.1-3 Existing Land Uses (North).*

or more significant impacts to agricultural or forestry resources than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.2.3 Conclusion

Adoption of the proposed Sign Code Amendment would not result in any new or more significant impacts to agricultural or forestry resources than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (No Impact)]**

Installation of the proposed 101 Tech Sign would not result in any new or more significant impacts to agricultural or forestry resources than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Installation of the proposed River View/Irvine Residential signs would not result in any new or more significant impacts to agricultural or forestry resources than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.3 AIR QUALITY

4.3.1 Setting

4.3.1.1 *Air Quality Context in the North San Jose Development Area, and for the 101 Tech Sign and River View/Irvine Residential Signs Projects*

Climate and Topography

The City of San Jose is located in the Santa Clara Valley within the San Francisco Bay Area Air Basin. The project area's proximity to both the Pacific Ocean and the San Francisco Bay has a moderating influence on the climate. This portion of the Santa Clara Valley is bound by the San Francisco Bay to the north, the Santa Cruz Mountains to the southwest, and the Diablo Range to the east. The surrounding terrain greatly influences winds in the valley, resulting in a prevailing wind that follows along the valley's northwest-southwest axis.

Regional and Local Criteria Pollutants

Major criteria pollutants, listed in "criteria" documents by the US Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and suspended particulate matter (PM). These pollutants can have health effects such as respiratory impairment and heart/lung disease symptoms.

Violations of ambient air quality standards are based on air pollutant monitoring data and are judged for each air pollutant. The Bay Area as a whole does not meet State or Federal ambient air quality standards for ground level ozone and $PM_{2.5}$ and State standards for PM_{10}. The area is considered in attainment or unclassified for all other pollutants.

Local Community Risks/Toxic Air Contaminants and Fine Particulate Matter

Besides criteria air pollutants, there is another group of substances found in ambient air referred to as Toxic Air Contaminants (TACs). These contaminants tend to be localized and are found in relatively low concentrations in ambient air; however, exposure to low concentrations over long periods can result in adverse chronic health effects. Diesel exhaust is a predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average).

Fine Particulate Matter ($PM_{2.5}$) is a complex mixture of substances that includes elements such as carbon and metals; compounds such as nitrates, organics, and sulfates; and complex mixtures such as diesel exhaust and wood smoke. Long-term and short-term exposure to $PM_{2.5}$ can cause a wide range of health effects. Common stationary sources of TACs and $PM_{2.5}$ include gasoline stations, dry cleaners, and diesel backup generators. The other more significant, common source is motor vehicles on roadways and freeways.

4.3.1.2 *Applicable Air Quality Regulations and Policies*

Federal, State, and regional agencies regulate air quality in the Bay Area Air Basin, within which the proposed project is located. At the Federal level, the USEPA is responsible for overseeing implementation of the Federal Clean Air Act and its subsequent amendments. CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of State air quality laws and regulations, including the California Clean Air Act.

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the Federal and State ambient air quality standards are maintained in the San Francisco Bay Area. BAAQMD has permit authority over stationary sources, acts as the primary reviewing agency for environmental documents, and develops regulations that must be consistent with, or more stringent than, Federal and State air quality laws and regulations.

Regional Air Quality Management Districts such as BAAQMD must prepare air quality plans specifying how State air quality standards would be met. The BAAQMD's most recent adopted plan is the Bay Area 2010 Clean Air Plan (CAP).

For all proposed projects, BAAQMD recommends implementation of the updated Basic Construction Mitigation Measures whether or not construction-related emissions exceed applicable thresholds.

4.3.1.3 *Sensitive Receptors*

BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, school playgrounds, child-care centers, retirement homes, convalescent homes, hospitals and medical clinics.

North San Jose Development Area

Office/R&D Properties 1, 9, and 15, as shown in Figure 3.2-1, are located in the vicinity of existing and/or planned residential development in the North San Jose Development Area. The residential properties over two acres in size shown on Figure 3.2-2 are properties where sensitive receptor populations are or could be located in the future.

101 Tech Sign Project Site

There are no sensitive receptors located within one mile of the 101 Tech Sign project site.

River View/Irvine Residential Signs Project Site

The nearest off-site sensitive receptors to the River View/Irvine Residential Signs project site are located approximately 150 feet east, across N. 1st Street.

4.3.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒	☐	6,7,8
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒	☐	2,3,6,7, 8
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	☐	☐	☐	☒	☐	2,3,6,8
4. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒	☐	2,3,6
5. Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒	☐	1

NSJ FPEIR - Air Quality Conclusions

The NSJ FPEIR identified significant air quality impacts related to fugitive dust from construction activities. Impacts from construction activities were reduced to a less than significant level with implementation of BAAQMD dust control measures. The NSJ FPEIR identified significant air quality impacts related to near-term and long-term regional air quality, including inconsistency with the population projections in the most recently adopted CAP in 2005 (2000 CAP). Even with implementation of mitigation measures, impacts to regional air quality from buildout of the North San Jose Development Area would be significant and unavoidable.

4.3.2.1 *Air Quality Impacts of the Sign Code Amendments*

Consistency with the 2010 CAP

(Checklist Question 1)

The NSJ FPEIR determined that build-out of the plan would result in a significant and unavoidable impacts pertaining to implementation of the 2000 CAP goals.

The 2010 CAP was adopted subsequent to the NSJ FPEIR and is the currently applicable Clean Air Plan for the San Francisco Bay Air Basin. The 2010 CAP addresses air quality impacts with respect to obtaining ambient air quality standards, reducing exposure of sensitive receptors to TACs, and reducing greenhouse gas emissions (GHGs). Since the proposed project does not involve population or employment growth, determining consistency with the 2010 CAP involves assessing whether applicable control measures contained in the 2010 CAP are implemented. The control measures are organized into five categories: stationary and area source control measures, mobile source measures, transportation control measures, land use and local impact measures, and energy and climate measures. The control measures are geared towards traditional land uses (e.g., residential, commercial, industrial uses) and buildings. The 2010 CAP control measures are not applicable to signs. The proposed Sign Code Amendments for freeway signs and residential parcels would not, therefore, obstruct implementation of the 2010 CAP.

The project would not change the development assumptions in the NSJ FPEIR. While the proposed Sign Code Amendments would not be inconsistent with the applicable CAP or involve population or employment growth, the conclusions regarding impacts of the NSJ Development Policies Update would remain the same. **[Same Impact as Approved Project (Significant Unavoidable Impact)]**

Sources of Air Pollutant Emissions

(Checklist Questions 2, 3, and 4)

In general, signs directly or indirectly emit air pollutants during their construction and operation. Direct vehicle emissions would result from construction vehicle trips to and from the sign sites and maintenance vehicle trips. Electronic signs result in indirect emissions from the generation of electricity used to power the signs. Electricity supplied to the City of San Jose by PG&E comes from various sources, including natural gas, nuclear, coal, and wild and hydroelectric generation resources in California and other western states. There are also several electric power plants within the City of San Jose that are connected to the larger transmission grid.

Operational Air Pollutant Emissions

The proposed Freeway Signs Code Amendment would increase the number of locations within North San Jose where freeway signs are allowed. The signs would require electricity in order to operate, and the production of electricity used by the signs would generate air pollutants. The majority of a typical development project's air pollution emissions, however, are from vehicle trips to and from a site. The long-term operation of each sign would include vehicle trips for minimal and irregular maintenance activities, occurring only as needed (less than once per month). The Residential Signs Code Amendment would allow taller signs in the North San Jose Development Area and would not increase the number of signs allowed or the number of vehicles required to maintain them. Since the signs would not generate regular or daily vehicle trips the air pollutant emissions associated with

vehicle trips from operation of the signs would be minimal and would result in air pollution emissions below the criteria air pollutant significance thresholds identified by BAAQMD.[18]

The NSJ FPEIR determined that build-out of the plan would result in significant and unavoidable impacts pertaining to increased emissions of criteria air pollutants. Air pollution emissions generated by the signs would be incremental and negligible when considered with the overall air pollution emissions evaluated in the NSJ FPEIR. The project would not result in new or more significant regional and local air quality impacts than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

Construction-Related Impacts

Wind blowing over exposed earth during foundation construction for the signs would generate dust, and construction equipment would emit exhaust that would temporarily affect air quality. Construction activities are also a source of organic gas emissions.

As previously described, properties 1, 9, and 15, as shown in Figure 3.2-1, are located in the vicinity of existing and/or planned residential development in the North San Jose Development Area. Signs installed as part of the Residential Signs Code Amendment would be located on properties with residential development. Construction activities associated with signs on these properties could temporarily affect sensitive receptors. Because installation of the proposed signs would require relatively minor excavation for construction of foundations, and construction would be completed within a relatively short period of time (two to four weeks), impacts to sensitive receptors during construction would be less than significant.

Regardless of the presence or absence of sensitive receptors, consistent with mitigation measures listed in the certified NSJ FPEIR and standard permit conditions in the City of San Jose, all sign installations would be required to implement the most recent BAAQMD dust and construction equipment exhaust control measures at the time a sign is proposed to further reduce and manage air pollutant emissions. Current BAAQMD dust and construction equipment exhaust control measures are listed below in SM AIR-1, *Section 4.3.2.2*. With implementation of BAAQMD dust and construction equipment exhaust control measures, installation of signs would not result in any new or more significant localized air pollutant than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

[18] For reference, a 511 dwelling unit high-rise condo project, 291,000 square foot racquet club, 152,000 sf junior college, 6,000 sf fast food restaurant with drive-thru, and a 99,000 sf regional shopping center – all uses likely to have signage – would have the potential to result in significant operational air pollutant emissions. Smaller versions of these uses would not result in significant operational air pollutant emissions. As noted above, the source of the majority of the air pollutant emissions for an individual development would be from vehicle trips to and from the development site in question.

Odor Impacts
(Checklist Question 5)

Odor impacts can result from siting a new odor source near existing sensitive receptors or siting a new sensitive receptor near an existing odor source (e.g., landfills, asphalt batch plants, and food processors). It is not anticipated that construction and operation of the signs would generate objectionable odors. **[Same Impact as Approved Project (No Impact/Less Than Significant Impact)]**

4.3.2.2 *Air Quality Impacts of the 101 Tech Sign Project*

Consistency with the 2010 CAP
(Checklist Question 1)

As discussed above, the 2010 CAP control measures are geared towards traditional land uses (e.g., residential, commercial, industrial uses) and buildings. The NSJ FPEIR determined that build-out of the plan would result in a significant and unavoidable impact to implementation of the 2000 CAP goals. The current 2010 CAP control measures are not applicable to signs and modifications to the Sign Code would not generate new population or employment. The proposed 101 Tech Sign would not, therefore, obstruct implementation of the 2010 CAP.

While the proposed 101 Tech sign would not be inconsistent with the applicable CAP or involve population or employment growth, the conclusions regarding impacts of the NSJ Development Policies Update would remain the same. **[Same Impact as Approved Project (Contribution to a Significant Unavoidable Impact)]**

Regional and Local Air Quality Impacts
(Checklist Questions 2-4)

As discussed above in *Section 4.3.2.1*, most of a typical project's operational air pollutant emissions are generated from vehicles traveling to and from a site. The long-term operation of the proposed sign would include vehicle trips with minimal and irregular maintenance activities, occurring only as needed (less than once per month and likely only one vehicle). The direct air pollutant emissions associated with vehicle trips from operation of the sign would result in air pollution emissions below the criteria air pollutant significance thresholds for an individual project identified by BAAQMD.

As described above, the NSJ FPEIR determined that build-out of the plans would result in significant and unavoidable impacts pertaining to increased emissions of criteria air pollutants. The proposed sign would support development on the site and air pollution emissions generated by the sign would be incremental and negligible when considered with the overall air pollution emissions evaluated in the NSJ FPEIR. Emissions from the sign would be below the BAAQMD thresholds. The project would not result in new or more significant regional and local air quality impacts than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

Construction-Related Impacts
(Checklist Question 4)

Installation of the proposed sign would require minor excavation for construction of a foundation. Sign construction would take two to four weeks and would require up to 37 cubic yards of soil off-haul. The nearest sensitive receptors are located over one mile away in every direction. Given the distance between the construction activities and sensitive receptors, and the short duration of construction activities, there are no sensitive receptors that would be significantly affected by construction dust or emissions from installation of the proposed sign. The construction dust and emissions from the sign, however, could make an incremental and temporary contribution to localized dust and exhaust emissions in the project area. Consistent with measures listed in the certified NSJ FPEIR and standard permit conditions in the City of San Jose, the project would be required to implement BAAQMD's recommended dust and construction equipment exhaust control measures.

Standard Permit Condition: Consistent with mitigation measures for construction impacts listed in the NSJ FPEIR, and in conformance with standard BAAQMD dust control measures, the following dust control measures would be implemented during all phases of construction on the project site to reduce dustfall emissions.

SM AIR-1: The following dust control measures shall be implemented during all phases of construction on the project site to reduce dustfall emissions.

- All active construction areas shall be watered twice daily or more often if necessary. Increased watering frequency shall be required whenever wind speeds exceed 15 miles-per-hour.
- Pave, apply water three times daily, or apply non-toxic soil stabilizers on all unpaved access roads and parking and staging areas at construction sites.
- Cover stockpiles of debris, soil, sand, and any other materials that can be windblown. Trucks transporting these materials shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- Subsequent to clearing, grading, or excavating, exposed portions of the site shall be watered, landscaped, treated with soil stabilizers, or covered as soon as possible. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas and previously graded areas inactive for 10 days or more.
- Installation of sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replanting of vegetation in disturbed areas as soon as possible after completion of construction.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. Clear signage shall be provided for construction workers at all access points.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the City of San José regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

With implementation of SM AIR-1, installation of the 101 Tech sign would not result in any new or more significant construction-related air emissions than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Odor Impacts
(Checklist Question 5)

It is not anticipated that construction and operation of the proposed sign would generate objectionable odors. **[Same Impact as Approved Project (No Impact)]**

4.3.2.3 *Air Quality Impacts of the River View/Irvine Residential Signs Project*

Clean Air Plan
(Checklist Question 1)

As previously described, the current 2010 CAP control measures are not applicable to signs and the River View/Irvine Signs would not generate new population or employment. The proposed residential signs would not obstruct implementation of the 2010 CAP. **[Same Impact as Approved Project (Significant Unavoidable Impact)]**

Regional and Local Air Quality Impacts
(Checklist Questions 2-4)

The long-term operation of the River View/Irvine Residential Signs would include vehicle trips with minimal and irregular maintenance activities, occurring only as needed (less than once per month and likely only one vehicle). The direct air pollutant emissions associated with vehicle trips from operation of the signs would result in air pollution emissions below the criteria air pollutant significance thresholds for an individual project identified by BAAQMD. The proposed signs would support development on the site and air pollution emissions generated by the signs would be incremental and negligible when considered with the overall air pollution emissions evaluated in the NSJ FPEIR. The project would not result in new or more significant regional and local air quality impacts than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

Construction-Related Impacts
(Checklist Question 4)

Installation of the proposed River View/Irvine Residential Signs would require minor excavation for construction of foundations. Given the short duration of construction activities associated with signs, there are no sensitive receptors that would be significantly affected by construction dust or emissions from installation of the proposed signs. The construction dust and emissions from the sign, however, could make an incremental and temporary contribution to localized dust and exhaust emissions in the project area. With implementation of SM AIR-1, described above, installation of the River View/Irvine Residential Signs would not result in any new or more significant construction-related air emissions than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Odor Impacts
(Checklist Question 5)

It is not anticipated that construction and operation of the proposed signs would generate objectionable odors. **[Same Impact as Approved Project (No Impact)]**

4.3.3 Conclusion

Adoption of the proposed Sign Code Amendments would not result in any new or more significant impacts to air quality than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

With implementation of BAAQMD dust and construction equipment exhaust control measures, installation of signs allowed under the proposed Sign Code Amendments would not result in any new or more significant localized air pollutant during construction than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Installation and operation of the proposed 101 Tech Sign would not result in any new or more significant impacts to air quality than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

Installation of the 101 Tech sign would not result in any new or more significant construction-related air emissions than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Installation and operation of the proposed River View/Irvine Residential Signs would not result in any new or more significant impacts to air quality than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

Installation of the River View/Irvine Residential Signs would not result in any new or more significant construction-related air emissions than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

4.4 BIOLOGICAL RESOURCES

The following discussion is based in part on a Biological Assessment completed for the 101 Tech Office/R&D sign in January, 2015, and a Biological Report completed for the 101 Tech Office/R&D Addendum in January 2012, by *WRA Environmental Consultants*. The following discussion is also based in part on information provided in a Lighting Impact Analysis prepared by *Lighting Design Alliance (LDA)* in December, 2014. These reports are attached as Appendices B, C, and D, respectively.

4.4.1 Setting

4.4.1.1 *Biological Context of the North San Jose Development Area*

Habitats

The NSJ FPEIR identifies five habitat types on developable properties in the North San Jose Development Area including urban landscape, agricultural, non-native grassland, coyote brush scrub, and remnant sycamore alluvial woodland. *Urban landscape* is characterized by properties that are occupied by buildings, residences, and outbuildings and generally contain a mixture of landscape plants and volunteer weedy species. *Agricultural* and *non-native grassland* habitats generally are vegetated with non-native, ruderal vegetation, with non-native grassland generally productive habitats for wildlife where plowing or weed control has been limited. *Coyote brush scrub* is found in areas protected from mechanical disturbance, such as along fences or property corners. Pockets of scrub habitat provide refuge for species that may forage in adjacent, open habitats. The remnant sycamore alluvial woodland in the North San Jose area is limited to a small patch next to Coyote Creek on a now developed commercial site off Brokaw Road.

Two riparian corridors extend through the North San Jose Development Area, the Guadalupe River and Coyote Creek. These waterways and associated riparian habitats are confined within engineered levees. The presence of year-round water and abundant invertebrates provide foraging opportunities for many species, however, including diverse bird communities. Riparian habitats are also used by migrants and wintering birds. Aquatic habitats within the channel beds support several species of native fishes, such as the California roach, Sacramento sucker, and sculpins, as well as non-native fishes, such as mosquitofish, bluegill and inland silverside. The federally threatened Central California Coast steelhead and the Fall-run Chinook salmon are anadromous fish known to occur in Coyote Creek and the Guadalupe River. Amphibians such as the western toad, and Pacific tree frog are also present.[19] The riparian corridor of each waterway generally extends to the top of the bank or edge of riparian vegetation, whichever is greatest.

Freeways

Sites that support *Urban Landscape* habitats are fully developed. Buildings, pavement and landscaping provide habitat for wildlife species typically and commonly found in developed areas of the County. In contrast, office/R&D properties 2, 4, 6, 7, 8, 10, 11 (project site), and 16 adjacent to

[19] City of San Jose. 2011. *Envision San Jose 2040 General Plan Final Program EIR.*

freeways, as shown in Figure 3.2-1, have qualities that could support biotic resources for special-status species (e.g., burrowing owl, white-tailed kite, Cooper's hawk, bats), or are located adjacent to riparian, wetland or aquatic habitats. These properties are listed below in Table 4.2-1.

Table 4.2-1:
Office/R&D Properties Adjacent to Freeways with Biotic Resources

Property	Qualities that Could Support Biotic Resources (On-Site and in Immediate Vicinity)	
	Vacant Land	Adjacent to Riparian Corridor
2	X	X (Guadalupe River)
4		X (Guadalupe River)
6*		X (Guadalupe River)
7	X	
8	X	
10		X (Guadalupe River)
11 (Project Site)		X (Guadalupe River)
16	X	

*The northern boundary of developed Property 6 borders Schallenberger Road, which is adjacent to Coyote Creek. The creek channel is located approximately 1,100 feet east of the freeway frontage of this property. Property locations are shown on Figure 3.2-1.

Residential

Of the residential properties shown on Figure 3.2-2, several are adjacent to the eastern levee of the Guadalupe River. These include a residential property on Montague Expressway and properties north of W. Tasman Drive. None of the residential properties shown are located adjacent to Coyote Creek.

Special-Status Species

Special-status wildlife species are those with legal protections, and include those that have been formally listed as Endangered or Threatened, or are candidates for listing under the Federal and California Endangered Species Acts. In addition, the California Department of Fish and Wildlife (CDFW) Species of Special Concern (species that face extirpation in California if current trends continue) and US Fish and Wildlife Service (USFWS) Birds of Conservation Concern are also considered special-status species due to the special consideration they are warranted under CEQA. In addition to regulations for special-status species, most birds in the US (including non-status species) and their active nests (those with eggs and/or young) are protected by both the Federal Migratory Bird Treaty Act of 1918 and the California Fish and Game Code.

Special-status plants are not expected to occur in areas of the City, including North San Jose, that are already urbanized due to previous land modifications and removal of native plants, and because they do not support natural plant communities.

Federally and State-listed animal species that occur or may occur within the San Jose City limits are primarily found in aquatic, salt marsh, tidal marsh, riparian, serpentine grasslands, open grasslands, oak woodland, and scrub habitats. Some are also found in agricultural habitats. Special-status animals are generally not expected to occur in areas of the City that are developed with structures and paving and that do not support natural plant communities since these areas do not meet habitat requirements for nesting, foraging, or cover for special-status species. Special-status animal species potentially found in the agricultural and open grassland/vacant land habitats in the North San Jose area or within vegetation in the Guadalupe River or Coyote Creek corridors are listed in Table 4.2-2.

Table 4.2-2:
Special-Status Animal Species in the North San Jose Development Area

Species	Status	Habitats in North San Jose
Western pond turtle	California Species of Special Concern	Primarily aquatic habitat in Coyote Creek and Guadalupe River
White-tailed kite (*Elanus caeruleus)*	State Protected	Agricultural, non-native grassland (cleared or cultivated fields) riparian
Cooper's hawk (*Accipiter cooperii*)	California Species of Special Concern	Wooded areas (urban landscape, riparian)
Burrowing Owl	California Species of Special Concern	Agricultural, non-native grassland (open county)
California horned lark (*Eremophila alpestris actia*)	California Species of Special Concern	Agricultural
Loggerhead Shrike (*Lanius ludovicianus*)	California Species of Special Concern	Coyote brush scrub,
San Francisco common yellowthroat	California Species of Special Concern	Fresh and brackish marshes and weedy riparian habitats in the Guadalupe River and Coyote Creek
Pallid bat (*Antrozous pallidus pacificus*)	California Species of Special Concern	Roosts in old structures, forage in open fields
Townsend's Big-eared bat (*Plecotus townsendii*)	California Species of Special Concern	Potentially roosted in abandoned buildings

Sources: NSJ PEIR and 2040 General Plan FPEIR, Appendix E.

In addition to the species listed above, special-status fish species that occur in the Guadalupe River and/or Coyote Creek within the North San Jose area include the Pacific lamprey, green sturgeon, Central Valley Fall-run Chinook salmon, Central California Coast steelhead, and longfin smelt. These species are associated with aquatic habitats.

Wildlife Movement/Migratory Birds

The City is located along the Pacific Flyway for migratory birds and the mosaic of habitats at the edge of the Bay and surrounding the City results in large-scale movements of birds during both migration and as a part of daily movements between roosting and foraging areas. During the fall, migratory birds fly over the San Francisco Bay Area on their way south, and again during the spring when they fly back up north. Migratory birds can be affected by human-built structures if the structure contains transparent materials, which may lead to unintentional collisions because the signs are difficult to see. Further, during the nighttime if a structure or building contains bright artificial light, birds can become vulnerable to collisions because they are attracted to, and disoriented by, the bright artificial light. The Alviso area, north of SR 237 and the North San Jose Development Area, is cited as an area where there is the greatest potential for additional bird collisions with new structures due to the presence of saline managed ponds, tidal marsh, grassland, Regional Wastewater Treatment Facility settling ponds, and riparian habitat along lower Coyote Creek that provide attractive conditions for breeding, wintering and migrating birds.

4.4.1.2 *101 Tech Sign Project Site Biological Resources*

Federally and State-listed animal species that occur or may occur within the San Jose City limits are primarily found in aquatic, salt marsh, tidal marsh, riparian, serpentine grasslands, open grasslands, oak woodland, and scrub habitats. Some are also found in agricultural habitats. The NSJ FPEIR identifies the 101 Tech Office/R&D property as a site with biotic resources within the North San Jose Development Area because it is vacant land and adjacent to the Guadalupe River riparian corridor.

Habitats

A Biological Resources Assessment was completed for the 101 Tech Office/R&D Project by WRA in 2012,[20] and site conditions have not substantially changed since that time. The site supports ruderal grassland and was previously used for agricultural purposes. The ruderal grassland on the site is considered a non-sensitive biological community and high levels of invasive plant species and scattered agricultural plants were observed on the project site. The potential presence of sensitive species was considered low on the site because of poor foraging habitat resulting from past and present disturbance as well as surrounding urbanized development.

As shown in Figure 3.3-1, the 101 Tech Office/R&D Project site is located adjacent to a small portion of the eastern side of the Guadalupe River. Though generally narrow and impacted in sections, the river corridor connects the South San Francisco Bay and associated fringe habitats (e.g., tidal wetlands, salt ponds) with undeveloped areas upstream of urban San Jose. Along with nearby Coyote Creek, the Guadalupe River is among the most extensive such corridors in the area. As described above in Section 4.4.1.1, the riparian corridor is used by a variety of species. In the

[20] WRA. *Orchard Parkway Commercial Development Biological Resource Assessment San Jose, California.* February 2012. Appendix B in City of San Jose *101 Tech Addendum to the Final Program Environmental Impact Report for the North San Jose Development Policies Update and the Final Program Environmental Impact Report for the Envision San Jose 2040 General Plan.* A copy of this assessment is provided in Appendix C of this document.

vicinity of the 101 Tech Office/R&D site, the Guadalupe River is channelized and has minimal to no riparian zone, providing limited quality habitat. A pedestrian/bicycle trail runs along the east side of the river adjacent to the site. A US 101 overpass crosses over the river adjacent to the southwest corner of the site. The area beneath the overpass is not lit at night and could provide roosting habitat for bats.

Special-Status Wildlife Species

The potential for special-status wildlife species to occur on the 101 Tech Office/R&D site is limited due to its urban environment and surrounding development. Special-status wildlife species known to be present on or adjacent to the site include the following:

Burrowing Owls

Burrowing owls are formally listed as CDFW Species of Special Concern and USFWS Bird of Conservation Concern. The burrowing owl is a small owl that inhabits grasslands and other open areas, and uses mammal burrows for shelter and nesting. Ground squirrel burrows are the most commonly-used shelter in northern California. Burrowing owls have a varied diet but are primarily insectivorous; foraging may occur at any time, but is most typical at night and during twilight. WRA biologists have observed this species within the general area intermittently during annual surveys conducted from 2007 to the present, mostly recently in 2014, when a pair nested on a site adjacent to the northeast of the 101 Tech Office/R&D site. Although this pair of owls were passively relocated from the site using CDFW-approved methodology in preparation for development, burrowing owls may still be present in the general vicinity.

Steelhead

Steelhead are listed under the Federal Endangered Species Act. Steelhead are an anadromous form of native rainbow trout of coastal California watersheds. Anadromous fish spend part of their life cycle in freshwater and part in the ocean. This species typically migrates to marine waters after spending two years in freshwater. After two to three years in the ocean, they return to their natal streams to spawn. Based on the known distribution of steelhead populations in Santa Clara County, the Guadalupe River supports a steelhead run. Although the urbanized reach of the river adjacent to the 101 Tech Office/R&D site is highly modified and does not provide steelhead spawning habitat, this reach is used for in- and out- migration. Thus, small numbers of steelhead may intermittently be present within this reach of the river at certain times of year. Steelhead migration often occurs at night.

Chinook Salmon

Chinook salmon have legal status dependent upon timing and location of spawning; many runs are Federal and/or Stated listed. The chinook salmon is the most abundant salmon species in California. Adults migrate from the marine environment to their natal freshwater streams and rivers to spawn, and then subsequently die. Various geographic populations exist (defined by spawning location and timing), and legal statuses vary between them. The Guadalupe River supports a small chinook salmon population, but the origin and status of this population is uncertain. A genetic analysis of

Guadalupe River chinook salmon suggests that the Guadalupe River chinook salmon are related to Central Valley and Oregon hatchery stock, and thus would not have legal protections. Even if found to be of non-hatchery origin, chinook salmon within the Guadalupe River would be considered "fall-run" or "late fall run" and would not warrant protection under the Federal or California Endangered Species Acts, though they would likely be considered Species of Special Concern by the CDFW.

Other Wildlife Species

Based on the Biological Environmental Assessment completed for the project in January 2015 (attached as Appendix B), other native wildlife that could be located on or adjacent to the 101 Tech site and sensitive to artificial night lighting include birds, fish, bats, and other mammals.

4.4.1.3 *River View/Irvine Residential Signs Project Site Biological Resources*

The River View/Irvine site is being developed with a high density residential development. There are no waterways, wetlands, or other sensitive habitats located on the River View/Irvine site.[21] The NSJ FPEIR does not identify the River View/Irvine property as a site with biotic resources although the western boundary of the site is adjacent to the Guadalupe River corridor. The N. 1st Street frontage at the eastern boundary is over 500 feet from the Guadalupe River corridor. Habitats in developed areas, such as the River View/Irvine property, are extremely low in species diversity. Species using developed habitats are predominately urban adapted birds and animals, such as mourning doves, squirrels, and domestic cats.

The NSJ FPEIR identifies properties near the site as locations of possible biotic resources due to their status as vacant land and/or their location adjacent to the Guadalupe River corridor.

4.4.1.4 *City of San Jose Riparian Corridor Policy*

There are approximately 11 properties zoned for residential development, and seven properties with freeway frontage zoned for office/R&D in the North San Jose Development Area that are adjacent to the Guadalupe River or Coyote Creek corridors.

The City of San Jose Riparian Corridor Policy Study (1999) states that development adjacent to riparian habitats should be set back 100 feet from the outside edge of the riparian habitat or top of bank, whichever is greater, to reduce impacts to riparian biotic communities and hydrologic regimes.

Specific Riparian Corridor Policy Guidelines that address development include 1A: Orientation, 1B: Incompatible Land Use, 2B: Glare, 2C: Visual, 2D: Signs, 2E: Lighting, and 2F: Noise. Additionally, Guideline 4B addresses recreational facilities and related lighting and noise. These Guidelines are described below. Project conformance to these guidelines are discussed in Section 4.4.2.2 *Impacts of the Proposed 101 Tech Sign*, (refer to Table 4.4-2).

[21] Sources: City of San José. 2008. *Wyse Property Addendum to the Final Program Environmental Impact Report for the North San José Development Policies Update (SCH#2004102067)*, review of aerial photographs, and March 2015 site visit.

Guideline Number	**Summary of Guideline**
1A: Orientation	- Buildings and structures should not back up to riparian corridors. - Site activities should be oriented to draw activity away from the riparian corridor, for example, night lighting should be oriented toward non-riparian property edges.
1B: Incompatible Land Uses	- Incompatible operations and activities are discouraged within and adjacent to riparian setback areas to protect the health of existing vegetation and wildlife, reduce adverse cumulative impacts to water quality, and protect the quality of recreation uses in the corridor. - Utility equipment, sub-stations, pumps, and similar facilities should be screened from any riparian corridor trail or recreational, educational, or interpretive facility within the riparian corridor.
2B: Glare	- Building materials should not produce glare that would adversely affect the riparian corridor.
2C: Visual	- The adverse visual impact of existing or unavoidable incompatible uses such as parking areas, loading zones, trash enclosures, mechanical devices, and similar accessory uses should be minimized by landscaping, hedging, berming, low walls and site design.
2D: Signs	- Signs associated with land uses that are adjacent to the riparian corridor and that are not related to complementary recreational or public safety services should be oriented away from the riparian corridor to avoid impacting recreational users of the corridor, or attracting otherwise unnecessary access and activity.
2E: Lighting	- Lighting within the corridor and setback areas should be avoided. Lighting on development sites should be designed and sited to avoid light and glare impacts to wildlife within the riparian corridor, consistent with public safety considerations. Any lighting located adjacent to riparian areas should be as low as feasible in height and must be directed downward with light sources not visible from riparian areas.
2F: Noise	- Noise-producing stationary mechanical equipment should be located as far as necessary from riparian corridors to preclude exceeding the ambient noise level in the corridors.
4B Recreation Facility, Lighting, and Noise	- All lighting and mechanical noise-generating sources for active recreational facilities should be located a minimum of 200 feet from the corridor and screened from the corridor where feasible with berms, fences, vegetation, or other screening materials to minimize impacts to the corridor. The light source of any nighttime lighting

Guideline Number	Summary of Guideline
	should not be visible from the riparian corridor. The exact dimension of a setback may require a site-specific analysis in consultation with a qualified biologist.

4.4.1.5 *Santa Clara Valley Habitat Plan – Development Conditions*

The Santa Clara Valley Habitat Plan (VHP) was initiated by six Local Partners (Santa Clara Valley Transportation Authority, County of Santa Clara, Santa Clara Valley Water District, and the Cities of San Jose, Morgan Hill, and Gilroy), in cooperation with the California Department of Fish and Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). The purpose of the VHP is to "protect and enhance ecological diversity and function in the greater portion of Santa Clara County, while allowing appropriate and compatible growth and development in accordance with applicable laws".

The project sites are located within the VHP Study Area where public and private projects, and ongoing activities are covered. Incidental take authorization is granted in the VHP Area by the ESA and NCCP permits for impacts to threatened and endangered species and associated habitats. Covered activities in the VHP Area fall into seven categories.

- Urban development.
- In-stream capital projects.
- In-stream operations and maintenance.
- Rural capital projects outside streams.
- Rural development.
- Rural operation and maintenance of public infrastructure outside streams.
- Conservation strategy implementation (i.e., activities within the lands managed, enhanced, restored, and monitored to conserve the natural resources targeted by this Plan).

The 101 Tech Sign and River View/Irvine Residential Signs project site has a land cover designation of Urban-Suburban and fall within the Urban Areas land cover fee zone.

The 101 Tech Sign Project site is located in the Burrowing Owl Survey Area and Fee Zone and is mapped as Burrowing Owl Occupied Habitat and subject to land cover verification process and burrowing owl habitat survey requirements. Burrowing owls have been observed within the general vicinity of the 101 Tech Sign site intermittently during annual surveys completed from 2007 to the present, mostly recently in 2014.

The River View/Irvine development is located in an area which, prior to construction of the current high-density residential development, may have been habitat for the Tricolored Blackbird (5.2 Acres).

All covered activities must incorporate the relevant conditions on covered activities described in the VHP in order to avoid or minimize impacts to covered species and natural communities. These conditions include project design and construction measures (such as pre-construction species

surveys and seasonal restrictions on construction activities) to directly protect species. Conditions are applicable to all "covered activities" in the VHP.

4.4.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☐	☒	2,3,9,10 11
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒	☐	2,3,12, 13
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒	☐	2,3
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☐	☐	☒	☐	2,3,12 13

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒	☐	1
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	☐	9

NSJ FPEIR - Biological Resource Conclusions

As described in the NSJ FPEIR, new development in the North San Jose Development Area would contribute to significant impacts related to loss of remnant sycamore riparian woodland, burrowing owls, and raptors. The NSJ FPEIR assumed that future development or redevelopment will not encroach upon the 100-foot setback from the riparian corridors of the Guadalupe River or Coyote Creek, or otherwise significantly impact these corridors. It was determined that implementation of mitigation measures would reduce impacts to vegetation and wildlife to a less than significant impact, with the exception of burrowing owls. The loss of approximately 600 acres of burrowing owl habitat would be a significant and unavoidable impact.

4.4.2.1 *Biological Impacts of the Sign Code Amendments*

Lighting and business signs are a part of the built environment on office/R&D sites throughout the urban areas of San Jose. Although freeway signs up to 60 feet in height on office/R&D sites, and residential sign up to 20 feet in height, were not specifically envisioned, the NSJ FPEIR did anticipate development of structures with similar or greater heights and some lighting on building facades and roof lines. Specific design guidelines adopted by the City Council that address lighting are described in the Industrial Design Guidelines, key policies in the Riparian Corridor Policy Study, and the City of San Jose Private Outdoor Lighting on Private Developments Policy 4-3, as well as the Sign Code.

Impacts to Sensitive Habitats and Special-Status Species
(Checklist Questions 1, 2, and 3)

Freeway Signs

The Freeway Signs Code Amendment could increase the number of signs that could apply for a permit/CEQA clearance adjacent to freeways in the North San Jose Development Area. Installation

of each new proposed sign would be subject to approval of a Development Permit and subsequent environmental review independent of this document. The associated project-level environmental review for the required Development Permit would include consideration of, and mitigation for the presence of biological resources as described by the VHP, City policies (including the Riparian Corridor Policy Study), and the NSJ FPEIR.

Approval of the Freeway Sign Code Amendment would allow freeway signs on properties with land use designations that could support office/R&D uses (i.e., *Transit Employment Center, Combined Industrial/Commercial*, and *Industrial Park*).

New development is required to implement City policies and conform to applicable local and State regulations and plans to reduce direct and indirect (e.g., lighting spillover) impacts to riparian and/or sensitive habitats and special-status species (e.g., burrowing owl) on and adjacent to development sites to a less than significant level. In addition, conditions of approval under the VHP call for preconstruction surveys for burrowing owls, where appropriate, and appropriate setbacks from riparian corridors within the Urban Service Area. With implementation of VHP conditions during project-level review on properties that would include a sign, direct and indirect impacts to sensitive riparian habitats, as well as special-status species would be reduced to a less than significant level.

As the associated project-level environmental review for freeway sign development permits would include consideration of, and mitigation for the presence of biological resources as described by the VHP, City policies, and NSJ FPEIR, the proposed change to the Sign Code would not conflict with existing plans, policies or regulations protecting wildlife or sensitive habitats including wetlands. If it is determined during project-level review that a lit sign could have a significant impact on riparian, wetland, or other sensitive habitats, then the sign location, orientation, and/or hours of operation could be modified to avoid impacts to the subject corridor.

Because the VHP has gone into effect, the significant unavoidable impact to burrowing owls identified in the NSJ FPEIR can be reduced to a less than significant level. With compliance to the VHP, the project impact to burrowing owls would be *less* than the significant and unavoidable impact identified in the NSJ FPEIR. **(Less Impact than Approved Project with Mitigation)**

<u>Residential Signs</u>

Freestanding signs are allowed up to five feet in height for each 50 units located on a subject site, up to a maximum height of 15 feet. The proposed Residential Signs Code Amendment would allow freestanding monument signs in North San Jose to be up to five feet in height for each 50 units located on a subject site, up to a maximum height of 20 feet on residentially zoned properties with high density development (i.e., a residential parcel with 200 units or more could have a 20 foot sign). The Residential Signs Code Amendment does not propose installation of any new types of signs that are not currently allowed under the Sign Code, rather, the amendment would allow taller signs on some higher density residential parcels in the North San Jose Development Area.

The taller signs would be designed in conformance to existing regulations for residential signs and would not include programmable, flashing, moving, or bright lights that would attract birds. Of the residential properties shown on Figure 3.2-2, several are adjacent to the eastern levee of the

Guadalupe River. These include a residential property on Montague Expressway and properties north of W. Tasman Drive. The Sign Code prohibits residential signs within 100 feet of a riparian setback. The height of the Guadalupe River levee is generally equal to or greater than the proposed 20-foot maximum sign height adjacent to these properties. Given the height of the levee, the minimal lighting allowed on residential signs, and City requirements that lighting not shine directly into riparian corridors, an increase in the residential sign heights from 15 to 20 feet would not result in a significant increase of light levels that would affect the quality of habitat in the Guadalupe River corridor.

Increased residential maximum sign heights from 15 to 20 feet on developed properties in North San Jose where multi-story high density residential buildings are present would not result in new or more significant impacts to sensitive habitats or special-status species than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Impacts to Wildlife Movement/Migratory Birds
(Checklist Question 4)

Freeway Signs

While the freeway signs would be located within an urban environment, mature trees at future sign locations could provide nesting habitat and/or foraging habitat for raptors and migratory birds. Migratory birds, including migratory raptors, are protected under the Migratory Bird Treaty Act and the California Department of Fish and Game Code Sections 3503, 3503.5, and 2800. Construction activities, including equipment noise and tree removal, could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. The California Department of Fish and Wildlife (CDFW)[22] defines "taking" as causing abandonment and/or loss of reproductive efforts through disturbance.

To comply with Federal regulations and measures in the NSJ FPEIR, which seek to protect migratory birds from injury or mortality, future freeway signs would be evaluated at a project-level with impacts to migratory birds and local wildlife movement dependent on the types and brightness of lights used, presence or absence of shaders (to direct lights down instead of up toward the sky), location and orientation of the sign in relation to riparian corridors, potential impacts to nest sites, etc.

If it is determined during project-level review that a lit freeway sign could have a significant impact on a migratory corridor or nursery site, then the sign location, orientation, and/or hours of operation could be modified to avoid impacts to the subject migratory corridor. With project-level environmental review completed prior to approval of a Development Permit, the freeway signs would avoid impacts to migratory birds and local wildlife movement. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

[22] Formally the California Department of Fish and Game.

Residential Signs

The Residential Signs Code Amendment does not propose installation of any new signs that are not currently allowed under the Sign Code, rather, the amendment would allow taller signs on residential parcels in the North San Jose Development Area. The taller signs would be designed in conformance to existing regulations for residential signs and would not include programmable, flashing, moving, or bright lights that would attract birds. Individual residential developments would be required to comply with Federal regulations and conditions in the NSJ FPEIR, which seek to protect migratory birds from injury or mortality during site development and construction. Therefore, an increase in the maximum residential sign heights from 15 to 20 feet on developed properties where multi-story buildings are present would not result in any new or more significant impacts to wildlife movement or migratory birds than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Local Policies and Ordinances
(Checklist Question 5)

Future freeway signs would be required to undergo project-level review and approval, and all signs installed under the Sign Code Amendments would be required to implement applicable plans, policies, and regulations.

Trees

Trees removed as a part of future signs would be replaced in accordance with all applicable laws, policies and guidelines, including the City of San José Tree Protection Ordinance, and the San José Municipal Code Section 13.28. In accordance with City policy, non-native ordinance-sized trees (greater than 56 inches in trunk circumference) would be replaced at a 4:1 ratio with a minimum 24-inch box. Non-native non-ordinance sized trees would be replaced at a 2:1 or 1:1 ratio, depending on their size. Native trees would be replaced at a 3:1 or 1:1 ratio, depending on their size. The species of trees to be planted would be determined in consultation with the City Arborist and the Department of Planning, Building and Code Enforcement.

Migratory Birds

As described above, migratory birds, like nesting raptors, are protected under the Migratory Bird Treaty Act and the California Department of Fish and Game Code Sections 3503, 3503.5, and 2800. The project would be required to comply with Federal regulations and measures in the NSJ FPEIR, which seek to protect migratory birds from injury or mortality. Future freeway signs would be evaluated at a project-level to avoid impacts to migratory birds.

Lighting

Specific design guidelines adopted by the City Council that address lighting are described in the Industrial Design Guidelines, key policies in the Riparian Corridor Policy Study, and the City of San Jose Private Outdoor Lighting on Private Developments Policy 4-3. Conformance to these policies

would be confirmed during project-level and design review of future signs which could be proposed with approval of the proposed Sign Code Amendments.

Future signs allowed with approval of the Sign Code Amendments would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Consistency with the Santa Clara Valley Habitat Plan/Natural Community Conservation Plan
(Checklist Question 6)

The North San Jose Development Area is located within the VHP study area and all sign installations associated with new development would be subject to applicable VHP conditions and fees, including burrowing owl fees as described above. Installation of signs in the North San Jose Development Area would not, therefore, conflict with an adopted Habitat Conservation Plan. **(Same Impact as Approved Project [Less Than Significant Impact)]**

4.4.2.2 *Biological Resources Impacts of the 101 Tech Sign Project*

Impacts to Sensitive Habitats
(Checklist Questions 1 and 2)

Direct Impacts

The proposed project does not include development within the 100-foot riparian setback zone. The sign would be installed 160 feet from the top-of-bank, which is the approximate riparian corridor edge along this segment of the Guadalupe River. The project would comply with applicable Riparian Corridor key policies to avoid impacts to the Guadalupe River riparian zone, including policies 1A, 1B, 2B, 2C, 2E, and 2F. With compliance to these policies the project would be in conformance to the Riparian Corridor Policy Study guidelines. Applicable requirements of these policies and the project's compliance to these polices are summarized in Table 4.4-2.

A Biological Report was prepared in 2012 for the Addendum for the 101 Tech project (file number H12-008). The Biological Report documented forty-eight special-status plant species in the greater vicinity of the project site. The project site, however, has minimal to no potential to support these species because of poor foraging habitat resulting from past and present disturbance as well as surrounding development, and none of these species were observed on the project site during the field survey performed by *WRA Environmental Consultants* on January 5, 2012.

Most of the special-status species documented from the vicinity occur in habitats such as coastal and freshwater march, coastal dune and scrub, chaparral, cismontane woodland, upland broadleaf forest, and closed-one coniferous forest. These habitats are not present on the project site and, therefore, associated plant species are not expected to occur. Of the species known to occur in grasslands, most are found on alkaline or serpentine soils or in vernal pools, none of which were observed in the project area in 2012.

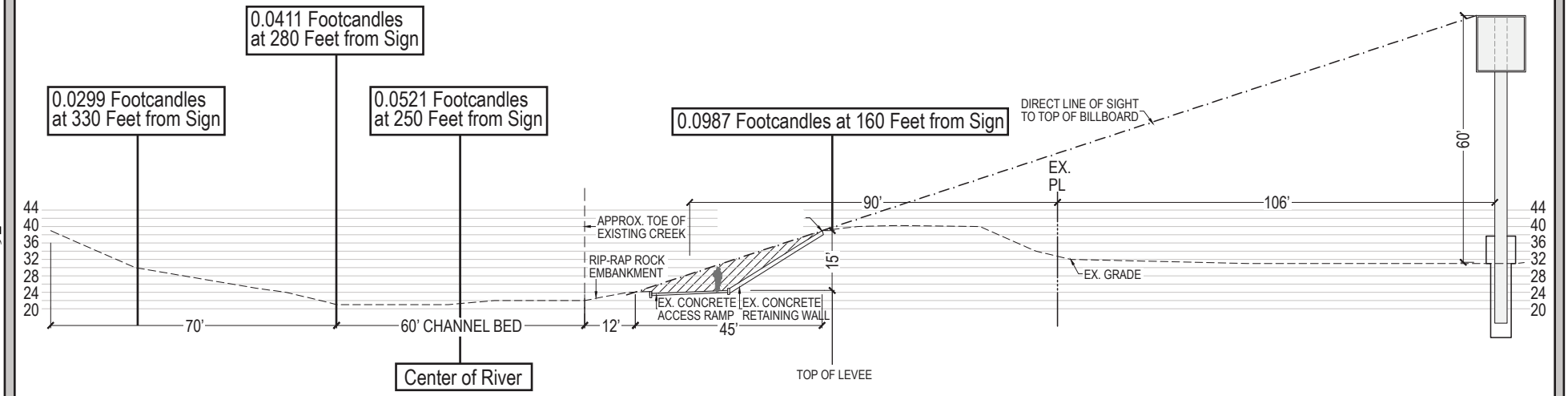
Indirect Impacts

The 101 Tech Sign would increase night lighting levels along a portion of the Guadalupe River adjacent to the project site. The increased illuminance along the river and its nearest bank due to the sign would be approximately 0.05 to 0.1 footcandles, or roughly equivalent to the range of light experienced under a full moon to deep twilight. Figure 4.4-1 shows lighting levels in various parts of the river corridor. Lunar light cycles (e.g., full moon conditions versus those of a new moon) have been shown to influence the activity patterns and behavior of a wide variety of nocturnal wildlife. As shown in Figure 4.4-2, below, the river curves to the west in the vicinity of the project site, which limits the length of the corridor that would be affected by night lighting from the sign.

As previously described, the Guadalupe River is an important movement corridor for animals within urban San Jose because it connects San Francisco Bay and associated fringe habitats (e.g., tidal wetlands, salt ponds) with undeveloped areas upstream of urban San Jose. Given the lack of information regarding electronic signs, potential effects to the river's ability to function as a corridor resulting from continuous nocturnal lighting is difficult to quantify. However, because more artificial ambient nocturnal light would be present in the vicinity following development of the site and surrounding areas, the status of the river as a relatively "dark" corridor amid relatively omnipresent urban lighting may make the functionality of the corridor important to local wildlife.

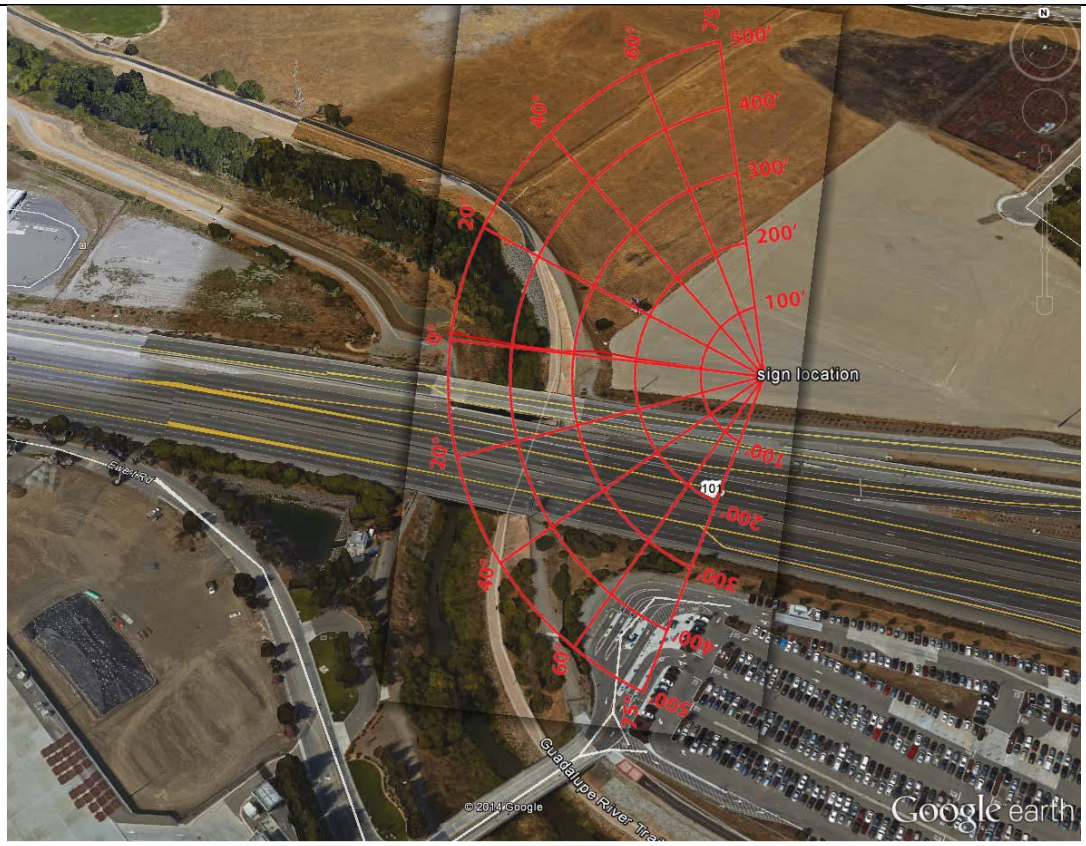
Although the City does not have regulations pertaining to hours of operation for programmable components of electronic freeway signs at night adjacent to industrial or commercial uses,[23] in recognition of the sign's location near a riparian corridor, as described in *Section 3.2.2, Project Description,* the sign would be required to automatically turn off during the nighttime hours between 10:00 pm and 6:00 am. This design feature which is proposed as part of the project, would allow a period of uninterrupted darkness in the Guadalupe River corridor, allowing continued use of the corridor by urban wildlife for movement and nighttime activities. The project would not, therefore have a substantial adverse effect on any riparian habitat or other sensitive natural habitat. **[Same Impact as Approved Project (Less Than Significant Impact)**

[23] The City limits hours of operation for programmable electronic freeway signs located adjacent to residential uses.



LINE-OF-SIGHT FROM SIGN TO GUADALUPE RIVER AND LIGHT MEASUREMENTS FIGURE 4.4-1

Figure 4.4-2: Sign Lighting Effects in the Guadalupe River Corridor*



*Numbers on curved lines indicate distance, and bisecting straight lines indicate viewing angle to the sign.

Impacts to Special-Status Species
(Checklist Question 1)

Burrowing Owls

At the time the NSJ FPEIR was certified, the VHP was not yet adopted and there was no mechanism in place to offset the damaging effects of development to burrowing owl populations. The NSJ FPEIR identified the loss of approximately 600 acres of burrowing owl habitat as a significant and unavoidable impact. With adoption of the VHP which is now in effect, the cumulative impacts from the loss of burrowing owl habitat would be offset through conservation and management of land for burrowing owls.

Pursuant to the VHP, the sign would be located on a site identified as occupied burrowing owl habitat. Pre-construction surveys would, therefore, be required to determine whether the project site is occupied prior to construction. If pre-construction surveys determine that owls are nesting on the site, then the project would be required to pay the applicable fee and conform to conditions in the VHP regarding disturbance of occupied burrows. With completion of burrowing owls surveys,

payment of applicable fees, and implementation of appropriate conditions of approval, the project would not result in significant impacts to burrowing owls.

The project is subject to the VHP and, therefore, required to pay all applicable VHP fees including the burrowing owl fee, which would reduce the project's impact to burrowing owls to a less than significant level. **(Less Impact Than Approved Project with Mitigation)**

Steelhead and Chinook Salmon

Fish species, as well as their aquatic invertebrate prey have been documented to modify their behavior in response to artificial nocturnal lighting, including altering their activity patterns (both spatially and temporally) to avoid lit areas. As might be expected, the effects tend to be strongest in aquatic features with shallow and/or clearer water, e.g. streams and creeks.

Both the Chinook Salmon and Steelhead are salmonid species.[24] While artificial night lighting has been shown to alter the behavior of some species in the salmonid family, effects on special-status salmonids due to the 101 Tech Sign would not be significant. No spawning habitat for the salmon species is present within the Guadalupe River near the proposed sign, and the amount of increased illuminance to be generated by the sign (which will not be illuminated between 10:00 pm and 6:00 am) is unlikely to modify migration behavior given the short periods of time that migrating salmonids are expected to be present in the area. **[Same Impact as Approved Project (Less Than Significant Impact)**

Impacts to Other Wildlife

(Checklist Question 1)

In the 2012 Biological Resources Report, forty-eight special-status wildlife species were recorded in the vicinity of the project site. No special-status wildlife species were observed in the project area during the field survey. No special-status wildlife species have a high potential to occur in the project area. Some wildlife species have a moderate potential to occur. All of the wildlife observed in the project area during the field survey are commonly found species, and many are adapted to occupying disturbed or urban areas.

Migratory Birds

The phenomenon of birds being attracted to and disoriented by artificial lighting, often resulting in mortality, is well-documented (particularly during foggy or rainy periods when migrating birds tend to fly lower to the ground). The 2015 Biological Assessment (attached as Appendix B) included a project-level literature review and analysis and was used to evaluate the dangers of bird strikes and other hazards for migratory birds from the proposed programmable electronic freeway sign. It was determined that the level of danger presented by the signs to migratory birds would not be significant for the following reasons:

[24] A salmonid is any of a family (Salmonidae) of elongate bony fishes (as a salmon or trout) that have the last three vertebrae upturned.

- The location of the sign would be over four miles from the fringes of the south San Francisco Bay and associated Bay fringe habitats (e.g., former salt ponds) which are used by large numbers of migrating birds that may travel in large groups relatively close to the ground (e.g., shorebirds and waterfowl).

- The proposed sign is unlikely to result in a level of bird take that would be considered significant because, as described in *Section 3.2.1, Project Description*, the sign would be located on and visually oriented toward drivers along US 101 which is a highly urbanized transportation corridor that is already subject to substantial and widespread artificial light, as well as a wide variety of other visual and acoustic disturbances. The US 101 corridor is, therefore, unlikely to be used by low-flying migrating birds.

- While the Guadalupe River corridor is a local movement corridor (as well as general habitat), the portion of the Guadalupe River near the proposed sign is unlikely to be used as a true migration flyway or corridor for nocturnally-moving birds. Birds using the river and affiliated riparian vegetation will most typically be year-round residents in the area or local summer residents (i.e., migratory birds breeding there); presumably such birds are familiar with and habituated to the local urban environment, including artificial lighting.

- The sign would be designed to include shaders activated during nighttime hours, to avoid directing light upward which could attract birds.

- Flashing lights (i.e., lights repeatedly activated and de-activated on short time scales, versus being continuously illuminated) are less likely to attract or disorient birds than continuously activated lights. LED light sources, as proposed by the project, are generally regarded as less likely to attract birds than more traditional lighting mechanisms. The proposed colors and lighting intensity on the sign would regularly change on short time scales.

For the above-listed reasons, the proposed 101 Tech Sign would not significantly impact migrating birds. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Nesting Birds

Increased lighting has some potential to alter the behavior of and/or reduce the reproductive success of birds that nest locally within the river riparian area and emergent vegetation. The proposed sign, however, would be turned off during the nighttime hours between 10:00 pm and 6:00 am which would allow adequate levels of continuous darkness in the corridor, similar to existing, more naturally occurring conditions. The proposed 101 Tech Sign would not, therefore, significantly impact nesting birds. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Bats

Species of foraging bats tend to congregate around fixed, bright nocturnal lighting where insects gather (e.g. street lights). Artificial light sources, such as the 101 Tech Sign, likely increase foraging efficiency for these species and the proposed sign may, therefore, have positive effects on the local populations of bats. Other bat species avoid foraging in the vicinity of artificial nocturnal light, and

thus well-lit areas may have a deterrence effect on these bats, resulting in potential negative effects to local populations if lighting is widespread within otherwise suitable foraging areas. The proposed sign may, therefore, increase the foraging efficiency for some bat species (a beneficial effect), and discourage other species from using the immediate area (an adverse effect). Given the abundance of artificial nocturnal lighting sources in urban San Jose in general, such effects are not considered significant since the area of foraging space that would be affected is relatively small.

Given the highly urban setting of the 101 Tech Office/R&D site, the immediate vicinity of the project is unlikely to support roosting (maternity or otherwise) by special-status bats (although some may occasionally forage in the area). Any bats roosting underneath the Highway 101 overpass adjacent to the southwest corner of the 101 Tech Office/R&D site are unlikely to be disturbed by the sign, as the level of light penetration beneath the bridge would be minimal. The project would not significantly affect bats of associated roosting sites. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Mammals

Little is known about the effects of artificial lighting on mammals other than bats. However, given what is known about mammal biology and behavior (e.g., the majority of species are nocturnal), artificial lighting likely has some negative effects. The proposed sign, however, would be turned off during the nighttime hours between 10:00 pm and 6:00 am which would allow adequate levels of continuous darkness in the corridor, similar to existing, more naturally occurring conditions. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Impacts to Wildlife Movement/Migratory Birds
(Checklist Question 4)

While the Guadalupe River corridor is a local movement corridor (as well as general habitat) for birds and other wildlife, the portion of the Guadalupe River near the proposed sign is unlikely to be used as a migration flyway. Wildlife using the river and affiliated riparian vegetation will most typically be year-round residents in the area or local summer residents; presumably such wildlife is familiar with and habituated to the local urban environment, including artificial lighting. As previously discussed, no spawning habitat for the salmon species is present within the Guadalupe River near the proposed sign which would be setback approximately 160 feet from the top-of-bank. The amount of increased illuminance to be generated by the sign is unlikely to modify migration behavior given the short periods of time that migrating salmonids are expected to be present in the area. Furthermore, the proposed sign, would be turned off during the nighttime hours between 10:00 pm and 6:00 am which would allow adequate levels of continuous darkness in the river corridor, similar to existing, more naturally occurring conditions. The project would not significantly affect the movement of any native resident or migratory fish or wildlife species or impede the use of native wildlife nursery sites. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Local Policies and Ordinances

(Checklist Question 5)

Key policies in the City of San José's Riparian Corridor Policy Study state that development adjacent to riparian habitats should be set back 100 feet from the outside edge of the riparian habitat or top of bank (whichever is greater) to reduce anticipated impacts to riparian biotic communities and hydrologic regimes. Table 4.4-2, below, summarizes the 101 Tech Sign project's compliance to applicable guidelines in the Riparian Corridor Policy Study.

Table 4.4-2:
Project Conformance to Applicable Riparian Corridor Policies

Guideline Number	Summary of Guideline	Project Compliance
1A: Orientation	- Buildings and structures should not back up to riparian corridors. - Site activities should be oriented to draw activity away from the riparian corridor, for example, night lighting should be oriented toward non-riparian property edges.	The sign would be located approximately 160 feet from the Guadalupe River top-of-bank, and would not back-up to the riparian zone. The sign would be turned off at night to minimize night-lighting in the riparian corridor.
1B: Incompatible Land Uses	- Incompatible operations and activities are discouraged within and adjacent to riparian setback areas to protect the health of existing vegetation and wildlife, reduce adverse cumulative impacts to water quality, and protect the quality of recreation uses in the corridor. - Utility equipment, sub-stations, pumps, and similar facilities should be screened from any riparian corridor trail or recreational, educational, or interpretive facility within the riparian corridor.	The sign would be located within the parking lot of the proposed 101 Tech Office/R&D Project site. The sign would not directly affect vegetation, wildlife, or water quality in the area. As described in *Section 4.10 Land Use*, the sign would not result in significant shadows on the Guadalupe River trail and the 101 Tech Sign would not, therefore, impact the quality of recreational uses in the corridor. The sign would be a relatively small structure compared to the buildings which would be located on the site, and the sign would be located approximately 160 feet from the top of bank and outside the established 100-foot property line buffer zone. Views of the sign from the Guadalupe River Trail would be distant, and quick, only lasting for the period of time it takes for trail users to pass by.
2B: Glare	- Building materials should not produce glare that would adversely affect the riparian corridor.	The non-programmable portions of the sign would be painted in a neutral color and would not be made of materials that would cause significant daytime glare. As described below, a lighting study completed for the project found that with incorporation of the required dimming technology, the levels of light emitted from

Table 4.4-2:
Project Conformance to Applicable Riparian Corridor Policies

Guideline Number	Summary of Guideline	Project Compliance
		the sign would not be at levels that would significantly affect the riparian corridor. Additionally, the sign would be turned off every night between the hours of 10:00 pm and 6:00 am.
2C: Visual	- The adverse visual impact of existing or unavoidable incompatible uses such as parking areas, loading zones, trash enclosures, mechanical devices, and similar accessory uses should be minimized by landscaping, hedging, berming, low walls and site design.	Views of the sign from the Guadalupe River Trail would be distant, and quick, only lasting for the period of time it takes for trail users to pass by as they enter or emerge from the US 101 undercrossing. The sign would be designed to avoid substantial levels of glare, and would be turned off at night. The sign is not expected to result in a significant adverse visual impacts from the Guadalupe River Trail.
2D: Signs	- Signs associated with land uses that are adjacent to the riparian corridor and that are not related to complementary recreational or public safety services should be oriented away from the riparian corridor to avoid impacting recreational users of the corridor, or attracting otherwise unnecessary access and activity.	The faces of the sign would be oriented toward vehicles on US 101, which would be roughly parallel to the adjacent segment of the Guadalupe River Trail (i.e., trail users would not view the sign head-on).
2E: Lighting	- Lighting within the corridor and setback areas should be avoided. Lighting on development sites should be designed and sited to avoid light and glare impacts to wildlife within the riparian corridor, consistent with public safety considerations. Any lighting located adjacent to riparian areas should be as low as feasible in height and must be directed downward with light sources not visible from riparian areas.	The sign would be located approximately 160 feet east from the top of bank. The sign would include technology that dims the sign based on ambient lighting, and the sign would be turned off between the hours of 10:00 pm and 6:00 am. As concluded in the Biological Assessment that was completed for the project, operation of the sign is not expected to result in substantial light or glare in the Guadalupe River corridor.
2F: Noise	- Noise-producing stationary mechanical equipment should be located as far as necessary from riparian corridors to preclude exceeding the ambient noise level in the corridors.	Noise in the Guadalupe River Corridor adjacent to the project property includes noise from vehicles on US 101 and noise from airport operations. The sign does not include noise features and would not result

Table 4.4-2:
Project Conformance to Applicable Riparian Corridor Policies

Guideline Number	Summary of Guideline	Project Compliance
		in noise that exceeds existing ambient noise levels.
4B Recreation Facility, Lighting, and Noise	- All lighting and mechanical noise-generating sources for active recreational facilities should be located a minimum of 200 feet from the corridor and screened from the corridor where feasible with berms, fences, vegetation, or other screening materials to minimize impacts to the corridor. The light source of any nighttime lighting should not be visible from the riparian corridor. The exact dimension of a setback may require a site-specific analysis in consultation with a qualified biologist.	While the 101 Tech Sign is not a recreational land use, the sign would be visible from segments of the Guadalupe River Trail, which is a recreational land use. The 101 Tech Sign would be located approximately 160 feet from the Guadalupe River top-of-bank. A qualified biologist was consulted as part of project environmental review. It was determined that with the 101 Tech Sign lights turned off between the hours of 10:00 pm and 6:00 am, as proposed, lighting from the sign would not result in impacts to biological resources in the riparian corridor. The proposed 160 foot setback is, therefore, adequate to avoid impacts to the corridor. Furthermore, turning off the sign during nighttime hours would minimize views of the sign from the Guadalupe River Trail at night.

The project would be consistent with all applicable plans, policies, and ordinances adopted for the protection of biological resources, as described throughout this section. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Consistency with the Santa Clara Valley Habitat Plan/Natural Community Conservation Plan
(Checklist Question 6)

The 101 Tech project site is within the VHP study area and is designated as follows:

Land Cover Designation: *Urban – Suburban*
Development Zone: *Urban Development greater than two acres covered*
Fee Zone: *Urban Areas (No Land Cover Fee)*
Owl Conservation Zone: *Burrowing Owl Occupied Habitat*

The site is designated as *Urban-Suburban* by the VHP.[25] As previously described, pursuant to the VHP, the sign would be located on a site identified as occupied burrowing owl habitat. Pre-

[25] Habitat Agency. *Habitat Conservation Plan Geobrowser*. <http://www.VHPmaps.com/habitat/> Accessed December 12, 2014.

construction surveys will, therefore, be required to determine whether the project site is occupied. If pre-construction surveys determine that owls are nesting on the site, then the project will be required to pay the applicable fee and implement appropriate conditions to avoid or limit adverse effects to individuals. The project is the installation of a sign and would not generate new daily traffic trips, therefore, the project would not be required to pay nitrogen deposition fees. With completion of burrowing owls surveys, payment of applicable fees, and implementation of appropriate conditions of approval (e.g., avoidance measures for burrowing owls, riparian setback), the project would not conflict with the provisions of the VHP. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.4.2.3 *Biological Resources Impacts of the River View/Irvine Residential Signs Project*

Biological Resources Impacts
(Checklist Questions 1-5)

The River View/Irvine Project site is currently being developed with high-density residential development, and the proposed signs would be located along the N. 1st Street frontage, over 500 feet from the Guadalupe River corridor. Lighting permitted on residential signs is minimal and would not shine into the corridor. The signs would be located in an urbanized area that would not affect any on- or off-site sensitive habitats.

Rare, threatened, endangered and sensitive plants, animals and natural communities are not expected or likely to occur because the site is being built-out with high-density residential development, and the site does not contain suitable habitat for special-status species (e.g., marsh, wetland, riparian or serpentine soils). With completion of the high-density residential development, common wildlife species have a potential to occur on the site, which are adapted to occupying disturbed or urban areas.

Given the relatively small footprints of the signs, the sign locations over 500 feet from the Guadalupe River corridor, and the minimal lighting permitted on residential signs, the River View/Irvine Residential Signs Project would not significantly affect the movement of any native resident or migratory fish or wildlife species or impede the use of native wildlife nursery sites.

The project would be consistent with all applicable plans, policies, and ordinances adopted for the protection of biological resources.

The proposed signs would not result in new or more significant impacts to biological resources than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Consistency with the Santa Clara Valley Habitat Plan/Natural Community Conservation Plan
(Checklist Question 6)

The River View/Irvine project site is within the VHP study area and is designated as follows:

Private Development Area:	Urban Development greater than or equal to two acres covered

Land Cover Designation:	Urban – Suburban
Development Zone:	Urban Development greater than two acres covered
Fee Zone:	Urban Areas (No Land Cover Fee)
Wildlife Survey Area:	Tricolored Blackbird (5.2 Acres)
Category 1 Streams and Setbacks:	Ground truthing will determine Actual riparian buffer needed (0.1 acres)

The site is designated as *Urban-Suburban* by the VHP.[26] Pursuant to the VHP, the signs would be located on a site identified as possible habitat for the tricolored blackbird. Prior to development of the site with the high-density residential development (currently being constructed), habitat surveys and pre-construction surveys were required, as applicable, to determine whether the project site was occupied by the tricolored blackbird. The signs would be part of existing development on the River View/Irvine site and would not increase the footprint of development such that new habitat areas would be disturbed. The project is the installation of two signs and would not generate new daily traffic trips, therefore, the project would not be required to pay nitrogen deposition fees. The project would not conflict with the provisions of the VHP. **(Same Impact as Approved Project [Less Than Significant Impact)]**

4.4.3 Conclusion

Adoption of the proposed Sign Code Amendments would not result in any new or more significant impacts to biological resources than addressed in the NSJ FPEIR. The identified significant unavoidable impacts for burrowing owls identified in the NSJ FPEIR would be reduced by measures included in the VHP. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation)]**

The proposed 101 Tech Sign would not result in any new or more significant impacts to biological resources than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation)]**

The proposed River View/Irvine Residential Signs would not result in any new or more significant impacts to biological resources than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation)]**

[26] Habitat Agency. *Habitat Conservation Plan Geobrowser*. <http://www.VHPmaps.com/habitat/> Accessed December 12, 2014.

4.5 CULTURAL RESOURCES

4.5.1 Setting

4.5.1.1 *Cultural Context of the North San Jose Development Area*

Approximately 410 cultural resources studies have been completed in the North San Jose Development Area. The area has 18 known prehistoric archaeological sites and 56 known Historic Period resources, not including bridges. There are also buildings over 45 years old, some of which have already been determined as eligible for National, State, and/or Historic Registers.

There are 16 properties in the North San Jose Development Area that would qualify for installation of a freeway sign under the criteria set forth in the proposed Freeway Signs Code Amendment. Based on analyses in the NSJ FPEIR, properties 7, 8, 9, 10, 11 (project site), 12, and 16, as shown in Figure 3.2-1, are areas with known cultural resources.

Paleontological Resources

Paleontological resources are fossils, the remains or traces of prehistoric life preserved in the geologic record. They range from the well-known and well publicized (such as mammoth and dinosaur bones) to lesser known but scientifically important fossils. The North San Jose Development Area is underlain by floodplain deposits which have a low potential to yield significant fossils at the surface, but a high sensitivity for paleontological resources at depth.[27] Fossils discovered in floodplain deposits are generally expected to be associated with mammals, birds, and reptiles.

4.5.1.2 *101 Tech Sign Project Site Cultural Resources*

The 101 Tech Office R&D site is located within the *Industrial Core Area* in the North San Jose Development Area. This area is generally considered to have a high potential for the discovery of buried prehistoric and historic archaeological resources.

An Archaeological Literature Review and field inspection was completed for the 101 Tech Office/R&D Project in December, 2011, to identify prehistoric and historic archaeological sites.[28] The Archaeological Literature Review determined that the property has been surveyed in the past for cultural resources with negative findings. None of the previous surveys resulted in the discovery of historic and/or prehistoric cultural resources. The nearest archaeological site was described as a shell midden deposit located approximately 0.50 miles northwest of the site. There are no structures on

[27] C. Bruce Hanson. 2010. *Paleontological Evaluation Report for the Envision San José 2040 General Plan, Santa Clara County, California.* Accessed May 26, 2013. Available at: <http://www.sanjoseca.gov/index.aspx?NID=2435>

[28] Holman & Associates. *Archaeological Literature Review.* December 2011. Prepared for the *101 Tech EIR Addendum (2012).* Report is on file at the City of San Jose.

the property and the field inspection found no evidence of historic or prehistoric materials on the property.

The project site is underlain by floodplain deposits which have a low potential to yield significant fossils at the surface, but a high sensitivity for paleontological resources at depth.[29]

4.5.1.3 *River View/Irvine Residential Signs Project Site Cultural Resources*

The River View/Irvine site is not located in an area designated by the NSJ FPEIR as having known historic or cultural resources, however, the site is adjacent to the Guadalupe River. Archaeological deposits are typically found near creeks and other waterways because they provided favorable living conditions for prehistoric people. There is a potential for the discovery of buried prehistoric archaeological resources at the River View/Irvine site.

4.5.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	☐	☐	☐	☒	☐	1,2,3,10 11
2. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	☐	☒	☐	1,2,3,10 11
3. Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☐	☒	☐	☐	1,2,3,10 11
4. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒	☐	1,2,3,10 11

NSJ FPEIR - Cultural Resources Conclusions

As described in the NSJ FPEIR, development and redevelopment in the North San Jose Development Area implementation of the project could contribute to significant impacts related to subsurface cultural resources. It was determined that implementation of mitigation measures would reduce impacts to subsurface cultural resources to a less than significant level.

[29] C. Bruce Hanson. 2010. *Paleontological Evaluation Report for the Envision San José 2040 General Plan, Santa Clara County, California.* Accessed May 26, 2013. Available at: <http://www.sanjoseca.gov/index.aspx?NID=2435>

4.5.2.1 *Cultural Resources Impacts of the Sign Code Amendments*

The proposed Sign Code Amendments would allow for: 1) the installation of freeway signs on office/R&D properties in the North San Jose Development Area which are over 10 acres in size, and which have over 800 linear feet of freeway frontage; and 2) installation of a freestanding monument sign on residentially zoned parcels in the North San Jose Development Area that support over 100 residential units, with an allowable sign height of five feet for each fifty units, up to a 20 foot height maximum (currently the maximum allowed residential sign height is 15 feet).

Historic Resources
(Checklist Question 1)

The Sign Code Amendments do not propose any changes to the existing provision in the Sign Code regarding the preservation of historic signs or the City's development review process, which includes discretionary review of signs associated with historic landmarks to ensure that signage conforms to the *Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation* and does not diminish the significance of a historic resource. **[Same Impact as Proposed Project (Less Than Significant Impact)]**

Archaeological and Paleontological Resources
(Checklist Questions 2, 3, and 4)

The NSJ FPEIR is specific in requiring completion of Archaeological Resources Assessment Reports, including a records review and field inventory for development proposals on properties 7, 8, 9, 11, and 12. Proposed signs would be required to implement the City's standard permit conditions as described under SM CUL-1 and SM CUL-2, Section 4.5.2.2, below, to address any unknown archaeological or paleontological resources discovered during sign installation on any of the sites.

With implementation of the City's standard permit conditions and mitigation described in the NSJ FPEIR, the proposed Sign Code Amendments would not result in significant impacts to subsurface cultural resources. **[Same Impact as Proposed Project (Less Than Significant Impact with Mitigation)]**

4.5.2.2 *Cultural Resources Impacts of the 101 Tech Sign Project*

Historic Resources
(Checklist Question 1)

There are no historic resources on the project site, therefore, the 101 Tech Sign would not affect an historic resource. **[Same Impact as Proposed Project (Less Than Significant Impact)]**

Archaeological Resources
(Checklist Questions 2 and 4)

The foundation of the proposed sign would require excavation to a depth of 18 to 35 feet below grade and would require approximately 37 cubic yards of soil to be hauled off-site. While no buried

cultural resources have been found to-date on-site, there is the potential for the construction of the proposed sign to impact unknown buried cultural resources.

Standard Permit Condition: Consistent with the NSJ FPEIR and City policies, the following standard permit conditions are included in the project to reduce or avoid impacts to subsurface cultural resources.

SM CUL-1 The following standard permit conditions shall be included in the project to reduce or avoid impacts to subsurface cultural resources.

- In the event that prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Director of Planning, Building and Code Enforcement shall be notified, and the archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery during monitoring would be submitted to the Director of Planning, Building and Code Enforcement.

- In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped. The Santa Clara County Coroner shall be notified and make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC) immediately. Once the NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

With implementation of SM CUL-1, installation of the 101 Tech sign would not result in any new or more significant impacts to subsurface cultural resources than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Paleontological Resources
(Checklist Question 3)

The project site development has a high potential to impact undiscovered paleontological resources at depth, based on the age and type of surface soils. Activities that involve substantial excavation (construction of below-ground parking garage) would have a higher potential for encountering paleontological deposits. While grading for the sign foundations is relatively minimal, construction activities to a depth of approximately 18 feet may still result in the accidental destruction or disturbance of paleontological sites, which could convey important information. Although not

anticipated, construction activities associated with implementation of the project could result in a significant impact to paleontological resources, if encountered.

Standard Permit Condition: Consistent with the City's standard permit conditions, the following standard permit condition will be implemented by the project to reduce and avoid impacts to as yet unidentified paleontological resources.

SM CUL-2 If vertebrate fossils are discovered during construction, all work on the site will stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The project proponent will be responsible for implementing the recommendations of the paleontological monitor.

With implementation of SM CUL-2, installation of the 101 Tech sign would not result in significant impacts to paleontological resources. **(New Less Than Significant Impact)**

4.5.2.3 *Cultural Resources Impacts of the River View/Irvine Residential Signs Project*

Cultural Resources Impacts
(Checklist Questions 1-4)

The River View/Irvine Site is being built-out with high density residential development. There are no historic resources on or adjacent to the project site, therefore, the residential signs would not affect an historic resource. **[Same Impact as Proposed Project (Less Than Significant Impact)]**

The foundations of the proposed signs would require minimal excavation. Although unlikely, there is the potential for the construction of the proposed signs to impact unknown buried cultural resources if excavation extends to native soils. With implementation of SM CUL-1, described above in Section 4.5.2.2, installation of the River View/Irvine Residential Signs would not result in any new or more significant impacts to subsurface cultural resources (historic or prehistoric) than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

The project site development has a high potential to impact undiscovered paleontological resources at depth, based on the age and type of surface soils. The sign foundation will require relatively minimal grading and installation of the River View/Irvine Residential Signs would not result in significant impacts to paleontological resources. **(No Impact)**

4.5.3 Conclusion

Adoption of the project would not result in any new or more significant impacts to cultural resources than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation)]**

With implementation standard permit conditions, the 101 Tech Sign project would not result in any new or more significant impacts to archaeological resources than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation)]**

With implementation of the City's standard permit conditions, the 101 Tech Sign project would not result in a significant impact to paleontological resources. **(New Less Than Significant Impact)**

With implementation standard permit conditions, the River View/Irvine Residential Signs Project would not result in any new or more significant impacts to archaeological resources than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation)]**

The River View/Irvine Residential Signs Project would not result in a significant impact to paleontological resources. **(No Impact)**

4.6 GEOLOGY AND SOILS

4.6.1 Setting

4.6.1.1 *Geologic Context of the North San Jose Development Area*

The North San Jose Development Area is located in the San Francisco Bay Area which is one of the most seismically active regions in the United States. Santa Clara County is classified as Zone D, the most seismically active zone. An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking. The degree of shaking is dependent on the magnitude of the event, the distance to its zone of rupture and local geologic conditions. The three major and active fault lines in the area are the San Andreas Fault, Calaveras Fault, and Hayward Fault. The San Andreas Fault runs north/south and parallel to the Hayward Fault and the Calaveras Fault line.

The North San Jose Development Area is bordered (approximately) by the Guadalupe River to the south and Coyote Creek to the north. The ground surface is relatively flat and comprised mostly of alluvium deposits including clay, silt, sand, and gravel. Below the surface alluvium soils are older alluvial soils down to depths of 950 feet.

4.6.1.2 *101 Tech Sign Project Site Geologic Conditions*

Soils and Groundwater

A Preliminary Liquefaction Evaluation Assessment completed by *Murray Engineers* for the 101 Tech Office/R&D Project in 2012.[30] According to this report, the site is located in an area underlain by Holocene age (less than 11,000 years old) flood plain deposits (Qhfp), with levee deposits (Qhl) along the margins of the Guadalupe River in the southwestern portion of the site, in the vicinity of the proposed sign location. The flood plain deposits are generally described as gray, dense, sandy to silty clay that may contain lenses of silt and fine gravel. The levee deposits are loose, moderately to well sorted, generally well-drained sandy and clayey silt ranging to sandy and silty clay. The surficial clay soils which cover the site are highly expansive. Expansive soils shrink and swell as a result of moisture changes. These changes can cause heaving and cracking of slabs-on-grade, pavements and structures found on shallow foundations.

Seismicity

The San Andreas Fault is approximately 20 miles west of the site; the Calaveras Fault is approximately 13 miles east of the site; and the Hayward Fault is approximately eight miles east of the site. The project site is not located within a fault rupture hazard zone, and therefore, fault rupture through the site is not anticipated.

[30] Murray Engineers. *Preliminary Liquefaction Evaluation.* July 2012. Appendix C in the City of San Jose *101 Tech Addendum, file number H12-008 (September 2012).*

Liquefaction

Soil liquefaction is a condition where saturated granular soils near the ground surface undergo a substantial loss of strength during seismic events. Loose, water-saturated soils are transformed from a solid to a liquid state during ground shaking. Liquefaction can result in significant deformations. Soils most susceptible to liquefaction are loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface.

The site is within the State of California Seismic Hazard Zone of Required Investigation for Liquefaction (CGS, 2004). According to the State of California Official Seismic Hazard Zones Map for the Milpitas Quadrangle, the site is located in an area considered susceptible to earthquake-induced liquefaction. In addition, according to the State's Seismic Hazard Zone Report 051, the site is underlain predominantly by Holocene alluvial fan deposits, with artificial levee fill in the southwestern portion of the site, and the depth to groundwater is anticipated to be approximately five to 10 feet below ground surface. The potential for some degree of liquefaction is high for alluvial fan deposits and can range from very high to low for artificial levee fill. Additionally, liquefaction potential maps on the Association of Bay Area Governments (ABAG) website characterize the liquefaction hazard and susceptibility at the site as moderate to very high.

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as an open body of water, channel or excavation. The site could experience about four to eight inches of lateral ground displacement from seismically-induced lateral spreading.

4.6.1.3 *River View/Irvine Residential Signs Project Site Geologic Conditions*

Soils and Groundwater

A Geotechnical Investigation was completed by *TRC* for the River View/Irvine site in September 2007.[31] According to this report, the site was located in an area underlain by undocumented fill to depths ranging from 2.5 to 7.5 feet, consisting of interbedded layers of very stiff to hard sandy silty clay, silty clay with sand, lean clay to lean clay with sand, very soft sandy silt, and medium dense clayey sand. Below the fill was interbedded alluvium layers consisting of medium stiff to hard fat (high plasticity) clay to fat clay with sand, soft to very soft stiff lean clay to sandy lean clay, medium dense to very dense clayey sand, medium dense to very dense silty sand, and loose to very dense poorly graded sand to poorly graded sand with clay and silt up to 50 feet (which is the maximum depth explored).

The near surface soils on-site have a low to very high expansion potential. Because the site topography is flat, there is no erosion or landslide hazard on the site.

[31] *TRC. Geotechnical Investigation*. September 2007.

Groundwater at the project site was encountered at depths ranging from nine to 19.5 feet below ground. Groundwater in the project area has been measured as high as five feet below ground. Fluctuations in the level of groundwater may occur due to variations in rainfall, underground drainage patterns, and other factors.

Seismicity

The San Andreas Fault is approximately 20 miles west of the site; the Calaveras Fault is approximately nine miles east of the site; and the Hayward Fault is approximately five miles east of the site. The project site is not located within a fault rupture hazard zone, and therefore, fault rupture through the site is not anticipated.

Liquefaction

The River View/Irvine site is located adjacent to the Guadalupe River and within a liquefaction hazard zone; however, no liquefiable soil layers were encountered at soil borings nearest the channel levee.

Lateral Spreading

The potential for lateral spreading at the site is moderate based on the site's proximity to the Guadalupe River, type of on-site soils, and potential for liquefaction.

4.6.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:						
a. Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	☒	☐	2,3,10 11
b. Strong seismic ground shaking?	☐	☐	☐	☒	☐	2,3,10 11

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
c. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒	☐	2,3,10 11
d. Landslides?	☐	☐	☐	☒	☐	2,3,10 11
2. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒	☐	2,3,10 11
3. Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒	☐	2,3,10 11
4. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	☐	☐	☐	☒	☐	2,3,10 11
5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	☐	2,3,10 11

NSJ FPEIR - Geology and Soils Conclusions

As described in the NSJ FPEIR, development and redevelopment in the North San Jose Development Area could contribute to significant impacts related to subsurface geological conditions. It was determined that implementation of mitigation measures would reduce impacts from geological conditions to a less than significant level.

4.6.2.1 *Geologic Impacts of the Sign Code Amendments*

Seismic Hazards and Soil Stability
(Checklist Questions 1 through 4)

The Sign Code Amendments would increase the number of signs permitted adjacent to freeways, and allow an increase in height for residential signs; the proposed amendments do not alter building regulations. Signs installed pursuant to the Sign Code Amendments would be installed in

conformance with the City's standard permit conditions and mitigation measures listed in the NSJ FPEIR (current standard permit condition language is described below under SM GEO-1 and SM GEO-2). For these reasons, the proposed Sign Code Amendments would not result in new or more significant seismic or other geological impacts than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Wastewater Disposal Systems
(Checklist Question 5)

The signs would not generate a need for septic tanks or alternative wastewater disposal systems. **[Same Impact as Approved Project (No Impact)]**

4.6.2.2 *Geologic Impacts of the 101 Tech Sign Project*

Seismic Hazards
(Checklist Questions 1 and 3)

The project would be located in an area that is seismically active and subject to four to eight inches of lateral ground displacement from seismically induced lateral spreading. Additionally, the soils on-site have moderate to high liquefaction potential. The proposed project would implement the standard permit conditions described below, to reduce impacts from seismicity and seismic-related hazards to a less than significant level.

Standard Permit Condition: Consistent with measures listed in the NSJ FPEIR and the City's standard permit conditions, the project would implement the following measure to reduce or avoid potential damage from seismic shaking and liquefaction.

SM GEO-1 To avoid or minimize potential damage from seismic shaking, all signs shall be built using standard engineering and seismic safety design techniques. Design and construction shall be completed in conformance with the recommendations of a design-level geotechnical investigation, which shall be included in a report to the City. The structural design of the signs shall account for repeatable horizontal ground accelerations. The report shall be reviewed and approved of by the City of San José's Building Division as part of the building permit review and issuance process. The signs shall meet the requirements of applicable Building and Fire Codes, as adopted or updated by the City. The project shall be designed to withstand soil hazards identified on each site and the signs shall be designed to reduce the risk to life or property to the extent feasible and in compliance with the Building Code.

With implementation of standard permit conditions, the project would not result in any new or more significant seismic hazard impacts than identified in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Soil Stability
(Checklist Questions 2 and 4)

Soils on the project site have a high expansive potential, and there could be increased erosion during construction activities.

Standard Permit Conditions: Consistent with measures in the NSJ FPEIR and the City's standard permit conditions, the project shall implement the following measures to reduce impacts from unstable soils at the site to a less than significant level.

SM GEO-2 The project shall be constructed in accordance with the standard engineering practices in the California Building Code, as adopted by the City of San José. In addition, a Grading Permit shall be obtained from the City of San José Department of Public Works prior to the issuance of a Public Works Clearance.

- The project shall conform to the recommendations in engineering reports for the project**.**
- The project shall prepare and implement an Erosion Control Plan in conformance with the requirements of the Department of Public Works.

With implementation of standard permit conditions, the project would not result in any new or more significant geologic or soil related impacts than identified in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Wastewater Disposal Systems
(Checklist Question 5)

The sign would not generate a need for septic tanks or alternative wastewater disposal systems. **[Same Impact as Approved Project (No Impact)]**

4.6.2.3 *Geologic Impacts of the River View/Irvine Residential Signs Project*

Seismic Hazards and Soil Stability
(Checklist Questions 1-4)

The near surface soils on the River View/Irvine site have a low to very high expansion potential. The site is within a liquefaction hazard zone. Additionally, the project would be located in an area that is seismically active. The project would implement SM GEO-1, described above, to reduce or avoid potential damage from seismic shaking and liquefaction. The project would implement SM GEO-2, described above, to avoid impacts from soils with high expansive potential, and increased erosion during construction activities. With implementation of standard permit conditions, the project would not result in any new or more significant geologic or soil related impacts than identified in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Wastewater Disposal Systems
(Checklist Question 5)

The signs would not generate a need for septic tanks or alternative wastewater disposal systems. **[Same Impact as Approved Project (No Impact)]**

4.6.3 Conclusion

Adoption of the proposed Sign Code Amendments would not result in any new or more significant geologic or soil related impacts than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Installation of the proposed 101 Tech Sign would not result in any new or more significant geologic or soil related impacts than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Installation of the proposed River View/Irvine Residential Signs would not result in any new or more significant geologic or soil related impacts than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 Setting

4.7.1.1 *Greenhouse Gas Emissions Context in the North San Jose Development Area*

Unlike emissions of criteria and toxic air pollutants, which have regional and local impacts, emissions of Greenhouse Gases (GHGs) have a broader, global impact. Global warming associated with the "greenhouse effect" is a process whereby GHGs accumulating in the upper atmosphere contribute to an increase in the temperature of the earth's atmosphere. The principal GHGs contributing to global warming and associated climate change are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial and manufacturing, utility, residential, commercial, and agricultural sectors.

4.7.2 Regulatory Background

4.7.2.1 *California Laws and Regulations*

The Global Warming Solutions Act (also known as "Assembly Bill (AB) 32") sets the State of California's 2020 GHG reduction goal into law. AB 32 requires that GHG emissions in California be reduced to 1990 levels by 2020. Prior to adoption of AB 32, the Governor of California also signed Executive Order S-3-05 which identified CalEPA as the lead coordinating State agency for establishing climate change emission reduction targets. Under Executive Order S-3-05, the State plans to reduce GHG emissions to 80 percent below 1990 levels by 2050. Additional State law and regulations related to GHG reductions include SB 375, the Sustainable Communities and Climate Protection Act (see discussion below), the State's Renewables Portfolio Standard for Energy Standard (Senate Bill 2X) and fleet-wide passenger car standards (Pavley Regulations).

In December 2008, the California Air Resources Board (CARB) approved the Climate Change Scoping Plan, which proposes a comprehensive set of actions designed to reduce California's dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals. In 2014, CARB adopted an updated Scoping Plan that defines CARB's climate change priorities for the next five years and lays the groundwork to start the transition to the post-2020 goals set forth in Executive Orders S-3-05 and B-16-2012.

The California Natural Resources Agency, as required under State law (Public Resources Code Section 21083.05) has amended the state CEQA Guidelines to address the analysis and mitigation of GHG emissions. In these changes to the CEQA Guidelines, Lead Agencies, such as the City of San Jose, retain discretion to determine the significance of impacts from GHG emissions based upon individual circumstances. Neither CEQA nor the CEQA Guidelines provide a specific methodology for analysis of GHG emissions and under the amendments to the CEQA Guidelines, a Lead Agency may describe, calculate, or estimate GHG emissions resulting from a project and use a model and/or qualitative analysis or performance based standards to assess impacts.

Senate Bill 375

Senate Bill 375 (SB 375), also known as the Sustainable Communities and Climate Protection Act of 2008, requires regional transportation plans to include a Sustainable Communities Strategy (SCS) that links transportation and land use planning together into a more comprehensive, integrated process. The SCS is a mechanism for more effectively linking a land use pattern and a transportation system together to make travel more efficient and communities more livable. The result is reduced GHG emissions from passenger vehicles along with other benefits.

4.7.2.2 *BAAQMD CEQA Guidelines and 2010 Bay Area Clean Air Plan*

BAAQMD identifies thresholds of significance for operational GHG emissions from land-use development projects in its 2010 CEQA Air Quality Guidelines. These guidelines include recommended significance thresholds, assessment methodologies, and mitigation strategies for GHG emissions. Under the BAAQMD CEQA Guidelines, if a project would result in operational-related GHG emissions of 1,100 metric tons (MT) (also called the "bright line" threshold), or 4.6 metric tons per service population[32] of carbon dioxide equivalents (CO_2e) per year or more, it would make a cumulatively considerable contribution to GHG emissions and result in a cumulatively significant impact to global climate change. The BAAQMD CEQA Guidelines also outline a methodology for estimating GHG emissions.

The Bay Area 2010 Clean Air Plan (CAP) is a multi-pollutant plan that addresses GHG emissions along with other air emissions in the San Francisco Bay Area Air Basin. One of the key objectives in the CAP is climate protection. The current CAP includes performance objectives, consistent with the state's climate protection goals under AB 32 and SB 375, designed to reduce emissions of GHGs to 1990 levels by 2020 and 40 percent below 1990 levels by 2035.

4.7.2.3 *101 Tech Sign Project Site Greenhouse Gas Emissions*

The project site is vacant. GHG emissions generated by the site are from irregular trips by motor vehicles for maintenance activities.

4.7.2.4 *River View/Irvine Residential Signs Project Site Greenhouse Gas Emissions*

The River View/Irvine project site is under construction with high-density residential development. GHG emissions generated by the site are from trips associated with construction activities and operation of mobile and stationary construction equipment.

[32] Service population is defined as the sum of the number of residents and the number of employees at the development.

4.7.3 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	☐	2,7,8
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	☐	2,3,6,8

NSJ FPEIR - Greenhouse Gas Emissions Conclusions

Evaluation of GHG emissions was not required at the time the NSJ FPEIR was prepared. GHG impacts are therefore evaluated, based on BAAQMD's Air Quality Guidelines, which includes thresholds of significance for GHG emissions.

4.7.3.1 *Greenhouse Gas Emissions Impacts of the Sign Code Amendments*

Greenhouse Gas Emissions
(Checklist Question 1)

Projects result in GHG emissions during construction and operation (e.g., mobile emissions, emissions from generation of electricity for operations, emissions of from the manufacturing and transport of building materials). The Sign Code Amendments would increase the number of programmable electronic freeway signs adjacent to freeways in the North San Jose Development Area, and increase the allowable height of residential signs in the North San Jose Development Area.

Energy use for residential signs would be for allowed external lighting, halolighting, and internal lighting if only the letters or symbols are illuminated. GHG emissions associated with the production of electricity for the number (less than 100), size, and type of residential signs are not anticipated to result in GHG emissions that would exceed the BAAQMD project-level significance threshold of 1,100 MT CO2e. Increasing the allowed height of residential signs as proposed by the Residential Signs Code Amendment would not require the use of energy beyond what was anticipated in the NSJ FPEIR or beyond what is allowed under the current Sign Code.

Programmable electronic signs are subject to energy efficiency requirements under Title 24 of the California Code of Regulations. The freeway signs would be required under the Sign Code to be dimmable, which would reduce energy use and GHG emissions associated with the generation of electricity. The annual GHG emissions associated with the proposed 101 Tech Sign would be less than five metric tons of CO_2e per year (see Section 4.7.3.2, and footnote) and the energy use for other

freeway signs, with energy efficiency and Sign Code requirements for dimmability, are expected to be similar. The addition of up to 16 freeway signs, therefore, would result in less than 100 additional metric tons of CO_2e per year from electricity generation.

During operation, the signs would generate infrequent and irregular vehicle trips with maintenance vehicles coming to repair the signs, as needed, typically less than once per month. Since the signs would not generate regular vehicle trips (like an office or commercial development), the emissions from sign construction and operation would be minimal and would not result in GHG emissions above the project-level significance thresholds identified in the 2010 BAAQMD Air Quality Guidelines.[33] **(New Less Than Significant Impact)**

BAAQMD Air Quality Guidelines

(Checklist Question 2)

The Sign Code Amendments have been evaluated based on the BAAQMD CEQA Air Quality Guidelines and would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. **(New Less Than Significant Impact)**

4.7.3.2 *Greenhouse Gas Emissions Impacts of the 101 Tech Sign Project*

Greenhouse Gas Emissions

(Checklist Question 1)

The 101 Tech Sign would generate GHG emissions during construction and operation (e.g., mobile construction equipment, emissions from the generation of electricity to operate the signs). Annual GHG associated with electricity use would be less than five metric tons of CO_2e per year.[34] In addition, the sign would not generate regular vehicle trips like typical development, with less than one additional trip per month associated with sign maintenance. Emissions from sign construction and operation would be minimal (less than five metric tons of CO_2e per year) and would not result in GHG emissions above project-level significance thresholds (1,100 metric tons of CO_2e per year) or service population thresholds (4.6 metric tons of CO_2e per service population [residents and employees] per year), than identified by the BAAQMD 2011 Air Quality Guidelines. The sign would contribute an incremental increase to the overall level of GHG emissions from developed land

[33] For reference, a 91 dwelling unit high-rise condo project, 46,000 square foot racquet club, 28,000 square foot junior college, 1,000 square foot fast food restaurant with drive-thru, and a 19,000 square foot regional shopping center – all uses likely to have signage – would have the potential to result in significant operational GHG emissions (Source: Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines.* May 2011.). As noted above, the source of the majority of the GHG emissions would be from vehicle trips to and from the development sites.

[34] Lighting Design Alliance, Inc. estimated a daily energy demand of 179 watt-hours per day per square foot of sign (refer to Section 3.6.5 in Appendix D). Assuming a sign up to 375 square feet in area and 24 hour operation, the annual energy use of the sign would be up to 24.5 megawatt (MW) hours per year. Using the PG&E greenhouse gas emission factor for 2015 of 177 MT CO_2/MWH, the CO_2 emissions would be about 4.3 MT CO_2 per year (For emission factor see Pacific Gas & Electric Company. Greenhouse Gas Emission Factors: Guidance for PG&E Customers. April 2013. http://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf)

uses in the City; however, the increase would not represent a substantial contribution to cumulative GHG emissions impacts. **(New Less Than Significant Impact)**

Conflicts with Plans or Policies
(Checklist Question 2)

As discussed in *Section 4.7.2 Regulatory Background*, the State of California has adopted a Climate Change Scoping Plan. Greenhouse gas emissions are also addressed in the adopted 2010 CAP and Plan Bay Area and the City of San José adopted energy efficiency policies in its General Plan.

The CARB-approved Climate Change Scoping Plan outlines a comprehensive set of actions intended to reduce overall greenhouse gas emissions in California, improve the environment, reduce dependence on oil, diversify California's energy sources, save energy, create new jobs, and enhance public health. The Scoping Plan includes recommended actions for reducing greenhouse gas emissions. While the Scoping Plan focuses on measures and regulations at a statewide level, local governments play a key role in implementing many of the strategies contained in the Scoping Plan, such as energy efficient building codes, local renewable energy generation, and recycling programs.

Similarly, the 2010 CAP includes performance objectives, consistent with the state's climate protection goals under AB 32 and SB 375, designed to reduce emissions of greenhouse gases to 1990 levels by 2020 and 40 percent below 1990 levels by 2035. The 2010 CAP identifies a range of Transportation Control Measures, Land Use and Local Impacts Measures, and Energy and Climate Measures that make up the CAP's control strategy for emissions, including greenhouse gas emissions.

The project includes energy efficient lighting, consistent with several recommended actions in the Scoping Plan, control measures in the 2010 CAP, and General Plan policies related to energy efficient lighting and would not conflict with implementation of recommended actions in these plans intended to reduce greenhouse gas emissions by the year 2020 and ultimately 2050.

4.7.3.3 *Greenhouse Gas Emissions Impacts of the River View/Irvine Residential Signs Project*

Greenhouse Gas Emissions
(Checklist Question 1)

The River View/Irvine Residential Signs would generate GHG emissions during construction and operation (e.g., mobile construction equipment, emissions from the generation of electricity to operate the signs). Residential signs are allowed minimal lighting. Per the Municipal Code Title 23, residential signs shall not be illuminated, except for required safety or directional signs. Residential signs are allowed illumination by external lighting, halolighting, and internal lighting only if the letters or symbols are illuminated.

Annual GHG associated with electricity use would be minimal (less that the electronic freeway sign described above), and the sign would not generate regular vehicle trips like typical development. Emissions from construction and operation of the signs would be minimal (less than five metric tons

of CO_2e per year) and would not result in GHG emissions above project-level significance thresholds (1,100 metric tons of CO_2e per year) or service population thresholds (4.6 metric tons of CO_2e per service population [residents and employees] per year), than identified by the BAAQMD 2011 Air Quality Guidelines. The signs would contribute an incremental increase to the overall level of GHG emissions from developed land uses in the City; however, the increase would not represent a substantial contribution to cumulative GHG emissions impacts. **(New Less Than Significant Impact)**

Conflicts with Plans or Policies
(Checklist Question 2)

The project would not conflict with implementation of any plans or policies intended to reduce greenhouse gas emissions.

4.7.3 Conclusion

Adoption of the proposed Sign Code Amendments would result in less than significant levels of GHG emissions based on the BAAQMD developed CEQA thresholds, and would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. **(New Less Than Significant Impact)**

The 101 Tech Sign would not generate net new greenhouse gas emissions above the threshold of 1,100 MT CO_2e per year or conflict with plans, policies or regulations for reducing greenhouse gas emissions. Therefore, the project would result in a less than significant greenhouse gas emissions. **(New Less Than Significant Impact)**

The River View/Irvine Residential Signs would not generate net new greenhouse gas emissions above the threshold of 1,100 MT CO_2e per year or conflict with plans, policies or regulations for reducing greenhouse gas emissions. Therefore, the project would result in a less than significant greenhouse gas emissions. **(New Less Than Significant Impact)**

4.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based in part on a Lighting Impact Analysis prepared by Lighting Design Alliance (LDA) in December, 2014, attached as Appendix D.

4.8.1 Setting

4.8.1.1 *Hazardous Materials Context of the North San Jose Development Area*

Hazardous materials encompass a wide range of substances, some of which are naturally-occurring and some of which are man-made. Examples include pesticides, herbicides, petroleum products, metals, (e.g., lead, mercury, arsenic), asbestos, and chemical compounds used in manufacturing. Determining if such substances are present on or near project sites is important because, by definition, exposure to hazardous materials above regulatory thresholds can result in adverse health effects on humans, as well as harm to plant and wildlife ecology.

Hazardous materials may be present in surface and subsurface soils and groundwater as a result of current or former land uses in the North San Jose Development Area. Land uses associated with hazardous materials include or have included agricultural activities, automobile and truck rental, service, and repair, electronics and other manufacturing operations, gasoline stations, and pest control services. Among the parcels in the North San Jose Development Area, over 150 sites are known or suspected of having had hazardous materials releases. Table 4.8-1, below, lists properties in the North San Jose Development Area with known hazardous materials releases where freeway signs would be allowed with approval of the Sign Code Amendment (see Figure 3.2-1).

Table 4.8-1:
Properties with Known Hazardous Materials Releases
(Office/R&D Adjacent to Freeways)

Property Number	Known Hazardous Materials Released
3	Miscellaneous Fuels, Waste Oil, Gasoline, Unreported Contaminants
4	Gasoline
5	Gasoline and Flammable Liquids, Chlorinated Flammable Liquids
8	Thionyl Chloroide, Nickel, Miscellaneous Fuels, Gasoline, Unreported Contaminants
15	Gasoline, Waste Oil, Unreported Contaminants
16	Waste Oil, Gasoline
Note: Refer to Figure 3.2-1 for property locations within San Jose.	

Due to the fact that these substances have properties that are toxic to humans and/or the ecosystem, there are multiple regulatory programs in place that are designed to minimize the chance for unintended releases and/or exposures to occur. Other programs set remediation requirements at sites where contamination has occurred.

4.8.1.2 *101 Tech Sign Project Site Hazardous Materials*

On-Site Contamination

A Phase I Environmental Site Assessment Report[35] and a Limited Soil Investigation Report[36] was prepared for the 101 Tech Office/R&D Project by *Bureau Veritas North America, Inc.,* in 2012. According to these reports, the 101 Tech Office/R&D site was used for agriculture from at least 1939 until the 1990s. There were no sources of hazardous substances, drums, or other chemical containers observed during a site inspection that was completed in August, 2011. No evidence of pits, ponds, septic systems, wastewater, or sumps was observed, or signs of stressed vegetation or discolored surface soils. The site showed no evidence of polychlorinated biphenyls (PCBs) (including transformers, capacitors, elevators, and lifts) or wells.

The project site is not on the Cortese List, although the Phase I ESA and Limited Soil Investigation Report determined that the site may contain pesticides in the soil and groundwater from past agricultural uses including elevated concentrations of arsenic, lead, and mercury.

The US 101 Tech Office/R&D Project (file number H12-008) included measures that would further define and cleanup any hazardous materials conditions at the site to ensure that construction workers and landscape workers would not be significantly impacted by contaminated soil. The required measures included additional soil sampling, site remediation, and completion of a soil management plan (SMP) and Health and Safety Plan. These measures would be implemented as part of the 101 Tech/Office R&D project, prior to installation of the proposed sign.

There is no school within ¼ mile of the 101 Tech Sign site.

Off-Site Sources of Contamination

A search of databases, including the Cortese list, found that numerous nearby properties were previously identified as utilizing small to large quantities of hazardous materials as well as disposing of hazardous wastes. In addition, several leaking underground storage tank sites located greater than ¼ mile from the subject property that have received regulatory case closure were identified. These facilities were generally associated with fuel releases located at distances greater than ¼-mile from the subject property and cross to down gradient. Based on information reviewed it does not appear that these releases have impacted the 101 Tech Office/R&D site/installation of the sign.

[35] Bureau Veritas North America, Inc. Phase 1 Environmental Site Assessment Report. August, 2011. Appendix D in the City of San Jose *101 Tech Addendum (September 2012).*
[36] Bureau Veritas North America, Inc. Limited Soil Investigation Report. August, 2011. Appendix D in the City of San Jose *101 Tech Addendum (September 2012).*

4.8.1.3 *River View/Irvine Residential Signs Project Site Hazardous Materials*

The following discussion is based in part on an environmental site assessment completed for the River View/Irvine site by *Lowney Associates* in October 2005, and a review of reports and correspondence on the State's Geotracker website.[37] Based on aerial photographs and topographic maps, the project site was planted with orchards as early as 1939. In the 1980's the orchards were removed and office buildings and associated uses were placed on the site. Soil testing on the site found elevated levels of dieldrin, arsenic, lead, mercury, and DDT. The NSJ FPEIR identifies the site as having known hazardous materials, including contamination from mercury.

The Santa Clara County Department of Environmental Health is providing oversight for a Voluntary Clean Up Program (SCCo Case 0651W23C01S) on the River View/Irvine residential development site that was initiated in 2011. Soil remediation activities have included excavation and proper disposal of contaminated soil materials found on the site and preparation of a Soil Management Plan for soil handling and construction activities.[38]

4.8.1.4 *Airport Safety Hazards Context in the North San Jose Development Area*

The Norman Y. Mineta San Jose International Airport is located south of the North San Jose Development Area. Development within the Airport influence Area (AIA) can be subject to hazards from aircraft and also pose hazards to aircraft travelling to and from the airport. The AIA is composite of areas surrounding the airport that are affected by noise, height and safety considerations (see Figure 4.8-1). These hazards are addressed in Federal and State regulations as well as in land use regulations and policies in the Airport Comprehensive Land Use Plan (CLUP). Properties 10, 11 (project site), 12, 13, 14, 15, and 16, and two residential parcels west of N. 1st Street and south of Airport Parkway, as shown in Figure 4.8-1, are located in the AIA.

4.8.1.5 *101 Tech Sign Project Site Airport Safety Hazards*

The project site is not located within ¼ mile of a private airstrip, however, the project site is located less than ¼ mile from the Norman Y Mineta International Airport and is within the AIA. The 101 Tech Sign is, therefore, subject to height restrictions under Federal Aviation Regulations, Part 77, which is administered by the Federal Aviation Administration (FAA) and incorporated into Santa Clara County Airport Land Use Commission policy. Federal Aviation Regulations, Part 77, "Objects Affecting Navigable Airspace", sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above ground.

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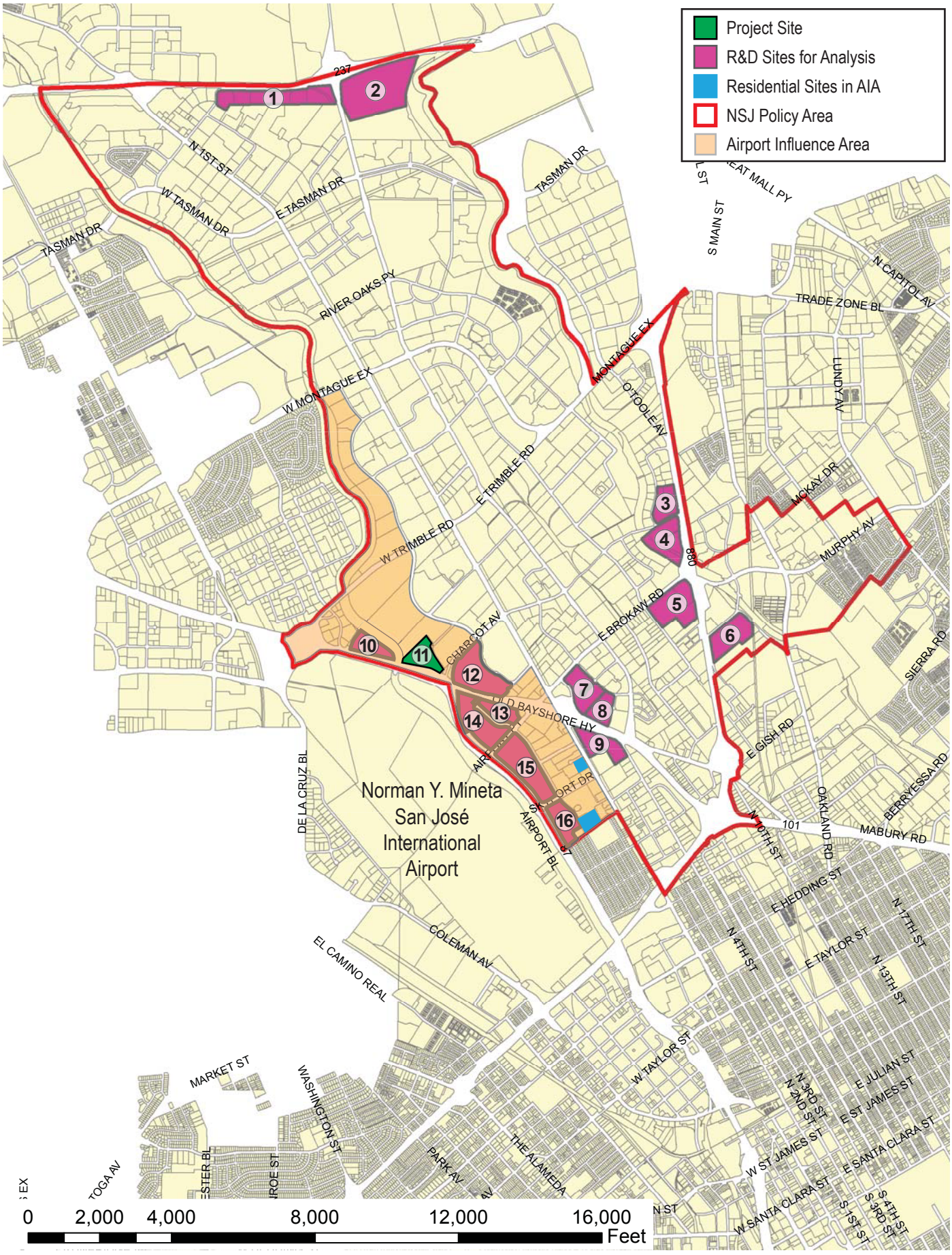
[37] Lowney Associates. *Phase I Environmental Site Assessment.* October 2005

[38] Source: Geotracker. Summary and regulatory correspondence for 3471 N. FIRST STREET, San José, California. Available at: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000003238. Accessed March 25, 2014.



NORTH SAN JOSE DEVELOPMENT AREA PROPERTIES LOCATED IN THE AIRPORT INFLUENCE AREA (AIA)

FIGURE 4.8-1

For the 101 Tech Sign site, any proposed structure of a height greater than approximately 20 feet above ground is required under FAR Part 77 to be submitted to the FAA for review. As the project proposes a maximum sign height of 60 feet above ground, notification to the FAA is required. In turn, the San Jose General Plan and Airport Land Use Commission (ALUC) policies require FAA issuance of "no hazard" determinations prior to development approval, with any conditions set forth in an FAA no-hazard determination also incorporated into the City's project approval. The FAA 'no hazard' determination would be included as a condition of approval, as appropriate, for all future signs in the AIA which could be approved the Sign Code Amendments.

CLUP Policy G-6 states that '*any proposed uses that may cause a hazard to aircraft in flight are not permitted within the AIA. Such uses include electrical interference, high intensity lighting, attraction of birds (certain agricultural uses, sanitary landfills), and activities that may produce smoke, dust, or glare*.' As discussed in Section 4.8.2, below, the FAA does not have standards or thresholds for sign brightness or glare. Nor does the Illumination Engineering Society (IES), who is recognized as the lighting authority and creates recommendations for proper illumination techniques.

4.8.1.6 *River View/Irvine Residential Signs Project Site Airport Safety Hazards*

The project site is not located within ¼ mile of a private airstrip and is outside the Mineta San José International Airport AIA.

4.8.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒	☐	2,3,10 11
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒	☐	2,3,10 11
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	☐	2,3,10 11

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?	☐	☐	☐	☒	☐	2,3,10 11
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	☐	2,3,4
6. For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	☐	2,3,10 11
7. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	☐	2,3,10 11
8. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒	☐	2,3,10 11

NSJ FPEIR - Hazards and Hazardous Materials Conclusions

The NSJ FPEIR identified significant hazardous materials impacts related to sensitive receptors residing in proximity to nearby hazardous materials users, hazards from contaminated soil and groundwater, the presence of asbestos and lead based paint, and the removal of underground storage tanks during site redevelopment activities. These impacts were reduced to a less than significant level through implementation of mitigation measures.

4.8.2.1 *Hazards and Hazardous Materials Impacts of the Sign Code Amendments*

Impacts from Hazardous Materials
(Checklist Questions 1, 2, 3, and 4)

The proposed Sign Code Amendments do not affect policies or procedures through which hazardous materials are dealt with during construction and development. Per the NSJ FPEIR, the City has policies and regulations in place to prevent impacts from hazardous materials, including evaluation of a site's historical and present uses to determine if any environmental conditions exist that require further investigation and possible remediation to avoid impacts to the community or the environment. Each sign would be subject to approval of a Development Permit or Sign Permit and appropriate environmental review clearance at the project-level. For these reasons, the proposed Sign Code Amendment would not result in impacts from: 1) routine transport, use, or disposal of hazardous materials; 2) foreseeable upset and accident release of hazardous materials; or 3) emission or handling of hazardous materials; or 4) significant hazard to the public or the environment. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Airport and Aircraft Hazards
(Checklist Questions 5 and 6)

There is no private airstrip in the North San Jose Development Area. Installation of signs in the North San Jose Development Area would not result in a safety hazard to people residing or working in the area due to the proximity of a private airstrip. **[Same Impact as Approved Project (No Impact)]**

The signs which would be allowed adjacent to freeways in the North San Jose Development Area with approval of the Freeway Sign Code Amendment would be a maximum of 60 feet above grade. Residential signs in North San Jose would be a maximum of 20 feet above grade. Future signs allowed under the Sign Code Amendments that are subject to FAA regulatory review would be required to comply with the City's General Plan Policy CD-5.8, requiring FAA issuance of "no hazard" determinations prior to approval.

The above paragraph notwithstanding, the nature (i.e., flashing images, brightness, etc.) of modern, large, programmable electronic freeway signs is such that it is not possible to definitively determine that there will be no hazard to aviation until such signs are in operation. To illustrate this fact, Airport staff and FAA air traffic controllers have been receiving reports from pilots landing and departing from San Jose International Airport that the operation of the large jumbotron video screens at the recently opened Levi's Stadium is creating distractions, glare, and reduced visibility. The Levi's Stadium is located approximately 3.5 miles from the Airport. The FAA is working with stadium officials in an effort to address this issue and, in the meantime, has issued a bulletin to pilots informing them that the Levi's Stadium's "high intensity lights may cause a visibility hazard, glare, or a distraction within 2,000 feet vertically and 12,000 feet laterally of the light source" (FAA, Letter to Airmen, 7/28/2014).

Although future programmable electronic freeway signs allowed by the proposed Sign Code Amendment would not be as large as other light sources that are visible to pilots approaching and

departing the Airport and to air traffic controllers in the Airport Tower, they could pose similar hazards to pilots and air traffic controllers as described above. Specific concerns are that the brightness, and/or glare from the signs could interfere with pilot and/or controller visibility in what is otherwise a low-light environment.

For pilots (in all aircraft including general aviation and jets), a low-light environment is critical for nighttime landings and takeoffs in order for navigational lighting (approach, runway, taxiway), signage, obstacles, and other aircraft to be clearly visible. For controllers, the ability to pick out aircraft in the vicinity of the Airport against the backdrop of a dark sky is critical to their task of maintaining adequate separation between aircraft. At the San Jose Airport Tower, when controllers scan the sky to look for both commercial and general aviation aircraft, signs could be visible when lit up after dark. In addition, light from the signs could reflect off of the clouds in low visibility conditions and cause distraction to pilots and/or controllers. As previously described, the FAA does not have standards or thresholds for sign brightness or glare. Nor does the Illumination Engineering Society (IES), who is recognized as the lighting authority and creates recommendations for proper illumination techniques.

As described in *Section 3.2.1* of the Project Description, for future programmable electronic freeway signs within the Airport Influence Area and which could be visible to pilots and/or air traffic controllers, the project-specific environmental review which would be required as part of the Development Permit approval process would include a technical evaluation of safety hazards to pilots and/or air traffic controllers. Such signs shall also comply with all applicable Sign Code regulations related to the operational standards for programmable signs (Section 23.02.905 of the Sign Code) to reduce safety hazards to aircraft and Airport operations to a less than significant level.

The Residential Signs Code Amendment would allow residentially zoned properties in North San Jose that are developed with high density buildings to install signs up to 20 feet above grade. The current Sign Code for residential signs allows illumination by external lighting, halolighting, and internal lighting if only the letters or symbols are illuminated. Additionally, only continuous lighting may be used. The lighting allowed on residential signs is minimal and placing a lit residential sign five feet higher than currently allowed in the North San Jose Development Area (at 20 feet instead of the currently allowed 15 feet), as proposed by the Residential Signs Code Amendment, would not create a new source of substantial light or glare for aircraft or the airport.

With conformance to applicable policies and regulations installation of signs in the North San Jose Development Area would not result in safety hazards to aircraft and Airport operations, and would not result in a safety hazard to people residing or working in the area due to the proximity of an airport. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Other Hazards
(Checklist Questions 7 and 8)

Implementation of Safety Plans

The proposed signs would be located on office/R&D and residential properties and would have no impact on emergency response plans. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Wildland Fire Hazards

People do not occupy or inhabit signs as with typical development (e.g., housing or office developments) and the signs would be located in the urbanized North San Jose Development Area. Installation and operation of signs in the North San Jose Development Area would not expose people or structures to wildland fires. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.8.2.2 *Hazards and Hazardous Materials Impacts of the 101 Tech Sign Project*

Impacts from Hazardous Materials
(Checklist Questions 1, 2, 3, and 4)

Onsite Hazardous Materials

As described above in Section 4.8.2.1, the City has policies and regulations in place to prevent impacts from hazardous materials including evaluation of a site's historical and present uses to determine if any environmental conditions exist that require further investigation and possible remediation. These policies were adopted to avoid impacts from hazardous materials to the community and the environment.

The Phase I ESA that was prepared for the 101 Tech Office/R&D Project, file number H12-008, found that the site may contain pesticides in the soil and groundwater from past agricultural uses including elevated concentrations of arsenic, lead, and mercury. It was determined that contamination could be encountered during earthwork activities at the site, therefore, in compliance with the NSJ FPEIR, additional testing and possible remediation would be required as part of site development.

Impact HAZ-1 Construction workers and/or the public could be exposed to hazardous materials during construction as a result of hazardous materials from past uses that contaminated soil on the site. **(Significant Impact)**

Mitigation Measure: Consistent with mitigation measures listed in the NSJ FPEIR, the project shall implement the following measure to reduce impacts from on-site hazardous materials to a less than significant level.

MM HAZ-1 The proposed sign shall not be installed until hazardous materials on the project property have been remediated in accordance with mitigation measures MM HAZ-1.1, -1.2, and -1.3 outlined for the property as part of the US 101 Tech Office/R&D Project (file number H12-008). These measures include soil sampling to define the extent of contamination at the site and remediation, and requires implementation of a Soil Management Plan (SMP) and a Health and Safety Plan (HSP) to protect workers. Installation of the proposed sign adjacent to the freeway shall be installed in conformance to the required SMP and HSP for the US 101 Tech Office/R&D Project. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

With site conformance to mitigation measures in the NSJ FPEIR and to the SMP and HSP which are required as part of the Site Development Permit for the 101 Tech Office/R&D site, the project would not result in impacts from: 1) routine transport, use, or disposal of hazardous materials; 2) foreseeable upset and accident release of hazardous materials; 3) emission or handling of hazardous materials, or 4) significant hazard to the public or the environment. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Impacts from Possible Off-Site Hazardous Materials

Based on the Phase I ESA and the Limited Soil Investigation Report prepared for the 101 Tech Office/R&D Project, no off-site contamination currently affects the project site. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Airport and Aircraft Hazards
(Checklist Questions 5 and 6)

There is no private airstrip in the North San Jose Development Area. Installation of 101 Tech Sign would not result in a safety hazard to people residing or working in the area due to the sign in proximity to a private airstrip. **[Same Impact as Approved Project (No Impact)]**

Airport Airspace Obstructions

Federal regulations require the proposed sign structure to be submitted to the FAA for airspace safety review. Per City General Plan Policy TR-14.2, FAA issuance of a Determination of No Hazard, and incorporation of any conditions of the FAA determination into City project approval, would ensure that the height of the proposed sign would not be a hazard to aircraft operation. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Sign Operational Hazards

The FAA review does not evaluate the operational details of signs. The proposed sign would be located adjacent to the north side of US 101, approximately 1,900 feet east of Runway 30R-12L at

the Norman Y. Mineta San Jose International Airport. The City's Sign Code limits messages to only on-site uses/tenants.

The proposed programmable electronic freeway sign would be located and oriented in a way that would be visible to pilots approaching and departing the Airport. In addition, the proposed sign would be visible to controllers in the Airport Tower as they identify and track aircraft. Therefore, the proposed sign could potentially pose hazards to aircraft operations associated with the sign when the display is lit during nighttime hours. Specific concerns are that the brightness and/or glare from the sign could interfere with pilot and/or controller visibility in what is otherwise a low-light environment. In addition, light from the sign could reflect off of the clouds in low visibility conditions and cause distraction to pilots and/or controllers. The ability for pilots and air traffic controllers to view navigational aids, obstacles, and other aircraft is critical to safe operations.

In view of the potential for the proposed sign to affect aircraft and Airport operations, a professional lighting impact analysis was completed for the project by LDA and is summarized below. The complete lighting impact analysis is included in Appendix D. The analysis included the following:

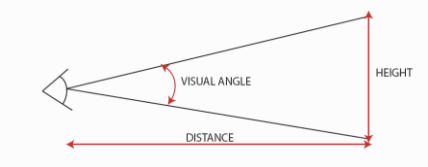
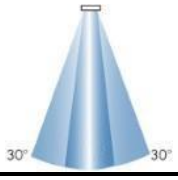
- Summary of existing sources and levels of light and glare in the immediate vicinity of the project and the Airport;
- Summary of the proposed characteristics of the sign, including size, height, orientation, brightness, animation, etc.;
- Evaluation of the sign's potential to result in adverse light or glare impacts to pilots and air traffic controllers; and
- Disclosure of measures to be incorporated into the design and/or operation of the sign that would avoid or minimize potential adverse light and glare effects.

To assist the reader in understanding the analysis and its conclusions, the lighting terms used in the analysis and discussion are defined in Table 4.8-2.

Table 4.8-2:
Definition of Lighting Terms

Brightness is the perceptual response to luminance. It is our response to a source of light, with sources being categorized between bright and dim. Brightness at a location is determined partly by the numerically measurable luminance of the light source and partly by the conditions of observation, such as the visible contrast with the field of view and the state of adaption of the eye. "High," "Medium," and "Low" brightness are terms used to describe contrast ratios (the ratio of one surface luminance to the luminance of a second surface) of greater than 30:1, between 10:1 and 30:1, and below 10:1 surface-to-background luminance, respectively. Contrast ratios above 30:1 are uncomfortable for the human eye to perceive.
Candela is a basic unit for measuring luminous intensity from a light source in a given direction. A common candle emits light with a luminous intensity of roughly one candela. If emission in some directions is blocked by an opaque barrier, the emission would still be approximately one candela in the direction that is not obscured.

Table 4.8-2:
Definition of Lighting Terms

Footcandle is an unit of measurement, abbreviated as FC, which is defined as the amount of illumination the inside surface of an imaginary one foot radius sphere would be receiving if there were a uniform point source of one candela in the exact center of the sphere. The footcandle can be thought of as the amount of light that actually falls on a given surface. One footcandle is equal to one lumen per square foot. Footcandles are additive.
Illuminance is the luminous flux per unit area on an intercepting surface at any given point (i.e. the light that falls on a surface).[39] Illuminance is associated with the footcandle.
LED, Light Emitting Diode, is a semiconductor device that emits incoherent optical radiation when forward biased. It is an electric device that converts energy to light.
Lumen is the basic unit of light, a measure of the perceived power of light. The lumen is defined in relation to the candela by 1 lumen = 1 candela x 1 steradian.[40]
Luminance is a photometric measure of the luminous intensity of a surface. The luminance indicates how much luminous power will be detected by an eye looking at the surface from a particular angle of view. It is an indicator of how bright the surface will appear. It is measured by candelas per meter squared (cd/m²), also referred to as ***Nits***.
Nit *is* described above, under 'Luminance.' The standard international (SI) unit of measurement for luminance is candelas per meter squared (cd/m²). The non-SI term for the same unit is the "nit". (Section 12.18 of the IESNA (Illuminating Engineering Society of North America) Lighting Handbook)
Visual angle is the angle formed by two rays of light, or two straight lines drawn from the extreme points of an object to the center of the eye. Viewing angles are defined as where the intensity of the LEDs are at 50 percent of their maximum brightness when a traveler is viewing the signage from a straight position. For example, at 15 degrees off-center, the LED brightness in a standard 30 degree viewing cone would be 50 percent of the maximum intensity. Viewing angles vary on the variation of the installation site. Factors like curving roadways, shoulder-mounted sign locations, and side visibility are some of the factors that affect the viewing angles.  

[39] Merriam Webster Dictionary. Available at: http://www.merriam-webster.com/medical/illumination. Accessed January 2, 2014.
[40] A steradian is the standard international (SI) unit of a solid angle. It is used to describe two-dimensional angular spans in three-dimensional space

Existing Lighting Conditions

Airport Tower and Aircraft

The characterization of the existing ambient lighting conditions from inside and outside the Norman Y. Mineta International Airport (Airport) Tower was based on a site visit in October 2014 for a different programmable electronic sign project[41], and interviews with air traffic controllers during the daytime and nighttime by LDA staff. The air traffic controllers were asked what issues they have with the existing brightness around the Airport and how such brightness impacts their visibility and the visibility of pilots flying into and out of the Airport. The visual impact to the controllers from light sources is dependent on both the orientation of the light to the Airport Tower and its brightness/luminance.

For an urban airport, the surrounding community has fairly well-controlled lighting, as viewed from the Airport Tower. According to the air traffic controllers, as well as reports from pilots, the primary existing visual hazard for pilots and the controllers is the nearby Levi's Stadium. The professional football games are more brightly lit than non-professional football games at the stadium. During the October 2014 site visit for a different programmable electronic sign project, a non-professional football game event was taking place. From the Airport Tower, the Levi's Stadium LED digital scoreboard and high output stadium lights are clearly visible. While the Levi's Stadium is approximately 3.5 miles away, the approximate elevation of the stadium is similar to the Airport Tower's observation floor. The large digital scoreboard screen is angled directly at the Airport Tower and is visible through an architectural gap in the stadium's seating bowl. According to the air traffic controllers, the testing of the scoreboard and events at professional football night games, such as fireworks and changing messages on the digital scoreboard screen, create the greatest visual hazards in the vicinity for the controllers. Specifically, the combination of the color saturation intensity and the flashing effects cause substantial issues.

In addition to Levi's Stadium, other existing sources of potential lighting issues to pilots and air traffic controllers include Avaya Stadium,[42] Buck Shaw Stadium, lighting for the Airport, Casino M8trix, lighting for the SOS Steel company, floodlighting on warehouses in the vicinity, and street lighting. A summary of notable light sources is provided below and shown in Figures 4.8-2 and 4.8-3. Note that the tinted windows inside of the Airport Tower block around 50 percent of the brightness of the outside luminance.

- Levi's Stadium – this existing stadium is located approximately 3.5 miles to the northwest of the Airport Tower. The brightest source of light, as discussed above, is from the LED digital scoreboard. Because the scoreboard is on an angle in comparison to the Airport Tower, a survey of the full brightness coming from the scoreboard is not possible. From inside the

[41] The site visit was within two months of the start of environmental review of the Tech Sign Project and lighting conditions had not changed appreciably (in terms of new light sources).

[42] The programmable signs at Avaya Stadium were evaluated prior to installation and were found not to pose a significant impact to pilots and air traffic controllers. The signs at Avaya Stadium were installed and operational in March 2015. [City of San Jose. *San Jose Earthquakes Stadium Signs.* File No. PD14-018. Initial Study/Addendum to the *Final Environmental Impact Report for the Airport West Stadium and Great Oaks Place Project* (SCH# 2009052053). December 2014].

Airport Tower, the luminance reading of the scoreboard during a non-professional football game was 17.3 candelas per meter squared (cd/m^2 or Nits) during a non-professional football event. From outside of the Airport Tower, the luminance reading was 20 to 67 Nits as the brightness varied, depending on what was displayed.

- Buck Shaw Stadium – this existing stadium is in direct view of the Airport Tower. Buck Shaw Stadium is nearly parallel to the Airport Tower so the poles and floodlights on the opposite side of the field are oriented towards the Airport Tower, but the stadium's relationship to the Airport Tower is out of the main viewing corridor for approaching and departing aircraft. The stadium's lighting fixtures were not identified by the air traffic controllers as a visual hazard as the fixtures on the field are aimed downward and include glare shields. From inside the Airport Tower, the luminance reading of the stadium lighting was 104 Nits. From outside the Airport Tower, the luminance reading of the stadium lighting was 154 Nits.

- Airport Lighting – the most visible source of lighting to the Airport Tower is the actual Airport facility itself. Airport facility lighting includes white and blue floodlights on the building facades, blue marker lighting on the runways, and tall pole-mounted apron lights around the airfield. The controllers had no visual hazard complaints about Airport lighting (including the pole-mounted flood lights, which were the brightest lights recorded). From inside the Airport Tower, the luminance reading of the pole-mounted light was 63 Nits. From outside the Airport Tower, the luminance reading of the pole lighting was 72 Nits.

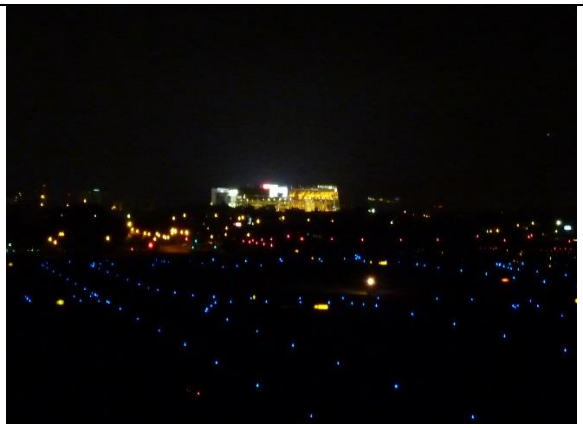
- Casino M8trix – to the north of the Airport is Casino M8trix, which has its building crown visible from the Airport Tower. The crown lighting has a combination of backlit box-letter signage, exposed LED box-letter signage, and color changing LED floodlighting. At night, the most visual lighting element is the exposed LED box-letter signage. The controllers do not consider the lighting at Casino M8trix as a visual deterrent. From inside the Airport Control Tower, the luminance reading of the floodlighting at the casino was 1.01 Nits. From outside the Airport Tower, the luminance reading of the floodlighting was 1.06 Nits. The red LED points of light on the 'M' in the M8trix sign was 190.5 Nits, and the backlit LED box-letter signage was 265.90 Nits from outside the Airport Control Tower.

- SOS Steel – one of the brighter visual objects in the airport area is an exposed neon-illuminated sign for SOS Steel Company located approximately 1.3 miles southwest of the Airport Tower. This sign was not identified by air traffic controllers as a visual deterrent. From inside the Airport Tower, the luminance reading of the sign was 3.0 Nits. From outside the Airport Tower, the luminance reading of the sign was 5.7 Nits.

- Adjacent Warehouse Floodlighting – the brightest source recorded in the vicinity was from the mounted floodlights on warehouses adjacent to the Airport Tower. These floodlights, however, are mounted at a lower level and do not come within the line-of-sight for air traffic controllers. Therefore, these floodlights were not identified by the controllers as a distraction. From inside the Airport Tower, the luminance reading of the floodlighting was 257 Nits. From outside the Airport Tower, the luminance reading of the floodlighting was 379 Nits.

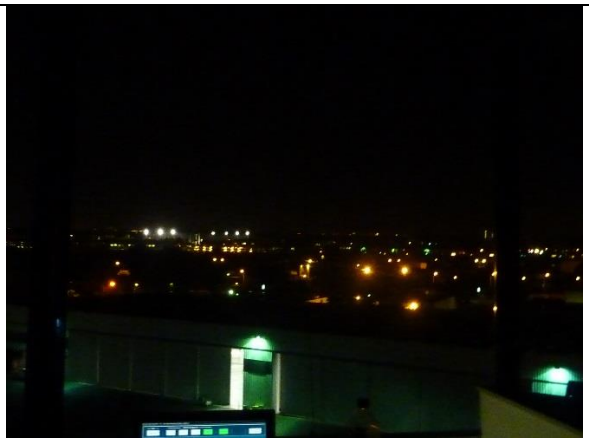
- Adjacent Street Lighting – the existing public streets that are located in the vicinity of the Airport Tower utilize streetlights that are a combination of low-pressure sodium and dropped lens cobra heads with metal halide lamps. Many of the streetlights are physically blocked from view by either the Airport terminals, hangers, adjacent buildings, and/or landscaping. The air traffic controllers did not identify street lighting as a visual deterrent.

Figure 4.8-2:
Views of Existing Light Sources from Inside and Outside the Airport Control Tower

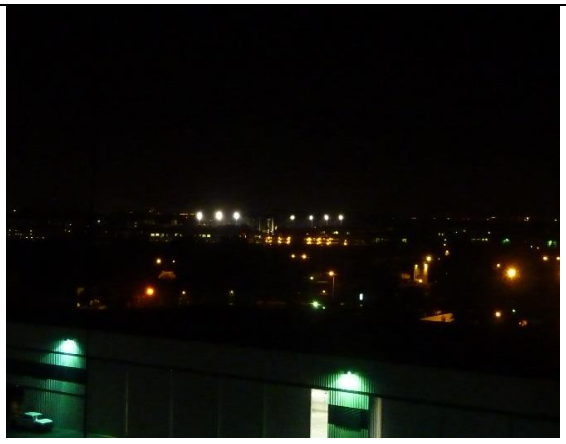


Levi's Digital Display Signage Outside Tower - 20 to 67 Nits

Adjacent Warehouse Floodlighting Outside Tower – 379 Nits

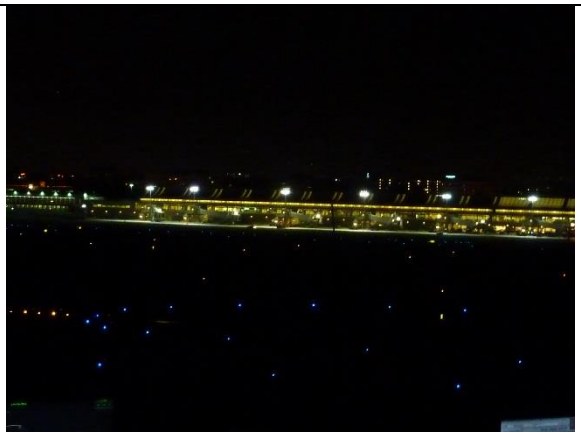


Buck Shaw Stadium Lighting Inside Tower – 104 Nits

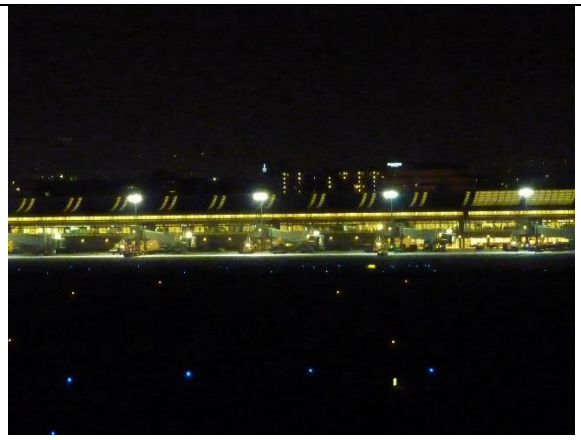


Buck Shaw Stadium Lighting Outside Tower – 154 Nits

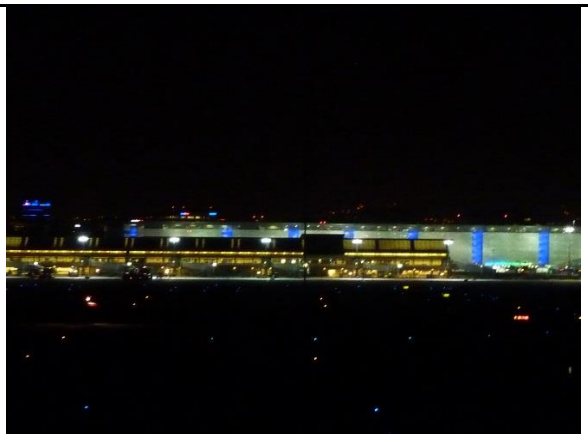
Figure 4.8-2:
Views of Existing Light Sources from Inside and Outside the Airport Control Tower



Airport Pole Lighting Inside Tower – 63 Nits



Airport Pole Lighting Outside Tower – 72 Nits



Casino M8trix Crown Lighting Inside Tower- Varies (See Text)

Casino M8trix Crown Lighting Outside Tower- Varies (See Text)

SOS Steel Sign Lighting Inside Tower – 3.0 Nits

Close-up View of SOS Steel Sign During the Day

LED Display Signage

As part of a site visit for a different sign project in October 2014, LDA took light measurement readings for existing LED display signage. The brightness of the LED signs depend on images being displayed and colors produced by varying the LED intensities. As the images change, so do the readings. For example, white displays provide more brightness than a color display such as a red or blue. Additionally, while distance does not affect brightness, the viewing angle and the specific target can impact what is measured, so readings can vary. Brightness of digital display signage in the project area measured 20 to 140 Nits. An example of a digital display sign in the area, located adjacent to southbound US 101 at the intersection of Duane Avenue and Raymond Street in the City of Santa Clara, is shown in Figure 4.8-3, below. This sign is approximately 1.2 miles northwest of the 101 Tech Office/R&D site.

Figure 4.8-3:
Example of Nearby Digital Display Signage at Night from Ground-Level

Methodology

A digital display sign (or programmable electronic component of the sign) is a matrix of LEDs capable of displaying several digital messages/images in a rotation. These display panels are highly adaptable and can be programmed to display stationary advertisements, public art, movies for the local community, or announcements. The media display panels integrate ambient light sensors to automatically reduce screen brightness depending on exterior light conditions. This adjustment of screen brightness is critical because of the significant variance in ambient conditions ranging from bright sunlight to darkness. For example, daytime ambient light readings vary, with afternoon intensities exceeding 9,000 footcandles on a sunny day. Conversely, at night the ambient light level can be less than a single footcandle. In order for the signs to be visible during the day, the digital display would be at full or near-full brightness during a sunny day. This full intensity would be extreme at night so the sign would be dimmed to more appropriate lower intensities at night.

LEDs possess the capability to dim, however, the content for the sign is not known at this time. The final artwork would have great impact on the luminance levels and brightness levels generated by the

sign. For example, an image of a white polar bear in a blizzard has the potential to be extremely bright, while a whale swimming in the ocean would be visibly lower. The cycle or timing of image transitions is critical and the sign would be regulated by City and State requirements to avoid hazardous lighting, glare, or distracting image rotation.

The subject of illumination is difficult to predict especially without a final sign design or media content. The evaluation of the proposed sign included an internet search, analyses of previous light measurements for light sources in the airport area, an interview with Airport Tower staff, contact with the FAA, and a review of the City Sign Code, State lighting standards, and current IES (Illumination Engineering Society) documentation. Based on LDA's professional experience with similar projects and signs, pilots like visual landmarks during the daytime and nighttime to help with orientation. The actual brightness of the landmark, however, cannot create glare. Items like fireworks, laser based light shows and even searchlights can all create adverse glare issues.
As discussed previously, the IES is recognized as the lighting authority and creates recommendations for proper illumination techniques. The IES's 10th Edition handbook is over 3.5 inches thick and references airport illumination. The references, however, are typically for interiors or airport apron illumination, with no reference to glare, either to pilots or to an air traffic controller. The IES has a special aviation committee and they are revising the Recommended Practice RP-37, which is currently outdated and cannot be referenced.

Viewing Angles

The magnitude of both vertical and horizontal viewing angles between the proposed signs and surrounding locations is important because those angles determine the brightness of the signs as seen by a person at a given location. As shown in Table 4.8-2, the greater the angle, the greater the reduction in lighting intensity as seen by a viewer. Given this fact, the methodology utilized to evaluate the effects of the proposed signs takes viewing angles into account. Specifically, the height of air traffic controllers in the Airport Tower in relation to the height of the sign (i.e., the vertical angle) is accounted for, as is the offset between the Airport Tower and a point directly centered in front of a sign face (i.e., the horizontal angle.). The same applies to the angles between a pilot and a sign, only there is great variability as the pilot is in motion in multiple dimensions in relation to the sign.

Evaluation of Glare and Safety Impacts

Glare and safety impacts from the signs to air traffic controllers and pilots are discussed below. Potential glare and safety impacts to motorists on US 101 are addressed in *Section 4.16, Transportation.*

As previously described in Table 4.8-2, luminance is a photometric measure of the luminous intensity of a surface. The luminance indicates how much luminous power will be detected by an eye looking at the surface from a particular angle of view. It is an indicator of how bright the surface will appear. The standard international unit of measurement for luminance is candelas per meter squared (cd/m^2). The non-SI term for the same unit is the "Nit". Lighting effects for airport safety is addressed using the Nit. Lighting effects to air traffic controller and aircraft are, therefore, described in terms of luminance (brightness) and associated Nits in the discussion below.

Impact to Air Traffic Controllers

The two faces of the proposed sign would be perpendicular to US 101. In relation to the Airport Control Tower, the proposed sign would be installed approximately 1.1 miles northwest. The center of the sign is approximately 53.5 feet above ground level, and the viewing height on the Air Traffic Control Tower Observation deck is approximately 89 feet above ground level. The main concern for the tower would be the brightness of the sign, but because of the orientation of the sign, the tower viewing angle would not be in direct view of the main brightness of the sign.

The following off-axis values are based upon the proposed night maximum brightness of 250 Nits at the sign face. The Tower is 10 degrees off-axis from the main brightness of the screen. According to the sign manufacturer, Watchfire, the maximum brightness viewed from the Tower in a horizontal orientation would be 150 Nits. The center line of the sign is 36 feet below the Tower viewing platform for a differential angle of less than 1 degree above horizontal. According to Watchfire, the maximum brightness of the sign when looking down at the sign from the Control Tower in a vertical orientation would be 0 Nits, as the visible light cuts off after 20 to 40 degrees.

When compared to other lighted elements around the Airport Control Tower as seen from the interior of the Tower, the LED digital display signage would not be the brightest object in view and would have more systems in place to control the brightness than other lit objects around the site. The brightness of the 101 Tech Sign would not adversely affect operations at the Airport Control Tower because the tower would have a very limited view of the sign, and the sign would not be oriented so that the Control Tower would be exposed to the maximum brightness of the sign.

With the proposed maximum brightness and illuminance limitations, including conformance to existing Sign Code regulations for programmable and non-programmable components of electronic signs, the sign would not result in significant glare or safety hazard impacts to air traffic controllers.

Impact to Pilots

The 101 Tech Sign would be located approximately 1,900 feet east of Airport Runway 30R-12L, and would be 60 feet above grade. Because the sign's location is above the pedestrian level, the potential viewing angles of the sign could impact some of the aircraft landing, departing, and taxiing, depending on their approach into the airport.

The orientation of aircraft at the Airport is dependent on the prevailing winds. When winds are from the northwest, aircraft land to the northwest on Runways 30L and 30R. When winds are out of the southeast, aircraft land to the southeast on Runways 12L and 12R. For the western approach, aircraft land on Runways 12L and 12R, which would have an unobstructed view of the sign, but would not have a direct viewing angle of the main brightness of the sign. For the eastern approach to Runways 30L and 30R, the views of the sign would be potentially blocked by the Airport Terminal Building, depending on the location of the plane, as the building is approximately 62 feet above grade.

For aircraft landing to the southeast on Runways 12L and 12R, the landing approach is variable. The runways are located where the sign would be partially visible, and are only off the main axis by approximately 30 degrees perpendicular to the face of the sign. For landing strip 12L, on a long

distance approach, the aircraft are 35 degrees off-axis at the maximum touchdown location. For landing strip 12R, on a long distance approach, the aircraft are 28 degrees off axis and at the maximum touchdown location. According to the sign manufacturer, Watchfire, the maximum brightness to the pilots in a horizontal orientation would be 290 Nits. The height of the aircrafts vary as they approach the runway, and the maximum brightness to the pilots in a vertical orientation would be 175 Nits. For comparison, other lighted elements around the Airport, or regional freeway digital signs have a brightness range between 20 and 290 Nits or cd/m^2 (these luminance readings of the display sign surface vary based on the color of light at the time of the reading).

For aircraft landing to the northwest on Runways 30L and 30R, the landing approach is also variable. The runways are located where the signs would be partially visible, and are only off axis by approximately 50 degrees perpendicular to the face of the sign. The Airport Terminal Building would block many of the views of the sign from planes that have landed. For planes in the air, there would still be viewing angles of the sign, dependent on the distance of the sign, and the height of the plane in the air. For landing strip 30L, on a long distance approach, the aircraft would be 40 degrees off axis at the maximum touchdown location. For landing strip 30R, on a long distance approach, the aircraft would be 45 degrees off axis at the maximum touchdown location. According to the manufacturer, Watchfire, the maximum brightness to the pilots in a horizontal orientation would be 290 Nits. The height of the aircrafts vary as they approach the runway, however, the maximum brightness to the pilots in a vertical orientation would be 150 Nits.

Compared to other lighted elements around the Airport, the brightness from the display faces of the 101 Tech Sign would be of comparable or lesser brightness than nearby light sources. The effects of the brightness on pilots depends on the direction from which the aircraft is flying into the airport, as well as the height above the ground. In the air, the pilots would have less view angles than motorists. The sign would be visible from the air, however, there would be other illuminated elements in the pilot's view with equal or greater intensity than the proposed sign, therefore, the sign would not add to light hazards for pilots. Once landed, many views of the sign would be blocked by the Airport Terminal building. The sign, therefore, would not cause significant hazards to aircraft safety.

In summary, based on the above analysis, the proposed sign would not result in a new or more significant safety hazard to the Airport than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Other Hazards

(Checklist Questions 7 and 8)

Implementation of Safety Plans

Sign foundations would be relatively small and would not impair implementation of adopted emergency response or evacuation plans. **[Same Impact as Approved Project (No Impact)]**

Wildland Fire Hazards

The sign would be located in an urban, developed area and would not be subject to wildland fires. **[Same Impact as Approved Project (No Impact)]**

4.8.2.3 *Hazards and Hazardous Materials Impacts of the River View/Irvine Residential Signs Project*

Impacts from Hazardous Materials
(Checklist Questions 1, 2, 3, and 4)

Onsite Hazardous Materials

The Phase I ESA that was prepared for the River View/Irvine site included soil testing which found elevated levels of dieldrin, arsenic, lead, mercury, and DDT. In accordance with requirements of the NSJ PFEIR, prior to development of the site with high-density residential development, the vertical and horizontal extent of contaminated soil was determined. Contaminated soils on the site not capped with building foundations, street and parking lot pavement, and/or clean landscaping, were removed and taken to an appropriate disposal facility consistent with State and local regulations.

The Santa Clara County Department of Environmental Health (SCCDEH) provides oversight of a Voluntary Cleanup Program on the River View/Irvine site. With conformance to mitigation measures in the NSJ FPEIR and continued oversight of activities by the SCCDEH, the project would not result in impacts from: 1) routine transport, use, or disposal of hazardous materials; 2) foreseeable upset and accident release of hazardous materials; 3) emission or handling of hazardous materials, or 4) significant hazard to the public or the environment. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Airport and Aircraft Hazards
(Checklist Questions 5 and 6)

The River View/Irvine project site is not located within ¼ mile of a private airstrip and is outside the Mineta San José International Airport AIA. **(No Impact)**

4.8.3 Conclusion

Adoption of the proposed Sign Code Amendments would not result in any new or more significant hazards or hazardous materials impacts than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation)]**

The 101 Tech Sign would not result in any new or more significant hazards or hazardous materials impacts than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation)]**

The River View/Irvine Residential Signs would not result in any new or more significant hazards or hazardous materials impacts than addressed in the NSJ FPEIR. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation)]**

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 Setting

4.9.1.1 *Hydrology and Water Quality Context in the North San Jose Development Area*

The North San Jose Development Area is located within the alluvial plain of the Santa Clara Valley which is bounded by the Santa Cruz Mountains to the west and the Diablo Range to the east. It is within the Guadalupe River and Coyote Creek watersheds and generally drains in a northwest direction towards the Guadalupe River. Water collected by the storm drain system contains varying amounts of non-point source pollutants associated with urban uses (e.g., roadway/street contaminants, litter, maintenance, landscaping supplies, etc.).

According to the Flood Insurance Rate Maps (FIRMs) prepared by the US Federal Emergency Management Agency (FEMA), much of the North San Jose Development Area is within the 100-year floodplain of the Guadalupe River. Aquifers in the North San Jose Development Area occur at varying depths and groundwater is highest near the Guadalupe River and Coyote Creek. Because the area is flat, little to no erosion occurs. The North San Jose Development Area is served by eight main storm drainage systems that discharge into both the Guadalupe River and Coyote Creek.

4.9.1.2 *101 Tech Sign Project Site Hydrology and Water Quality*

Hydrology and Water Quality

The sign would be located in an urban area. Stormwater from the project site currently flows overland to drain into the City of San Jose storm drain system. The site is currently vacant and non-point source pollutants are primarily comprised of sediments. Excessive precipitation can carry these non-point pollutants into downstream waterways. Runoff from the project site eventually empties into the San Francisco Bay.

The nearest pump station to the project site is the Trimble Road pump station, serving the area between Trimble Road and US 101. The Trimble Road pump station has a pumping capacity of 600 cubic feet per second.

Flooding

Based on the FEMA FIRM[43], the project site is located within *"Zone X: Other Flood Areas"* which is defined as areas of 0.2 percent chance of flooding; areas of one percent chance of flooding with average depths of less than one foot with drainage for areas less than one square mile; and areas of protected levees from one percent annual chance of flood.

[43] Federal Emergency Management Agency (FEMA). Flood Insurance Rate Map, Community Panel Number 0603490068 H, dated May 18, 2009.

Seiches, Tsunamis, and Mudflows

A seiche is an oscillation of the surface of a lake or landlocked sea varying in period from a few minutes to several hours. There are no landlocked bodies of water near the project site that in the event of a seiche would affect the site.

A tsunami (or tidal wave) is a series of water waves caused by the displacement of a large volume of a body of water, such as an ocean or large lake. Due to the immense volumes of water and energy involved, tsunamis can devastate coastal regions. There are no bodies of water near the project site that in the event of a tsunami would affect the site.[44]

A mudflow is the rapid movement of a large mass of mud formed from loose soil and water. The project area is flat and there are no mountains near the site that in a mudflow will affect the site.

4.9.1.3 *River View/Irvine Residential Signs Project Site Hydrology and Water Quality*

Hydrology and Water Quality

Stormwater from the project site currently flows into the City of San Jose storm drain system. Construction on the River View/Irvine site is currently being completed. Compliance with the National Pollutant Discharge Elimination System (NPDES) General Construction Activity Stormwater Permit administered by the Regional Water Quality Control Board, and City Policy Number 6-29 to avoid significant impacts to water quality during construction activities, is required by the City of San Jose as part of conditions of approval for the development.

The nearest pump station to the project site is the River Oaks system, located adjacent to the southwest boarder of the project site. The River Oaks system includes a detention basin and has pumping capacity of 67 cubic feet per second.

Flooding

Based on the FEMA FIRM[45], the proposed residential signs would be located in an area subject to 100-year floods. Flooding in the project area could also occur if the adjacent Guadalupe River levee breaches as a result of earthquake induced liquefaction and lateral spreading under the levee, although the likelihood of such an event is unlikely. The signs would not be located in a dam failure inundation area.[46]

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[44] Association of Bay Area Governments. *Tsunami Inundation Map for Coastal Evacuation.* 2009. Available at: <http://quake.abag.ca.gov/tsunamis>. Accessed December 11, 2014.
[45] Federal Emergency Management Agency (FEMA). Flood Insurance Rate Map, Community Panel Number 0603490068 H, dated May 18, 2009.
[46] Envision 2040 San Jose General Plan. *ABAG Dam Failure Inundation Map.* Available at: *http://www.sanjoseca.gov/DocumentCenter/View/2203*. Accessed March 23, 2015.

Seiches, Tsunamis, and Mudflows

There are no landlocked bodies of water near the project site that in the event of a seiche would affect the site. There are no bodies of water near the project site that in the event of a tsunami would affect the site.[47] The project area is flat and there are no mountains near the site that in a mudflow will affect the site.

4.9.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒	☐	2,3,10 11
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒	☐	2,3,10 11
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on-or off-site?	☐	☐	☐	☒	☐	2,3

[47] Association of Bay Area Governments. *Tsunami Inundation Map for Coastal Evacuation.* 2009. Available at: <http://quake.abag.ca.gov/tsunamis>. Accessed March 24, 2015.

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on- or off-site?	☐	☐	☐	☒	☐	2,3,10 11
5. Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒	☐	2,3,10 11
6. Otherwise substantially degrade water quality?	☐	☐	☐	☒	☐	2,3,10 11
7. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒	☐	14
8. Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	☐	☐	☐	☒	☐	14
9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒	☐	2,10,11
10. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	☐	1

NSJ FPEIR - Hydrology and Water Quality Conclusions

The NSJ FPEIR identified significant hydrology and water quality impacts related to flooding, erosion during construction, and stormwater runoff. The NSJ FPEIR found that these impacts could be reduced to a less than significant level with implementation of mitigation measures.

4.9.2.1 *Hydrology and Water Quality Impacts of the Sign Code Amendments*

Water Quality and Flooding
(Checklist Questions 1-10)

Development, including the installation of signs, is required to comply with national, State, and local regulations regarding water quality and flooding. The Freeway Signs Code Amendment would allow an increase in the number of signs permitted adjacent to the freeways in the North San Jose Development Area, and the Residential Signs Code Amendment would allow installation of a freestanding sign on residentially zoned parcels in the North San Jose Development Area that support over 100 residential units, with an allowable sign height of five feet for each fifty units, up to 20 feet in height (currently the maximum allowed residential sign height is 15 feet).

Future signs which could be allowed with approval of the proposed Sign Code Amendments would comply with applicable regulations including the National Pollution Discharge Elimination System (NPDES) permit, City Policy 6-29[48], and the City's Flood Ordinance, which reduce water quality and flooding impacts to a less than significant level. With conformance to applicable regulations, including those described above and standard permit conditions during construction activities (see SM HYD-1, below), the signs would not result in violation of any water quality standards.

Signs generally have a minimal footprint and require minimal subsurface work. Signs, therefore, do not substantially alter the drainage pattern of a site, create a substantial amount of runoff, or impede flood flows. Signs are not occupied or inhabited, therefore, signs do not expose people to hazards from inundation, including seiche, tsunami, or mudflow. Signs do not require water use and, therefore, do not deplete groundwater supplies. For these reasons, the proposed Sign Code Amendments would not result in significant hydrology or water quality impacts. **[Same as Approved Project (Less Than Significant Impact with Mitigation)]**

4.9.2.2 *Hydrology and Water Quality Impacts of the 101 Tech Sign Project*

Operational Hydrology and Water Quality
(Checklist Questions 1 through 10)

Given the relatively small footprint of the base of the proposed sign (approximately 130 sf), installation of the sign would not measurably increase stormwater runoff from the 101 Tech Office/R&D site. The project would not result in significant water quality impacts with the implementation of standard measures consistent with the NPDES Permits and City policy requirements including City Policy 6-29, and the City's Flood Ordinance. The project site is flat; therefore, the potential for erosion on the site is low. Operation of the proposed project would not create substantial runoff, diminish water quality as a result of erosion, or otherwise substantially

[48] The City of San Jose Policy 6-29 requires all new and redevelopment projects to implement Post-Construction Best Management Practices (BMPs) and Treatment Control Measures (TCMs) to the maximum extent practicable. BMPs could include methods, activities, maintenance procedures, or other management practices designed to reduce the amount of stormwater pollutant loading from a site. TCMs are design measures, landscape characteristics, or permanent stormwater pollution prevention devices installed and maintained as part of a project to reduce stormwater pollution loading from a site.

degrade water quality. The proposed sign would be installed in conformance with the standard permit conditions proposed for development on the site as part of the 101 Tech Office/R&D Project, as described below.

Standard Permit Conditions: Consistent with measures in the certified 2005 NSJ FPEIR and the City's standard permit conditions, the project shall implement the following measure to reduce construction-related water quality impacts to a less than significant level.

SM HYD-1 The project shall comply with the NPDES General Construction Activity Stormwater Permit administered by the Regional Water Quality Control Board. Prior to construction or grading, a "Notice of Intent" (NOI) shall be filed to comply with the General Permit, and a Stormwater Pollution Prevention Plan (SWPPP) shall be prepared that addresses measures to minimize and control construction and post-construction runoff. Copies of the SWPPP shall be submitted to the City of San José Department of Public Works. The following measures shall be included in the SWPPP:

- Preclude non-stormwater discharges to the stormwater system.
- Incorporate effective, site-specific Best Management Practices for erosion and sediment control during the construction and post-construction periods.
- Cover soil, equipment, and supplies that could contribute pollution prior to rainfall events or monitor runoff.
- Perform monitoring of discharges to the stormwater system.
- Comply with the City's Grading Ordinance.

With implementation of the above standard permit conditions, the proposed project would not result in any new or more significant construction-related water quality impacts than identified in the NSJ FPEIR. **[Same as Approved Project (Less Than Significant Impact with Mitigation)]**

The project site is not located within a dam failure inundation zone, and due to existing protections in place to manage the structural integrity of dams, dam failure is unlikely. It is not probable that the project would be impacted by dam failure. The sign would not impede or redirect flood flows. The project site is not located within a 100-year flood plain and/or protected from 100-year floods by a levee, dike, or other structures. As discussed above in *Section 4.9.1.2*, the project site is not subject to seiche, tsunami, or mudflow. In addition, since the proposed sign would not be occupied or inhabited, the sign would not expose people to risk from dam inundation. The proposed project would not expose people to significant risks involving flooding or inundation and would not result in any new or more significant hydrology or water quality impacts than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

4.9.2.3 *Hydrology and Water Quality Impacts of the River View/Irvine Residential Signs Project*

Hydrology and Water Quality
(Checklist Questions 1 through 10)

Given the relatively small footprint of the proposed signs, installation of the signs would not measurably increase stormwater runoff from the River View/Irvine site. The project would not result in significant water quality impacts with the implementation of standard measures consistent with the NSJ FPEIR requirements (described in SM-1, above), the existing NPDES Permits, and City policy requirements including City Policy 6-29, and the City's Flood Ordinance. The project site is flat; therefore, the potential for erosion on the site is low. Operation of the proposed signs would not create substantial runoff, diminish water quality as a result of erosion, or otherwise substantially degrade water quality.

The River View/Irvine site is not located within a dam failure inundation zone, and due to existing protections in place to manage the structural integrity of dams, dam failure is unlikely. It is not probable that the project would be impacted by dam failure. Since the proposed signs would not be occupied or inhabited, the signs would not expose people to risk from dam inundation. The sign would not impede or redirect flood flows.

The River View/Irvine high density residential project was designed with 10 percent of the project site below the flood elevation. These areas will function as flood conveyance areas to minimize flooding across the site in a major flood event. This measure was incorporated into the project design on the River View/Irvine site to reduce flooding impacts on the site to a less than significant level.

As discussed above in *Section 4.9.1.3*, the project site is not subject to seiche, tsunami, or mudflow. The proposed project would not expose people to significant risks involving flooding or inundation and would not result in any new or more significant hydrology or water quality impacts than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

4.9.3 Conclusion

Adoption of the proposed Sign Code Amendments would not result in any new or more significant hydrology and water quality impacts than addressed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Installation of the proposed 101 Tech Sign would not result in any new or more significant hydrology and water quality impacts than addressed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Installation of the proposed River View/Irvine Residential Signs would not result in any new or more significant hydrology and water quality impacts than addressed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

4.10 LAND USE

4.10.1 Setting

4.10.1.1 *Land Use Context in the North San Jose Development Area*

The North San Jose Development Area is approximately six square miles and is located generally south of SR 237, east of the Guadalupe River, north and northwest of I-880, and west of Coyote Creek. A portion of the area extends east to Lundy Avenue. The North San Jose Development Area is a heavily developed urban environment comprised mostly of one- and two-story industrial buildings and warehouses, two- to five-story campus industrial parks, multi-tenant industrial complexes, and several high and medium-high density residential projects. The area has four and six-lane roadways, and is bracketed by three major freeways including SR 237, US 101, and I-880. North First Street has a Light Rail Transit line (LRT), as does Tasman Drive. Also located within the North San Jose Development Area are two card clubs, two mobile home parks, and retail commercial/hotel/office development along North First and North Fourth Streets.

Santa Clara Valley Habitat Plan

As discussed in *Section 4.4 Biological Resources*, subsequent to the certification of the NSJ FPEIR, the Santa Clara Valley Habitat Plans (VHP) was adopted. The VHP is a conservation program intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County. The entire North San Jose Development Area is located within the VHP study area.

Norman Y. Mineta San Jose International Airport Comprehensive Land Use Plan

The Norman Y. Mineta San Jose International Airport (Airport) is located just south of the North San Jose Development Area. As described in *Section 4.8, Hazards and Hazardous Materials*, the AIA is a composite of areas surrounding the airport that are affected by noise, height and safety considerations.[49] Properties 10, 11 (project site), 12, 13, 14, 15, and 16, and several residential parcels, as shown in Figure 4.8-1, are located in the AIA.

Applicable CLUP policies for development within the AIA include the following:

- **G-5:** Where legally allowed, dedication of an avigation easement to the City of San Jose shall be required to be offered as a conditions of approval on all projects located within the AIA.

- **G-6:** Any proposed uses that may cause a hazard to aircraft in flight are not permitted within the AIA. Such uses include electrical interference, high intensity lighting, attraction of birds, and activities that may produce smoke, dust, or glare.

[49] Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan: Norman Y. Mineta San Jose International Airport.* May 2011.

- **G-7:** All new exterior lighting within the AIA shall be designed so as to create no interference with aircraft operations. Such lighting shall be constructed and located so that only the intended area is illuminated and off-site glare is fully controlled. The lighting shall be arrayed in such a manner that cannot be mistaken for airport approach or runway lights by pilots.

- **H-2:** Any project that may exceed a FAR Part 77 surface must notify the FAA.

4.10.1.2 *101 Tech Sign Project Site Land Use*

The 12.9-acre 101 Tech Office/R&D site is located at the terminus of Atmel Way in North San Jose. The site is vacant, undeveloped land that is regularly mowed. Vegetation on the site consists of ruderal (weedy) grasses, and trees located along the project boundary for the adjacent Atmel research and development (R&D) facility northeast of the site.

The 101 Tech Office/R&D site is bound by the Guadalupe River to the west, US 101 to the south, and a modern, two-story R&D/office building with loading docks and surrounding surface parking to the northeast, adjacent to Atmel Way. To the north and northeast are several parcels of vacant, undeveloped land. To the west is the Guadalupe Parkway (SR 87).

The 101 Tech Office/R&D site is zoned *TEC- Transit Employment Center* and designated *Industrial Park* in the City General Plan.

Santa Clara Valley Habitat Plan

The 101 Tech Office/R&D site is located within the North San Jose Development Area, which is in the VHP area. The 101 Tech Office/R&D site is identified as *Burrowing Owl Occupied Habitat* in the VHP.

Airport Comprehensive Land Use Plan

As shown in Figure 4.8-1, the 101 Tech Office/R&D site is located within the AIA, as designated by the Airport CLUP.

4.10.1.3 *River View/Irvine Residential Signs Project Site Land Use*

The 26.80-acre River View/Irvine site is located at the intersection of N. 1st Street and River Oaks Parkway in North San Jose. The site is being developed with a high-density residential development.

Adjacent to the northern boundary of the River View/Irvine site is research and development (R&D) uses, east of the site across N. 1st Street is residential development and vacant land that is regularly tilled, south of the site is R&D uses, and west of the site is the Guadalupe River.

The River View/Irvine site is zoned A(PD)- Planned Development and is currently being developed with high-density residential land uses. The site is designated *IP-Industrial Park* in the City General Plan.

Santa Clara Valley Habitat Plan

The River View/Irvine site is located within the North San Jose Development Area, which is in the VHP area. The River View/Irvine site is identified as having possible habitat for Tricolored Blackbird in the VHP, although with development, this potential habitat is no longer present.

Airport Comprehensive Land Use Plan

The River View/Irvine site is not located within the AIA, as designated by the Airport CLUP.

4.10.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Physically divide an established community?	☐	☐	☐	☒	☐	1,2,3
2. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒	☐	2,3,4
3. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	☐	2,3,9

NSJ FPEIR - Land Use Conclusions

The NSJ FPEIR identified significant land use impacts related to incompatible residential development in proximity to industrial land uses, and increased traffic. The NSJ FPEIR found that with implementation of mitigation measures, impacts related to land use compatibility could be reduced to a less than significant level. Even with implementation of mitigation measures, impacts related to traffic congestion would remain a significant and unavoidable impact.

4.10.2.1 *Land Use Impacts of the Sign Code Amendments*

Land Use Conflicts
(Checklist Question 1)

Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project's design or scope. Depending on the nature of the impacts and their severity, land use compatibility conflicts can range from minor irritation and nuisance to potentially significant effects on human health and safety.

The Sign Code Amendments would allow signs that are not specifically allowed by the current Sign Code (Title 23). As discussed in Sections *4.3 Air Quality*, and *4.12 Noise*, the signs would not generate regular daily vehicle trips and would not include sound features, therefore, air pollutant emissions and noise associated with vehicle trips and general operation of the signs would be negligible.

Construction activities associated with signs could temporarily affect sensitive receptors including those near properties 1, 9, and 15, as shown in Figure 3.2-1, which are properties located in the vicinity of existing and/or planned residential development in the North San Jose Development Area. Additionally, signs associated with the Residential Signs Code Amendment would be located on residentially zoned parcels in North San Jose that are high density development types. Sections *4.3 Air Quality* and *4.12 Noise*, of this IS/Addendum discuss these issues in detail and conclude that air quality impacts to sensitive receptors during construction would be minimal due to the relatively minor excavation for construction of foundations, and relatively short construction schedule. Furthermore, all construction activities would be required to implement standard permit conditions to minimize construction-related noise levels near residential development or other sensitive receptors to reduce noise impacts to a less than significant level.

As described in *Section 4.8, Hazards and Hazardous Materials*, compliance with the applicable regulations and policies of the FAA and the City would provide compatibility with the ALUC's CLUP for San Jose International Airport. As described in *Section 4.16 Transportation*, the freeway signs would be designed in conformance to City and State regulations and policies pertaining to brightness restrictions to promote motorist safety along the adjacent freeways. Lighting on the residential signs would be minimal and would not result in significant light or glare.

Approval of the proposed Sign Code Amendments would not result in a new or more significant land use compatibility impact than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

<u>Dividing an Established Community</u>

The signs permitted under the proposed Freeway Signs Code Amendment would be located adjacent to freeways, which are high-traffic roadways that create a division in the landscape, and on developed residential properties. Both the freeway signs and residential signs would have a relatively small footprint compared to the development on each respective property. The signs would

be installed within the boundaries of each property. The signs would not physically divide established communities. **[Same Impact as Approved Project (No Impact)]**

Consistency with Applicable Plans, Policies, and Regulations
(Checklist Question 2)

Airport Comprehensive Land Use Plan

Since the proposed signs would not be occupied or inhabited, the project's consistency with the Airport's 65 CNEL noise contour and safety zones established to minimize the number of people exposed to aircraft noise and potential accidents are not applicable, and are not discussed further.

As described in *Section 3.3.1 Project Description*, for future freeway signs, including programmable electronic signs, the project-specific environmental review which would be required as part of the Development Permit approval process would include consideration of safety hazards to pilots and/or air traffic controllers. The design review that would be required for the residential signs would include a review of the location and design of the proposed signs, and a finding must be made to confirm that each proposed sign would not create any safety hazard. As discussed in *Section 4.8 Hazards and Hazardous Materials*, sign structures that are required to be submitted to the FAA for airspace safety review will need to obtain "no hazard" determinations prior to approval, with any conditions of the FAA determinations incorporated into City project approval consistent with City General Plan Policy TR-14.2. The project-specific environmental review and/or design review for each sign would confirm compliance of each respective sign to applicable CLUP policies, as described in Section 4.10.1.1, above. With compliance to applicable CLUP policies, approval of the Sign Code Amendments would not conflict with the CLUP. **[Same Impact as Approved Project (Less Than Significant Impact)]**

City Policies and Regulations

Community Design

In 2009, the City of San Jose completed a report that evaluated different types of signs. The report described how signs play a significant role in the visual environment of a city in that they are prominent structures that are typically, and deliberately, highly visible in the public realm. The report determined that billboards are more prominent than most other signs due to their size and height. A review of billboards in two study census tracts indicated that billboard structures, like their messages, are generally unrelated to the local setting. Unlike 'way-finding' signs for local businesses which often reflect the architectural design of the building or the character of the neighborhood, as proposed by the project, billboard structures are often awkwardly placed, do not relate to the buildings or sites they occupy, and look much the same in any given location.[50]

The City of San Jose Urban Design Guidelines includes a goal to create and maintain Gateways into the North San Jose Development Area by utilizing distinct signage so that motorists know they are

[50] City of San Jose. 2009. *Billboard on Private Property and Advertising on City Property.* Available at: http://www.sanjoseca.gov/DocumentCenter/View/676. Accessed December 15, 2014.

entering a unique District. Signage associated with urban development was envisioned as a part of the long-term framework in the North San Jose Development Area.

The project would allow installation of a freestanding sign on parcels in the North San Jose Development Area that support over 100 residential units, with an allowable sign height of five feet for each fifty units, up to 20 feet in height (currently the maximum allowed residential sign height is 15 feet). The proposed project would also allow for the placement of programmable electronic 'way-finding' signs for office/R&D sites located adjacent to the freeway at an estimated 16 locations within the North San Jose Development Area. Several intersections are specifically identified as gateways in the North San Jose Urban Design Guidelines including: US 101/Zanker Road, US 101/N. 1st Street, US 101/SR 87, US 101/Trimble Road, I-880/Brokaw Road, I- 880/Montague Expressway, I-880/Tasman Drive, SR 237/Zanker Road, and SR 237/N. 1st Street. Views from the gateways are typically of urban development with distant views of the foothills.

Gateways in the North San Jose Development Area identified in the City's General Plan include North First Street at SR 237 and near Charcot Avenue, Brokaw Road at I-880, and Guadalupe Parkway east of US 101.

Freeway signs would be subject to the provisions of Section 23.02.905(I) of the Sign Code which stipulates that programmable electronic freeway signs may display only on-site commercial or non-commercial messages. All signs (freeway and residential) would be subject to design-review, which would require that signs be designed with architectural details that complement the design of the properties where they are placed. Approval of the Sign Code Amendments would not conflict with the City's North San Jose Urban Design Guidelines or City General Plan which seek to maintain attractive Gateways in the North San Jose Development Area. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Hazards

The current Sign Code for residential signs allows illumination by external lighting, halolighting, and internal lighting if only the letters or symbols are illuminated. Additionally, only continuous lighting may be used. The lighting allowed on residential signs is minimal and placing a lit residential sign five feet higher than currently allowed in the North San Jose Development Area (at 20 feet instead of the currently allowed 15 feet), as proposed by the Residential Signs Code Amendment, would not create a new source of substantial light or glare. The Residential Signs Code Amendment would not result in visual impairments to motorists or create safety hazards to Airport operations.

Programmable electronic freeway signs approved on office/R&D sites as proposed by the project would be subject to the same regulations as programmable electronic freeway signs on commercial properties, as detailed in Section 23.04.035 of the Sign Code. These regulations include limits on sign quantity, size, height, location, and orientation. Additionally, all future programmable electronic freeway signs would be required to conform to the requirements listed in Section 23.02.905 of the Sign Code, which includes regulations to avoid visual impairments to motorists and operational standards to reduce safety hazards to Airport operations to a less than significant level. As described in detail in *Section 4.8 Hazards and Hazardous Materials,* the signs would be designed in conformance with City and State policies to avoid impacts from luminance and illumination to

airport safety and motorists on US 101. As described in *Section 4.8 Hazards and Hazardous Materials,* the project would not conflict with City policies pertaining to hazards or hazardous materials. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Riparian Setbacks and Birds

New development would be required to implement City General Plan policies and conform to applicable local and State regulations and plans to reduce impacts to riparian and/or sensitive habitats and special-status species (e.g., burrowing owl) to a less than significant level. The City of San Jose also has a Riparian Corridor Policy Study (1999) which states that development adjacent to riparian habitats should be set back 100 feet from the outside edge of the riparian habitat (or top of bank, whichever is greater) to reduce anticipated impacts to riparian biotic communities and hydrologic regimes.

In order to comply with State policies related to birds and City policies related to riparian corridors, future freeway signs would be evaluated at a project-level with impacts dependent on the types and brightness of lights used, presence or absence of shaders (to direct lights down instead of up toward the sky), location and orientation of the sign in relation to riparian corridors, potential impacts to nest sites, etc. The residential signs allowed under the Residential Signs Code Amendment would not include substantial light or glare and these signs would comply with the required 100-foot riparian setback as described in key policies from the Riparian Corridor Policy Study.

With project-level review and/or design-review completed prior to approval, the signs would be designed to avoid impacts to migratory birds and local wildlife movement as required by City Policies and regulations. **[Same Impact as Approved Project (Less Than Significant Impact)]**

<u>Federal and State Regulations</u>

The California Outdoor Advertising Act and the Federal Highway Beautification Act are both laws that apply to advertising signs along primary highways and freeways. The California Outdoor Advertising Act is implemented through regulations adopted by the California Department of Transportation (CalTrans).

The Acts generally do not regulate on-site signage in urban areas, but to be considered on-site signage a sign located within 660 feet of the highway right-of-way must generally be located within 1,000 feet of the location on which the related business is being conducted, or the entrance to such business. The Acts also specify that if an on-site sign is located within 660 feet of the highway right-of-way, and it is a message center display (programmable electronic sign), the sign cannot be located within 1,000 feet of another message center display on the same side of the highway. The distance between future freeway signs located within 660 feet of the freeway right-of-way would be consistent with the requirements of the State of California Outdoor Advertising Act which, as described above, requires 1,000 feet between programmable electronic signs along the same side of a freeway. Further, the Acts generally prohibit signs within 300 feet of the point of intersection of a highway or highway and railroad lines, and signs that could prevent any traveler of the highway from having a clear view of approaching vehicles for a distance of at least 500 feet.

The provisions of the Acts, including distance/orientation requirements would be applicable to all future freeway signs which could be allowed with approval of the Freeway Signs Code Amendment. Additionally, N. 1st Street is a designated National Highway System Route, therefore, provisions of the Acts for non-programmable signs including distance/orientation requirements would be applicable to future signs along this corridor, which could be allowed with approval of the Residential Signs Code Amendment.

As part of the project-level review, future freeway signs allowed by the Sign Code Amendments would be required to conform to the State Vehicle Code which limits the brilliance of signs so that their maximum light output would not exceed 1,000 times the minimum measured brightness in a driver's field of view, within ten degrees of that field of view. The Freeway Signs Code Amendment would not conflict with State policies pertaining to the brightness of lights. The residential signs allowed under the Residential Signs Code Amendment would have minimal lighting and would not result in substantial light or glare. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Consistency with the Santa Clara Valley Habitat Conservation Plan
(Checklist Question 3)

The North San Jose Development Area is located within the VHP study area and all sign installations would be subject to applicable VHP fees, including burrowing owl fees as described above. Installation of signs in the North San Jose Development Area would not, therefore, conflict with an adopted Habitat Conservation Plan. **(Same Impact as Approved Project [Less Than Significant Impact)]**

4.10.2.2 *Land Use Impacts of the 101 Tech Sign Project*

Land Use Conflicts
(Checklist Question 1)

Land Use Compatibility

As discussed in Sections *4.3 Air Quality*, and *4.12 Noise*, the sign would not generate regular daily vehicle trips and would not include sound features, therefore, air pollutant emissions and noise associated with vehicle trips and general operation of the sign would be negligible. Construction of the sign would result in a temporary increase of localized air pollutant emissions and noise, however, construction activities associated with the sign would last less than one year and there are no sensitive receptors located within one mile of the 101 Tech Office/R&D site that could be affected as the sign is being installed. As described in *Section 4.8 Hazards and Hazardous Materials*, installation of the sign at the proposed location would not result in a significant hazard to airport operations, and the sign would be required to obtain an FAA determination of 'no hazard' prior to installation. As described in *Section 4.16 Transportation*, the signs would be designed in conformance to City and State regulations and policies pertaining to brightness restrictions to promote motorist safety along adjacent freeways.

The proposed sign would not result in a new or more significant land use compatibility conflict than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Dividing an Established Community

The proposed sign would be located adjacent to US 101, which is a high-traffic roadway that creates a division in the landscape. The sign would have a relatively small footprint compared to the office/R&D development it would support. The sign would identify occupants of the office/R&D development and would be installed within the boundaries of the existing property. The sign would not physically divide an established community. **[Same Impact as Approved Project (No Impact)]**

Consistency with Applicable Plans, Policies, and Regulations
(Checklist Question 2)

Airport Comprehensive Land Use Plan

According to the Airport's CLUP, the 101 Tech electronic programmable freeway sign is proposed within the AIA. As discussed in *Section 4.8, Hazards and Hazardous Materials*, sign structures that are required to be submitted to the FAA for airspace safety review will need to obtain "no hazard" determination prior to approval, with any conditions of the FAA determinations incorporated into City project approval consistent with City General Plan Policy TR 14.2. In addition, pursuant to CLUP and City General Plan policy, the 101 Tech project is already required to grant an avigation easement to the City setting forth acceptance of elevation restrictions and aircraft noise impacts over the entire project property.

Glare and Safety Hazards

Given the proximity of the proposed sign to the Airport, light and glare from the sign could result in potential hazards to Airport operations. Specifically, the proposed sign could impair the vision of air traffic controllers and/or pilots. Glare and safety hazard impacts of the proposed sign on pilots and air traffic controllers are discussed in detail in *Section 4.8 Hazards and Hazardous Materials.* As concluded in *Section 4.8*, the sign would not result in significant glare or safety hazards to air traffic controllers or pilots.

Based on the above discussion, the project would not conflict with the CLUP or result in a new land use that would conflict with the Airport or Airport operations at a level that would be more significant than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

City Policies and Regulations

Community Design

The project requires approval of an amendment to the City's Sign Code to allow programmable electronic freeway signs on Office/R&D sites in the North San Jose Development Area that meet specified criteria (less than 10 acres in size with at least 800 linear feet of freeway frontage).

Hazards

The proposed sign is not a billboard and would act as a 'way-finding' sign to support occupants of the 101 Tech Office/R&D site. The project would not conflict with North San Jose Development Area policies which seek to maintain attractive Gateways into San Jose. Furthermore, Section 23.04.035(E)(4) of the Sign Code requires approval of a Development Permit for all freeway signs. Approval of the Development Permit would include a review of the sign's architectural details to confirm that the sign is compatible with planned Office/R&D development on the site.

In order to avoid adverse effects to motorists on US 101, the proposed sign would be designed in conformance to the applicable sections of the City's Sign Code, primarily Sections 23.04.035 and 23.02.905 as discussed above in *Section 4.10.2.1*.

Riparian Setbacks and Birds

In conformance with key policies in the City Riparian Corridor Policy Study, the sign would be located approximately 160 feet from the Guadalupe River top-of bank, and as described in *Section 4.4, Biological Resources,* a project-level study was completed for the sign which confirmed that the sign would not significantly affect birds or riparian habitat (see Appendix B).

The project would not conflict with community design standards, Sign Code regulations, the Riparian Corridor Policy Study, or any City policies that were adopted to avoid an environmental impact. **[Same Impact as Approved Project (Less Than Significant Impact)]**

State Regulations

To avoid adverse effects on motorists, the proposed sign would be designed in conformance to the State Vehicle Code as part of the Site Development Permit approval. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Consistency with the Santa Clara Valley Habitat Plan
(Checklist Question 3)

As discussed in *Section 4.4 Biological Resources,* the project site is identified in the VHP as *Burrowing Owl Occupied Habitat*, therefore, pre-construction surveys are required prior to any construction activities at the site. With design, installation, and operation of the freeway sign in conformance with the project-specific conditions in the VHP, and with payment of applicable fees,

the 101 Tech Sign would not conflict with the provisions of the VHP. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.10.2.3 *Land Use Impacts of the River View/Irvine Residential Signs Project*

Land Use Conflicts
(Checklist Question 1)

As discussed in Sections *4.3 Air Quality,* and *4.12 Noise,* the proposed residential signs would not generate regular daily vehicle trips and would not include sound features, therefore, air pollutant emissions and noise associated with vehicle trips and general operation of the signs would be negligible. Construction of the signs would result in a temporary increase of localized air pollutant emissions and noise, however, construction activities associated with the signs would be temporary and short of duration (less than two months). The signs would not be in the AIA and would not, therefore, result in a significant hazard to airport operations. Lighting permitted on residential signs is minimal and the signs would not result in a traffic safety hazard. The proposed signs would not result in a new or more significant land use compatibility conflict than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Consistency with Applicable Plans, Policies, and Regulations
(Checklist Question 2)

Community Design

The project proposes two residential signs, up to 20 feet in height, on a property being developed with over 1,000 residential units. Title 23 of the City's Municipal Code (Sign Code) currently allows signs on residential properties that are 15 feet in height, maximum. The project requires approval of an amendment to the City's Sign Code to allow residential developments with one hundred residential units or more that meet size and design standards to install freestanding signs with a maximum height of up to twenty feet.

Hazards

The proposed signs would act as 'way-finding' signs to support residential development on the River View/Irvine site. Per the Municipal Code Title 23, residential signs may be allowed illumination by external lighting, halolighting, and internal lighting if only the letters or symbols are illuminated. Only continuous lighting may be used. The lighting allowed on residential signs is minimal and placing a lit residential sign five feet higher than currently allowed in the North San Jose Development Area (at 20 feet instead of 15 feet), as proposed on the River View/Irvine site, would not create a new source of substantial light or glare that would represent a hazard.

Consistency with the Santa Clara Valley Habitat Plan
(Checklist Question 3)

With design, installation, and operation of the residential signs in conformance with the project-specific conditions in the VHP, and with payment of applicable fees, the River View/Irvine

Residential Signs would not conflict with the provisions of the VHP. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.10.3 Conclusion

The proposed Sign Code Amendments would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, or result in any new or more significant land use impacts than addressed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Installation of the proposed 101 Tech Sign would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, or result in any new or more significant land use impacts than addressed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Installation of the River View/Irvine Residential Signs would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, or result in any new or more significant land use impacts than addressed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

4.11 MINERAL RESOURCES

4.11.1 Setting

4.11.1.1 *Mineral Resources Context in the North San Jose Development Area, and the 101 Tech Sign and River View/Irvine Residential Signs Projects*

Extractive resources known to exist in and near the Santa Clara Valley include cement, sand, gravel, crushed rock, clay, and limestone. Santa Clara County has also supplied a significant portion of the nation's mercury over the past century. Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board has designated the Communications Hill Area (Sector EE), bounded generally by the Southern Pacific Railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue as containing mineral deposits that are of regional significance as a source of construction aggregate materials. Neither the State Geologist nor the State Mining and Geology Board has classified any other areas in San Jose as containing mineral deposits of statewide significance or the significance of which requires further evaluation.

The North San Jose Development Area, including the 101 Tech Sign Site, is within a developed urban area and does not contain any known or designated mineral resources.

4.11.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒	☐	2,3,10, 11
2. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒	☐	2,3,10 11

NSJ FPEIR - Mineral Resources Conclusions

The NSJ FPEIR did not evaluate mineral resources, however, as required as part of the CEQA checklist, mineral resources have been evaluated as part of this Initial Study/Addendum.

4.11.2.1 *Mineral Resources Impacts of the Sign Code Amendments*

The proposed Sign Code Amendments would affect signs permitted in the North San Jose Development Area. The Communications Hill Area, which is identified as containing mineral resources, is located over five miles south of the North San Jose Area. Installation of additional signs in the North San Jose Development Area would not impact mineral resources beyond what was described in the NSJ FPEIR. **(No Impact)**

4.11.2.2 *Mineral Resources Impacts of the 101 Tech Sign and River View/Irvine Residential Signs Projects*

The proposed signs are located in the North San Jose Development Area which, as described above, is five miles from the Communications Hill area. Installation of the proposed signs would not impact mineral resources beyond what was described in the NSJ FPEIR. **(No Impact)**

4.11.3 Conclusion

Adoption of the proposed Sign Code Amendments would result in a less than significant impact to mineral resources. **(No Impact)**

Installation of the proposed 101 Tech Sign and/or the River View/Irvine Residential Signs would result in a less than significant impact to mineral resources. **(No Impact)**

4.12 NOISE

4.12.1 Setting

4.12.1.1 *Noise Context in the North San Jose Development Area*

As described in the NSJ FPEIR, the noise environment in the North San Jose Development Area is defined primarily by vehicular traffic along arterial roadways, and aircraft associated with the Norman Y. Mineta International Airport (Airport). Portions of the area to the north and east of the Airport are within the 60 CNEL noise contour.

4.12.1.2 *101 Tech Sign Project Site Noise*

The 101 Tech Sign would be located at the terminus of Atmel Way, near the intersection of Atmel Way and Orchard Parkway. The site is currently undeveloped. The noise environment at the project site primarily results from transportation noise sources in the site vicinity including traffic on US 101 and SR-87, and aircraft from the Airport.

As described in the 2040 General Plan FPEIR, noise levels in the project area range from 60 to 71 dBA DNL.[51]

According to the Airport Master Plan EIR, the western portion of the project site falls within the projected 65-70 dB CNEL[52] noise contour impact area, with the remainder of the site falling within the projected 60-65 dB CNEL noise contour.

4.12.1.3 *River View/Irvine Residential Signs Project Site Noise*

The River View/Irvine Residential Signs would be located along the N. 1st Street frontage between River Oaks Parkway and planned Skytop Street in North San Jose. The site is being developed with a high-density residential development. The noise environment at the project site primarily results from transportation noise sources in the site vicinity including traffic on N. 1st Street, VTA light rail trains, and aircraft. Noise levels in the project area range from 61 to 65 dBA DNL.[53]

4.12.1.4 *Noise Standards*

Table 4.12-1 shows the noise levels considered consistent with specific land uses in the City of San Jose. For office and commercial uses, outdoor noise levels of up to 70 decibels are considered satisfactory and up to 75 decibels are permitted for new development if the indoor noise level does not exceed 45 decibels and outdoor uses are limited to acoustically protected areas. The projects, 101 Tech and River View/Irvine, must meet the Performance Standards of their applicable zoning districts. The 101 Tech site is in the *IP* zoning district, and River View/Irvine site is zoned *A(PD)*.

[51] The Day/Night Average Sound Level (DNL). The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
[52] The Community Noise Equivalent Level (CNEL). A 24-hour equivalent continuous level in dBA where 5 dBA is added to evening noise levels from 7:00 p.m. to 10:00 p.m. and 10 dBA is added to nighttime noise levels from 10:00 p.m. to 7:00 a.m.
[53] City of San Jose. *Wyse Property Project Addendum to the NSJ FPEIR.* January 2008.

The Noise Performance Standards (Municipal Code *requirements*) of the residential, commercial, and industrial zoning districts apply, as follows:

Table 4.12-1: Noise Performance Standards for Conventional Zoning Districts

	Maximum Noise Level in Decibels at Property Line
Uses adjacent to a property used or zoned for residential purposes	55
Uses adjacent to a property used or zoned for commercial purposes	60
Uses adjacent to a property used or zoned for industrial or use other than commercial or residential purposes	70

Per General Plan Policy EC-1.2, the City considers significant noise impacts to occur if a project would:

- Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain "Normally Acceptable" [in the Land Use Compatibility Guidelines]; or

- Cause the DNL at noise sensitive receptors to increase by three dBA DNL or more where noise levels would equal or exceed the "Normally Acceptable" level [in the Land Use Compatibility Guidelines].

4.12.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project result in:						
1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒	☐	2,3
2. Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒	☐	2,3

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project result in:						
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒	☐	2,3
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒	☐	2,3
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	☐	2,3,10 11
6. For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	☐	1

NSJ FPEIR - Noise Conclusions

The NSJ FPEIR identified significant noise impacts related to the placement of noise sensitive receptors in areas with elevated noise levels, noise from increased traffic on roadways, and noise from construction activities. All noise impacts were reduced to a less than significant level with mitigation incorporated, with the exception of increased traffic noise on the roadways from increased development.

4.12.2.1 *Noise Impacts of the Sign Code Amendments*

Operational Noise Impacts

(Checklist Questions 1, 2, 3, 5 and 6)

Signs are not occupied or inhabited by people. Therefore, installation of signs would not expose people to excessive noise levels from operation, aircraft, or traffic beyond what was described in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

All future signage that might make noise would be required to meet the Zoning Ordinance noise performance standards and would be required to demonstrate that noise from the signs would be at levels below City thresholds. **[Same Impact as Approved Project (Less Than Significant Impact)]**

The NSJ FPEIR concluded that buildout of the NSJ Development Area would result in significant unavoidable noise impacts to sensitive receptors along certain roadways due to increased traffic. Once installed, the signs would generate less than one traffic trip per month and would not otherwise generate noise from operation. The proposed Sign Code Amendments would not result in significant noise impacts to sensitive receptors beyond those discussed in the NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

Construction Noise Impacts
(Checklist Question 4)

The Sign Code Amendments would allow an increase of signs permitted adjacent to freeways in the North San Jose Development Area. Properties 1, 9, and 15, as shown in Figure 3.2-1, are located in the vicinity of existing and/or planned residential development. Signs allowed under the Residential Signs Code Amendment would be located on residential properties. The construction of signs would generate noise; however, all construction activities would be required to comply with the City's standard permit conditions for construction noise to minimize noise levels near residential development or other sensitive receptors (refer to Section 4.12.2.2, below).

In addition to the standard permit conditions, signs near residential development would be required to comply with the City's Municipal Code which restricts construction hours within 500 feet of a residential unit to 7:00 AM to 7:00 PM Monday through Friday, unless otherwise expressly allowed in a Development Permit or other planning approval.[54] With implementation of standard measures and restrictions to the hours of construction, short-term construction noise and vibration impacts would be reduced to a less than significant level. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Airport Noise
(Checklist Question 5 and 6)

Signs are not inhabited by people and approval of future signs would not, therefore, result in the placement of people in an area that is impacted by airport noise. **[Same Impact as Approved Project (No Impact)]**

[54] The Municipal Code does not establish quantitative noise limits for demolition or construction activities occurring in the City.

4.12.2.2 *Noise Impacts of the 101 Tech Sign Project*

Operational Noise Impacts from the Proposed Sign
(Checklist Questions 1, 2, 3, 5 and 6)

The 101 Tech Sign, which would be installed as part of a planned office/R&D development, would not have speakers or other noise/audio-emitting hardware and would not be occupied or inhabited by people. Therefore, operation of the 101 Tech Sign would not expose people to excessive noise levels from operation, aircraft, or traffic beyond what was described in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

The NSJ FPEIR concluded that buildout of the North San Jose Development Area would result in significant unavoidable noise impacts to sensitive receptors along certain roadways due to increased traffic. The proposed sign would not generate vehicle trips on a regular basis. Maintenance of the proposed sign would generate occasional trips, as needed, but these trips would be minimal (less than one per month). The sign would not result in traffic trips that would increase noise levels on roadways beyond noise levels discussed in the NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

Construction Noise Impacts
(Checklist Question 4)

There are no sensitive receptors (i.e. residential development, schools, etc.) located within one mile of the 101 Tech Sign project site. The project would result in a short-term increase in noise levels in the project area during construction activities, but would not adversely affect any noise-sensitive uses. Additionally, the project would be required to implement the City's standard permit conditions for construction noise.

Standard Permit Condition: Consistent with measures in the NSJ FPEIR and the City's standard permit conditions, the following measures shall be implemented during project construction to minimize noise.

SM NOI-1 The following measures shall be implemented during all construction activities.

- Utilize 'quiet' models of air compressors and other stationary noise sources where technology exists.
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent land uses.
- Locate staging areas and construction material areas as far away as possible from adjacent land uses.
- Prohibit all unnecessary idling of internal combustion engines.

- If impact pile driving is proposed, multiple-pile drivers shall be considered to expedite construction. Although noise levels generated by a single pile driver, the total duration of pile driving activities would be reduced.
- If impact pile driving is proposed, temporary noise control blanket barriers shall shroud pile drivers or be erected in a manner to shield the adjacent land uses. Such noise control blanket barriers can be rented and quickly erected.
- If impact pile driving is proposed, foundation pile holes shall be pre-drilled to minimize the number of impacts required to seat the pile. Pre-drilling foundation pile holes is a standard construction noise control technique. Pre-drilling reduces the number of blows required to seat the pile. Notify all adjacent land uses of the construction schedule in writing.
- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the case of the noise complaint (e.g. starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. The telephone number for the disturbance coordinator at the construction site will be posted and included in the notice sent to neighbors regarding the construction schedule.

Construction of the proposed sign would not result in a new or more significant construction noise impact than previously described in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

4.12.2.3 *Noise Impacts of the River View/Irvine Residential Signs Project*

Operational Noise Impacts from the Proposed Sign
(Checklist Questions 1, 2, 3, 5 and 6)

The River View/Irvine Residential Signs, which would be installed as part of the high density residential development currently being constructed on the site, would not have speakers or other noise/audio-emitting hardware and would not be occupied or inhabited by people. Therefore, operation of the signs would not expose people to excessive noise levels from operation, aircraft, or traffic beyond what was described in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

Construction Noise Impacts
(Checklist Question 4)

Consistent with measures in the NSJ FPEIR and the City's standard permit conditions, the signs would be installed in accordance with SM-1, described above, to minimize noise during construction. Construction of the proposed signs in accordance with SM NOI-1 would not result in a new or more significant construction noise impact than previously described in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

4.12.3 Conclusion

The Sign Code Amendments would not result any in new or more significant noise impacts than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

The 101 Tech Sign would not result in new or more significant noise impacts than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

The River View/Irvine Residential Signs would not result in new or more significant noise impacts than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

4.13 POPULATION AND HOUSING

4.13.1 Setting

4.13.1.1 *Population and Housing Context in the North San Jose Development Area, and for the 101 Tech Sign and River View/Irvine Residential Signs Projects*

According to California Department of Finance 2010 census data estimates for 2014, San Jose has a population of 1,000,536 persons. As of 2014 the City of San Jose had approximately 323,203 households with an average of 3.18 persons per household[55] and 505,571 persons in the workforce (which is an average of 1.56 employed residents per household).[56] According to the City's 2040 General Plan, the projected population in 2035 will be 1.3 million persons occupying 429,350 households.

The jobs/housing balance is the relationship between the number of housing units required as a result of local jobs and the number of residential units available in the City. This relationship is quantified by the jobs/employed resident ratio. When the ratio reaches 1.0, a balance is struck between the supply of local housing and local jobs. The jobs/employed resident ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing.

In 2011, San Jose had a higher number of employed residents than jobs (approximately 0.8 jobs per employed resident) but this trend is projected to reverse with full build-out under the current General Plan.

4.13.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒	☐	1,2,3

[55] California Department of Finance *Table 2: E-5 City/County Population and Housing Estimates.* January 1, 2014. Available at: http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php. Accessed August 11, 2014.

[56] State of California Department of Finance. *2008-2012 American Community Survey 5-Year Estimates.* 2012. Available at: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1&prodType=table Accessed January August, 2014.

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	☐	1,2,3
3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	☐	1,2,3

NSJ FPEIR - Population and Housing Conclusions

The NSJ FPEIR did not identify any significant impacts related to population and housing. The NSJ FPEIR disclosed that development and redevelopment in the North San Jose Development Area will increase both jobs and housing. The land use changes would result in a greater increase in jobs than housing, which is consistent with the City's General Plan policies.

4.13.2.1 *Population and Housing Impacts of the Sign Code Amendments*

Population Growth and People/Housing Displacement
(Checklist Questions 1, 2, and 3)

Signs do not induce population growth. The signs that could be allowed under the Sign Code Amendments would be placed adjacent to the North San Jose Development Area freeways to identify occupants of the office/R&D development on each respective property, and on residential properties supporting 100 or more residential units. The signs would have relatively small foundations and would not displace people or housing or induce substantial growth. The Sign Code Amendments would not result in any new or more significant impacts to population and housing than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.13.2.2 *Population and Housing Impacts of the 101 Tech Sign and River View/Irvine Residential Signs Projects*

Population Growth and People/Housing Displacement
(Checklist Questions 1, 2, and 3)

As discussed above, while implementation of the North San Jose Development Policies would induce planned population growth through the provision of additional employment, signs do not induce population growth. There are no existing residences on the project site that would be displaced by the proposed signs. The proposed signs would not result in any new or more significant impacts to population and housing than identified in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.13.3 Conclusion

The Sign Code Amendments would not result in any new or more significant impacts to population or housing than discussed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

The proposed 101 Tech Sign and River View/Irvine Residential Signs projects would not result in any new or more significant impacts to population or housing than discussed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.14 PUBLIC SERVICES

4.14.1 Setting

4.14.1.1 *Public Services Context in the North San Jose Development Area, and for the 101 Tech Sign and River View/Irvine Residential Signs Projects*

Fire protection in the North San Jose Development Area is provided by the San Jose Fire Department (SJFD). The nearest fire station to the 101 Tech site is Station 5 located at 1380 North 10th Street. The nearest fire station to the River View/Irvine Residential Signs site is Station 29 located at 199 Innovation Drive. Police protection services in the North San Jose Development Area are provided by the San Jose Police Department (SJPD). Officers patrolling the City are dispatched from police headquarters located at 201 West Mission Street. The Riverview Residential Signs project site is located in the Santa Clara Unified School District.[57]

4.14.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:						
Fire Protection?	☐	☐	☐	☒	☐	1,2,3
Police Protection?	☐	☐	☐	☒	☐	1,2,3
Schools?	☐	☐	☐	☒	☐	1,2,3
Parks?	☐	☐	☐	☒	☐	1,2,3
Other Public Facilities?	☐	☐	☐	☒	☐	1,2,3

[57] Santa Clara Unified School District. *School Finder*. Available at: http://www.schfinder.com/SantaClaraUSD/. Accessed March 24, 2015.

NSJ FPEIR - Public Services Conclusion

While implementation of the North San Jose Development Policy would incrementally increase the demand for public services, the NSJ FPEIR did not identify any significant impacts related to public services.

4.14.2.1 *Public Services Impacts of the Sign Code Amendments*

Public Services Impact Summary
(Checklist Question 1)

Signs constructed as a result of the Sign Code Amendments would not be a typical use such as residential, commercial, or industrial, that would generate demand for public services including fire and police protection, schools, parks, and other public facilities (such as libraries and community centers). Signs do not generate demand for public services because they are not occupied or inhabited by people. The proposed Sign Code Amendments would not have a significant impact on public services. **[Same Impact as Approved Project (No Impact)]**

4.13.2.2 *Public Services Impacts of the 101 Tech Sign and River View/Irvine Residential Signs Projects*

Public Services Impact Summary
(Checklist Question 1)

As described above, signs do not generate demand for public services because they are not occupied or inhabited by people. The proposed signs would not have a significant impact on public services. **[Same Impact as Approved Project (No Impact)]**

4.14.3 Conclusion

The Sign Code Amendments would not result in new or more significant impacts to public services than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (No Impact)]**

The proposed 101 Tech Sign and River View/Irvine Residential Signs Projects would not result in new or more significant impacts to public services than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (No Impact)]**

4.15 RECREATION

4.15.1 Setting

4.15.1.1 *Recreation Context in the North San Jose Development Area, and for the 101 Tech Sign and River View/Irvine Residential Signs Projects*

The City of San José owns and maintains approximately 3,491 acres of parkland, including neighborhood parks, community parks, and regional parks. The City also has 12 community centers hubs, and 42 neighborhood reuse centers. Other recreational facilities include seven public skate parks, five swimming pools, joint use facilities and over 55 miles of trails.

4.15.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☐	☒	☐	1
2. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒	☐	1

NSJ FPEIR - Recreation Conclusion

The NSJ FPEIR did not identify any significant impacts related to the provision of recreational facilities for planned residential development in the North San Jose Development Area.

4.15.2.1 *Recreational Impacts of the Sign Code Amendments*

Recreational Facilities Impact Summary
(Checklist Questions 1 and 2)

Signs installed as a result of the Sign Code Amendments are not a typical use, such as residential or commercial, that would generate demand for recreational facilities. The proposed Sign Code Amendment would not have a significant impact on recreational facilities. **[Same Impact as Approved Project (No Impact)]**

4.15.2.2 *Recreational Impacts of the 101 Tech Sign and River View/Irvine Residential Signs Projects*

Recreational Facilities Impact Summary
(Checklist Questions 1 and 2)

As described above, signs do not generate demand for recreational facilities because they are not occupied or inhabited by people. The proposed signs would not have a significant impact on recreational facilities. **[Same Impact as Approved Project (No Impact)]**

4.15.3 Conclusion

The Sign Code Amendments would not result in new or more significant impacts to recreation than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (No Impact)]**

The 101 Tech Sign and River View/Irvine Residential Signs projects would not result in new or more significant impacts to recreation than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (No Impact)]**

4.16 TRANSPORTATION

4.16.1 Setting

4.16.1.1 *Transportation Context in the North San Jose Development Area*

Freeways

Freeways serving the North San Jose area include SR 237, US 101, Interstate 880 (I-880), and SR 87. These facilities are described below:

SR 237 is a six-lane freeway located along the northern boundary of the North San Jose area. It extends in an east/west direction between Sunnyvale and Milpitas and provides access to I-880 and US 101. Two of the six lanes (one in each direction) are designated as high occupancy vehicles (HOV) lanes. Access to the North San Jose Development Area is provided via its interchanges with Great America Parkway, North First Street, Zanker Road, and McCarthy Boulevard.

US 101 is an eight-lane freeway (three mixed-flow lanes and one HOV lane in each direction) north of Cochrane Road in Morgan Hill. South of Cochrane Road, it narrows to six-lanes with no HOV lanes provided. US 101 provides connections to I-880, SR 237, and SR 87. Existing access to and from the North San Jose Development Area is provided via interchanges at North First Street, Trimble Road, and Montague Expressway.

I-880 is a six-lane freeway between its transition from SR 17 in Los Gatos to Montague Expressway. North of Montague Expressway four lanes in each direction are provided. It extends north to Oakland and south to Campbell at which point it makes a transition into SR 17 to Santa Cruz. I-880 provides connections to both US 101 and SR 237. Access to the North San Jose Development Area is provided via interchanges at Old Bayshore Highway, Brokaw Road, Montague Expressway, and Tasman Drive.

SR 87 connects from SR 85 in south San Jose to US 101 near the San Jose airport. It is a four-lane freeway from SR 85 to US 101, with auxiliary lanes near the I-280 interchange. SR 87 provides direct service to the North San Jose Development Area through its termination at Guadalupe Parkway and connection to North First Street.

Local Streets

Major arterials serving the North San José area are North First Street, Zanker Road, Tasman Drive, Montague Expressway, Trimble Road, and Brokaw Road. These roadways are described below:

North First Street is a four-lane arterial running through the center of North San José. It extends from downtown San José to Alviso. It provides access to the North San José area from all freeways serving the area. The Santa Clara County Light Rail Transit (LRT) system operates in the median of the roadway between downtown San José and Tasman Drive.

Zanker Road runs in a north-south direction through North San José. It extends south from Alviso to its termination at Old Bayshore Highway. Direct freeway access is provided via its interchange with SR 237. Between SR 237 and River Oaks Parkway, Zanker Road is a six lane roadway. South of River Oaks Parkway, the cross-section of this facility varies from two to four lanes.

Tasman Drive is an east/west arterial that extends from Lawrence Expressway to I-880. The roadway is generally a four-lane facility in the North San José area, but widens to six-lanes east of McCarthy Boulevard in Milpitas.

Montague Expressway is a six-lane expressway that extends in an east-west direction between I-880 and US 101. Montague Expressway serves as the primary east-west arterial through the North San José area.

Trimble Road is an east-west arterial that extends from Montague Expressway to US 101. It is a six-lane facility from Montague Expressway to Orchard Parkway, and a four-lane street west of Orchard Parkway across the four-lane bridge over the Guadalupe River. At its intersection with De La Cruz Boulevard, near the US 101 interchange, Trimble Road becomes De La Cruz Boulevard.

Brokaw Road is a six-lane east/west arterial that extends from US 101 to I-880. It provides connections to North First Street and Zanker Road.

Transit, Pedestrian, and Bicycle Facilities

The North San Jose Development Area has an extensive transit system the LRT system on North First Street and Tasman Drive. Bus service is provided primarily along Tasman Drive, Montague Expressway and Trimble Road.

There are numerous City and County designated bikeways in the North San Jose Development Area. Bike lanes are located along parts of First Street, Zanker Road, Oakland Road, Tasman Drive, Trimble Road, and Brokaw Road. A bike path is located along a portion of SR 237. Bike routes are located along parts of First Street, Grand Boulevard/Los Esteros, Headquarters Drive/Holger Way, Tasman Drive, Montague Expressway, and Charcot Avenue.

The connectivity of sidewalks for pedestrian access varies by location in the North San Jose Development Area.

4.16.1.2 *101 Tech Sign Project Site Transportation*

Roadway Network and Site Access

The 101 Tech Office/R&D site is located at the westerly terminus of Atmel Way, northwest of the US 101/SR 87 interchange. US 101 and SR 87 provide regional access to the project site. Atmel Way can be accessed via Orchard Parkway, which connects with SR 87 just southeast of the site. Atmel Way is also accessible via Orchard Avenue from Trimble Avenue, which connects with US 101 just west of the project site.

Transit, Pedestrian, and Bicycle Facilities

The Valley Transportation Authority (VTA) provides LRT in the project area. The closest LRT stop to the project site is Component Station (1) along North First Street, approximately 0.58 miles north of the project site.

The 101 Tech Office/R&D site is currently undeveloped and offers no existing infrastructure for vehicular, pedestrian, or bicycle access to the southwestern portion of the site where the sign would be located. Pedestrian access to the overall 101 Tech Office/R&D site is available from existing sidewalks located on Atmel Way, and pedestrian or bicycle access is available via the Guadalupe River Trail.

Once the 101 Tech Office/R&D site is built out with the planned development, the proposed sign would be accessible from the planned surface parking lot.

Applicable Plans, Policies, and Regulations

California Outdoor Advertising Act and the Federal Highway Beautification Act

The California Outdoor Advertising Act and the Federal Highway Beautification Act (Acts) apply to signs located along primary highways and freeways, including 101 Tech Sign. The Acts generally do not regulate on-site signage in urban areas, but to be considered on-site signage a sign located within 660 feet of the highway right-of-way must generally be located within 1,000 feet of the location on which the related business is being conducted, or the entrance to such business. The Acts also specify that if an on-site sign is located within 660 feet of the highway right-of-way, and it is a message center display (programmable electronic sign), the sign cannot be located within 1,000 feet of another message center display on the same side of the highway. Further, the Acts generally prohibit signs within 300 feet of the point of intersection of a highway or highway and railroad lines, and signs that could prevent any traveler of the highway from having a clear view of approaching vehicles for a distance of at least 500 feet.

City of San Jose Sign Code (Municipal Code, Title 23)

The Sign Code (Municipal Code, Title 23) is intended to regulate the usage and design of signs to serve economic or community interests, while promoting an aesthetically pleasing environment. The Sign Code regulates lighting and signs so that they do not create traffic hazards and, therefore, signs that are consistent with the Sign Code are not considered to be a traffic safety hazard.

California Vehicle Code

In accordance with the California Vehicle Code, the brilliance of signs may not have a maximum light output exceeding 1,000 times the minimum measured brightness in a driver's field of view, within ten degrees of that field of view.

4.16.1.3 *River View/Irvine Residential Signs Project Site Transportation*

Roadway Network and Site Access

The River View/Irvine Residential site is located west of N. 1st Street between River Oaks Parkway and the planned Skytop Street in North San Jose. I-880 and SR-237 provide regional access to the project site. N. 1st Street can be accessed via E. Tasman Drive which connects with I-880 east of the site, or via the N. 1st Street interchange with SR-237 north of the site.

Transit, Pedestrian, and Bicycle Facilities

The Valley Transportation Authority (VTA) provides LRT in the project area. The closest LRT stop to the River View/Irvine project site is River Oaks Station located in front of the project site, along N. 1st Street. Pedestrian access to the overall River View/Irvine site is available from existing sidewalks located on adjacent roadways. Bike lanes are located along the project street frontage on N. 1st Street. Pedestrian or bicycle access is available via the Guadalupe River Trail.

Applicable Plans, Policies, and Regulations

City of San Jose Sign Code (Municipal Code, Title 23)

As previously described, the Sign Code regulates lighting and signs so that they do not create traffic hazards and, therefore, signs that are consistent with the Sign Code are not considered to be a traffic safety hazard.

4.16.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒	☐	1,2,3

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒	☐	1,2,3
3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒	☐	1,2,3
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☒	☐	☐	1,2,3,4
5. Result in inadequate emergency access?	☐	☐	☐	☒	☐	2
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒	☐	1,2,3

NSJ FPEIR - Transportation Conclusions

The NSJ FPEIR identified significant transportation impacts related to pedestrian and bicycle facilities, transit systems, and intersection and freeway segments. Impacts could be reduced to a less than significant level at some locations with mitigation incorporated. Levels of service impacts were identified as significant and unavoidable for intersections in San Jose, Santa Clara, Milpitas, and Campbell, and numerous freeway segments in the South Bay Area. Transit impacts would be reduced by physical improvements for transit. Safety impacts related to signage were not specifically addressed.

The following discussion is based in part on a Lighting Impact Analysis prepared by Lighting Design Alliance (LDA) in 2014, attached as Appendix D.

4.16.2.1 *Transportation Impacts of the Sign Code Amendments*

Circulation System
(Checklist Question 1 and 2)

Signs do not generate daily or regular trips (like a typical land use such as residential or commercial development). Signs generate trips irregularly, as needed, for maintenance activities. The project would not, therefore, significantly affect the performance of the circulation system including roadways, freeways, and bicycle/pedestrian/transit facilities. The project would not conflict with an applicable congestion management program. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

Air Traffic, Emergency Access, and Transportation Facilities
(Checklist Questions 3, 5, and 6)

As discussed in *Section 4.8 Hazards and Hazardous Materials*, future freeway signs allowed in the North San Jose Development Area under the proposed Sign Code Amendment would be subject to approval of a Development Permit (including project-specific environmental review) and all applicable Sign Code regulations related to the operational standards for programmable and non-programmable components of electronic freeway signs to reduce safety hazards to pilots and air traffic controllers to a less than significant level. As described in *Section 3.3.7*, for signs within the Airport Influence Area (AIA) of the San Jose International Airport and which could be visible to pilots and/or air traffic controllers, the project-specific environmental review would include a technical evaluation of safety hazards to pilots and/or controllers from programmable components of electronic freeway signs. As described in Sections *4.8 Hazardous Materials* and *4.10 Land Use*, policies and regulations have been adopted as part of the CLUP, California Vehicle Code, and City Sign Ordinance to avoid conflicts between sources of light and airport operational safety. Residential signs would be designed in conformance to existing regulations for residential signs and would not include programmable, flashing, moving, or bright lights that would create a substantial source of light or glare. The project would not affect air traffic, emergency access, or conflict with any adopted policies, plans, or programs regarding the performance or safety of transportation facilities. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

Hazards to Transportation Operations and/or Motorist Safety
(Checklist Question 4)

The freeway signs that could be permitted under the proposed Freeway Signs Code Amendment would be designed with architectural features to make them compatible with Office/R&D development on each respective site. The signs would be located on private property and would not physically extend onto the public right-of-ways where they could create a physical safety hazard. Per existing Sign Code requirements, the signs would be located and designed in a manner that would not interfere with the visibility or functionality of existing traffic signals or signage for motorists.

The purpose of signs is to draw attention. Signs are an integral part of development: signs identify location, uses, and information. A notable concern, however, is that the ability of programmable

electronic freeway signs to change display images could be a distraction to drivers passing by and result in a safety hazard.

In general, variables that affect the attention of drivers include, but are not limited to, the driver's age, weather conditions, cell phone use, in-vehicle information systems (e.g., radio, climate controls, smoking/lighting, fuel gage, and map/GPS), external sources (e.g., people, events, and structures), and driver familiarity with a route. Variables related specifically to the programmable components of electronic freeway signs that could distract drivers include, but are not limited to:

- **Sign Size and Orientation** – Signs that are of conventional size and/or similar to existing signage in the area tend to be less distracting. Signs oriented towards drivers can be more distracting than signs that are not oriented towards drivers. Signs mounted lower, closer or within a driver's line of sight can be more distracting.

- **Sign Placement/Setting** – Signs that are more conspicuously placed in a less cluttered environment can be more distracting.

- **Sign Contrast** – The contrast of the sign is a function of the luminance difference between the sign and its background. A contrast ratio of less than 30:1 would not cause glare (see definition of brightness in Table 4.8-1).

- **Roadway Characteristics** – Compared to straight roadways, curved roadway segments require more adept handling from drivers. Distraction by a programmable electronic freeway sign may be larger when a driver is experiencing greater driving demands from maneuvering a curved roadway. Maneuvering at intersections also increases driver demand given the sources of potential conflicts such as pedestrians crossing, changing of traffic control devices, and turning maneuvers.

Variables such as sign luminance and time intervals between displays can factor into the distractibility of a sign. The proposed signs would conform to the standards regarding sign illumination and display intervals (when displaying static images) described the City's current Sign Code and in the California Vehicle Code. In accordance with Section 23.02.905 (C)(1) of the Sign Code, the signs would not change more than once every eight (8) seconds and would not include animation. The brightness of the signs would result in a difference between the ambient light measurement and the operating sign light measurement of less than three tenths foot candles. The signs would use automatic dimming technology to adjust the brightness of the signs relative to ambient light. In accordance with the California Vehicle Code, the brilliance of the signs would have a maximum light output not exceeding 1,000 times the minimum measured brightness in a driver's field of view, within ten degrees of that field of view.

Distracted drivers could brake or slow without good cause (which could result in decreased headway between vehicles and increased speed variance), make unwarranted lane changes, etc. that could create safety hazards. Future freeway signs would be subject to approval of a Development Permit and all applicable Sign Code regulations related to the operational standards for programmable electronic freeway signs to reduce safety hazards to a less than significant level. **(New Less Than Significant Impact)**

Residential signs would be designed in conformance to existing regulations for residential signs and would not include programmable, flashing, moving, or bright lights that would create a substantial source of light or glare that would affect motorist safety. Residential signs would be evaluated for sight-distance and other safety hazards during the design-review process. The design review would include a review of the location and design of the proposed signs, and would include a finding that confirms that each proposed sign would not create any safety hazard, including safety hazards to motorists. **(New Less Than Significant Impact)**

4.16.2.2 *Transportation Impacts of the 101 Tech Sign Project*

The proposed project would construct freeway sign with a programmable electronic component on a 12.9 acre site in the North San Jose Development Area. The sign would be located on a site currently approved for up to 666,000 sf of office/R&D space. The proposed sign would be approximately 1,900 feet east of Runway 30R-12L at the Norman Y. Mineta San Jose International Airport. The sign would be oriented to be visible to vehicles travelling in both directions on US 101.

Circulation System
(Checklist Question 1 and 2)

The proposed sign would generate minimal vehicle trips irregularly, as needed, for maintenance activities. The project would not significantly affect the performance of the circulation system including roadways, freeways, and bicycle/pedestrian/transit facilities. The project would not conflict with an applicable congestion management program. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

Air Traffic, Emergency Access, and Transportation Facilities
(Checklist Questions 3, 5, and 6)

As described in Sections *4.8 Hazardous Materials* and *4.10 Land Use*, policies have been adopted as part of the CLUP, California Vehicle Code, and City Sign Ordinance to avoid conflicts between sources of light and airport/transportation operational safety. Based upon a review of the location, orientation, and brightness characteristics of the proposed sign the project would not affect air traffic, emergency access, or conflict with any adopted policies, plans, or programs regarding the performance or safety of transportation facilities. **(New Less Than Significant Impact)**

Hazards to Transportation Operations and/or Motorist Safety
(Checklist Question 4)

The following discussion focuses on the potential for the proposed programmable component of the electronic freeway sign on the 101 Tech Office/R&D site to cause substantial safety hazards to motorists. It is based on the technical lighting analysis completed for the project by *LDA* (refer to Appendix D).

- **Sign Size and Orientation –** The sign is proposed at the southwest corner of the 101 Tech Office/R&D site at the terminus of Atmel Way, adjacent to north side of US 101. The intent of the sign is to be visible to travelers on US 101, therefore, the sign would be oriented so

that the faces of the sign are perpendicular to the highway, and visible to motorists. One side of the digital display sign would be facing towards drivers traveling northwest, and the other side of the sign would face towards drivers traveling southeast. The main view of the sign would be from vehicles traveling northwest, with the sign only visible from 1,100 linear feet or closer because a portion of the view would be blocked by the SR 87 overpass.

As shown in Figure 4.16-1, below, the sign would be oriented with no direct, straight-on view of the sign from the freeway. From the northbound direction, there would be a view of the sign approximately five degrees off axis, but at this point the vehicle would be further than 500 feet from the sign. All other views of the sign from cars traveling northbound would be at angles ranging from 30 to 80 degrees off-axis, depending on which lane the vehicle is in and how close the vehicle is to the sign. The onramp lane furthest north would have the most direct view of the sign, with the highest brightness reading of 300 cd/m^2 of the sign surface on the horizontal plane. This brightness level would remain consistent until about 40 degrees off axis where it would decline. At the farthest lane, especially when the driver is closer to the sign, the light measurement readings would drop off to 250 to 175 cd/m^2 depending on the angle.

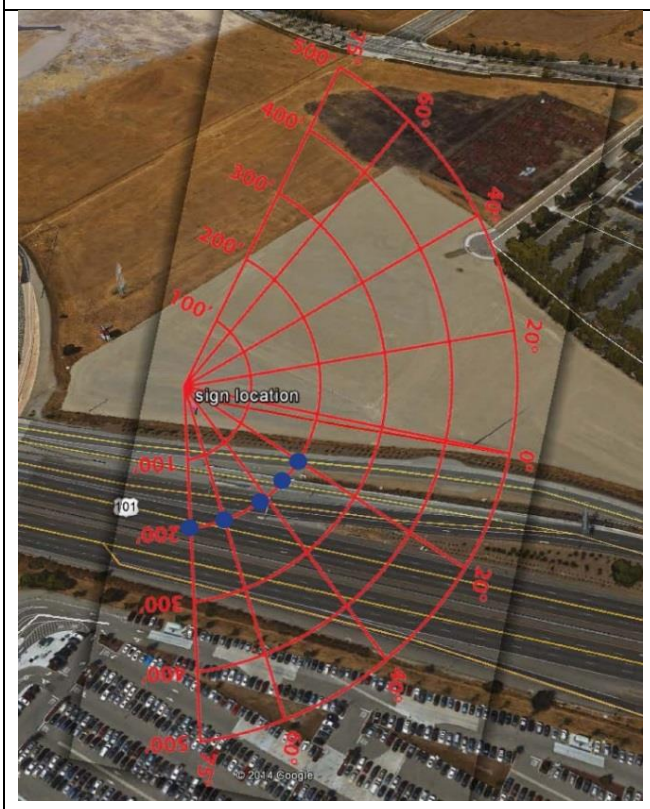
For motorists traveling southbound, there is no visual obstruction, but the southbound lanes are approximately 300 to 400 feet away from the signage, so their viewing angles of the sign brightness will be less than the viewing angles of the brightness from the northwest viewing.

- **Sign Placement/Setting –** The sign is proposed in an urban, developed environment on a site that would be developed with Office/ R&D uses. As outlined in Section 3.2, *Project Description*, the project would generate rotating static images that would change no more than once every eight (8) seconds.

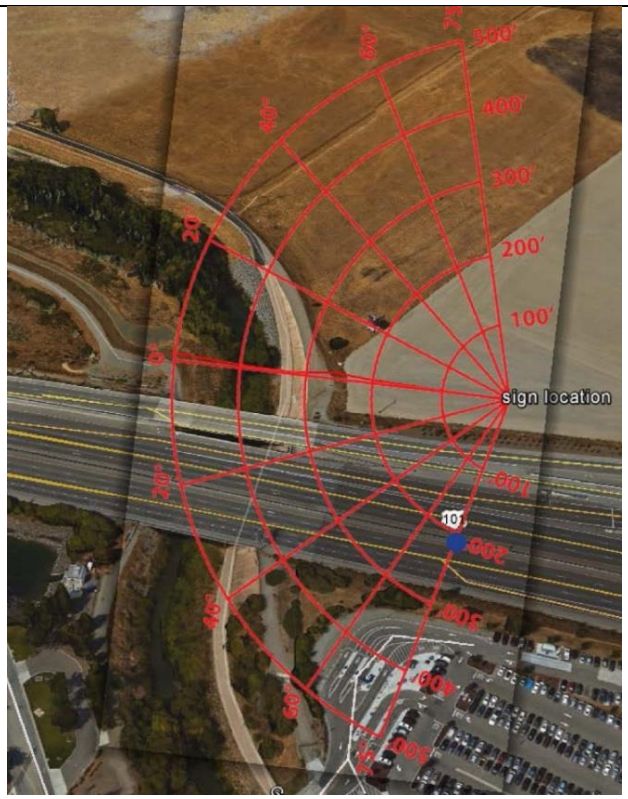
- **Sign Contrast –** The proposed sign would conform to the existing standards regarding sign illumination and display intervals (when displaying static images) in the City's current Sign Code. The proposed sign would be dimmed in accordance with the City's current Sign Code at night, which allows adaptation to contrast ratios to minimize glare within acceptable levels.

- **Roadway Characteristics –** Given the orientation and setback of the proposed sign, the sign would be primarily visible to drivers travelling northwest on US 101. US 101 in the vicinity of the site is a straight roadway with no curvature.

Figure 4.16-1: Sign Relationship to Vehicles on US 101*



Northwestbound



Southbound

*Numbers on curved lines indicate distance, and bisecting straight lines indicate viewing angle to the sign.

With compliance to the City's Sign Code, it is the professional opinion of *LDA* that the proposed sign would not result in a substantial safety hazard to drivers on US 101 (refer to Appendix D). Views of the sign would be partially obstructed by the SR 87 connector ramp, there would be no straight-on views of the sign, and views would last for a relatively short period of time given the travel speeds on US 101 (approximately 65 miles per hour when not congested).

Given the size and orientation of the sign, the limited visibility of the sign, the context of the existing setting, and regulated sign lighting contrast, the incremental distraction of the sign would not create a significant distraction or hazard to motorists on US 101. **(New Less Than Significant Impact)**

4.16.2.3 *Transportation Impacts of the River View/Irvine Residential Signs Project*

Circulation System

(Checklist Question 1 and 2)

The proposed sign would generate minimal vehicle trips irregularly, as needed, for maintenance activities. The project would not significantly affect the performance of the circulation system including roadways, freeways, and bicycle/pedestrian/transit facilities. The project would not conflict with an applicable congestion management program. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

Air Traffic, Emergency Access, and Transportation Facilities
(Checklist Questions 3, 5, and 6)

The proposed residential signs would be setback from roadways and sidewalks and would not exceed the height of nearby structures, therefore, installation of the signs would not affect air traffic, emergency access, or conflict with any adopted policies, plans, or programs regarding the performance or safety of transportation facilities. **(New Less Than Significant Impact)**

Hazards to Transportation Operations and/or Motorist Safety
(Checklist Question 4)

The River View/Irvine Residential Signs would be designed in conformance to existing regulations for residential signs and would not include programmable, flashing, moving, or bright lights that would create a substantial source of light or glare that would affect motorist safety.

The River View/Irvine Residential Signs would be placed adjacent to the residential buildings and would be designed in accordance with Section 23.02.1160 of the Sign Code, which includes the following line-of site requirements to avoid transportation hazard impacts:

- If the signs are proposed within a corner triangle[58] or driveway triangle[59], the height of the sign shall not exceed three feet.
- A height of greater than three feet may be allowed upon a finding that safety is not impaired.

With compliance to Section 23.02.1160, the River View/Irvine Residential Signs would not result in significant hazards to transportation operations or safety. **(New Less Than Significant Impact)**

4.16.3 Conclusion

The proposed Sign Code Amendment would not result in a new or more significant transportation impact than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

The 101 Tech Sign would not result in a new or more significant transportation impact than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

The River View/Irvine Residential Signs would not result in a new or more significant transportation impact than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Contribution to Significant Unavoidable Impact)]**

[58] A corner triangle is defined as a triangle of land formed by two intersecting streets, where two sides of the triangle consist of the curblines of the intersecting streets and the third side of the triangle is a straight line drawn between points on each curbline located 45 feet from the intersection.
[59] A driveway triangle is defined as a triangle of land formed by the intersection of a street and driveway, where two sides of the triangle consist of the curbline of the street and abutting edge of the driveway, and the third side of the triangle is a straight line drawn between points on the curbline and driveway edge located ten feet from the intersection point.

4.17 UTILITIES AND SERVICE SYSTEMS

4.17.1 Setting

4.17.1.1 *Utilities and Service Systems Context in the North San Jose Development Area*

Water, Sanitary Sewer, and Solid Waste

The North San Jose Development Area is located within the City of San Jose Urban Service Area. The City of San Jose maintains the wastewater system in the North San Jose Development Area, the San Jose Water Company distributes water, and Republic Services provides solid waste services. Signs do not generate demand for water, sewer, or waste disposal at landfills.

Electricity

Pacific Gas & Electric (PG&E) supplies electricity to the North San Jose Development Area. Distribution of electric power is accomplished primarily through underground systems extending from various high voltage transmission lines in the area. Transmission lines that pass through or adjacent to the North San Jose Development Area include a 115 kV line along the east side of the Guadalupe River, a 115 kV line along the east side of Zanker Road, a 60 kV line along North First Street, and three 12 kV lines along North First Street, SR 237, and Zanker Road.

Storm Drainage

Storm drainage systems in the North San Jose Development Area were designed to convey flows from a three-year storm event, and much of the area lacks sufficient drainage capacity. Existing storm drainage facilities in the southern and south of US 101 areas drain into the Guadalupe River and local flooding may occur when river levels are high. The City has policies and ongoing Capitol Improvement Projects (CIPs) in place to upgrade the storm drainage system, as needed.

4.17.1.2 *101 Tech Sign Project Site Utilities and Service Systems*

Water, Sanitary Sewer, and Solid Waste

The planned 101 Tech Office/R&D development would connect to a 16-inch water main in Atmel Way operated by the San Jose Municipal Water System, and an eight-inch sanitary sewer line located in Atmel Way that connects to a 10-inch sanitary sewer system that runs northerly in Orchard Parkway. The site would be serviced by Republic Services, with solid waste disposed of at any of four privately owned landfills in San Jose.

Electricity

Two PG&E easements are located within the project area. An 80-foot wide easement is located along the western portion of the site, and provides right-of-way for existing overhead power lines. An approximately 20-foot wide easement is located along the southern boundary of the site and provides right-of-way for an underground electrical line.

Storm Drainage

Runoff from the project site currently flows overland. Runoff from the planned Office/R&D development would be collected on-site and drain to existing 18- and 24-inch mains located in Atmel Way which connect to a 96-inch system running northerly in Orchard Parkway, which drains to the Guadalupe River and flows north into the San Francisco Bay.

4.17.1.3 *River View/Irvine Residential Signs Project Site Utilities and Service Systems*

Water, Sanitary Sewer, Solid Waste, and Electric

The high density residential development at the River View/Irvine site would connect to existing utility and electric lines in the project area, with upgrades as needed. The site would be serviced by Republic Services, with solid waste disposed of at any of four privately owned landfills in San Jose.

Storm Drainage

Runoff from the Riverview Irvine site would be collected on-site and drain to existing storm drainage mains in the project area, with upgrades as needed. Drainage to the site ultimately flows north into the San Francisco Bay.

4.17.2 Environmental Checklist and Discussion of Impacts

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒	☐	1,2,3, 10
2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒	☐	1,2,3, 10
3. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒	☐	1,2,3, 10

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
Would the project:						
4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒	☐	1,2,3, 10
5. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒	☐	1,2,3, 10
6. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒	☐	1,2,3, 10
7. Comply with federal, state and local statutes and regulations related to solid waste?	☐	☐	☐	☒	☐	1,2,3, 10

NSJ FPEIR - Utilities and Service Systems Conclusions

The NSJ FPEIR did not identify any significant overall utility or service system impacts. Measures were, however, identified to address possible impacts related to sanitary sewer services, stormwater systems, and wastewater treatment during future development.

4.17.2.1 *Utilities and Service Systems Impacts of the Sign Code Amendments*

Utilities and Service System Impacts
(Checklist Questions 1-7)

The operation of signs, in general, do not generate demand for water, sewer and solid waste disposal at landfills. Signs would connect to existing electrical lines that serve existing development at each respective property. Title 24 of the California Code of Regulations limits energy use for exterior signage in California.[60] Energy efficiency requirements in the California Energy Code (Title 24) as well as dimming requirements for programmable freeway signs in the City's Sign Code would limit the energy demand for each programmable sign and it is not anticipated that new off-site electrical

[60] Title 24 (2008) limits exterior, internally illuminated signs, and integral electronic displays to 12 watts per square foot and requires a dimmer if operated during night time hours.

infrastructure would be needed to serve each site. In addition, as discussed in *Section 4.9 Hydrology,* signs have a relatively minimal footprint and would not substantially impact storm drain facilities. Each new sign would require approval of a Development Permit and/or design review which would include evaluation for adequacy of the on-site and off-site stormwater collection systems. The City has policies in place which avoid significant impacts to the City's utility and service systems. The proposed Sign Code Amendments would not result in significant impacts to utilities and service systems. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

4.17.2.2 *Utilities and Service Systems Impacts of the 101 Tech Sign Project*

Utilities and Service System Impacts
(Checklist Questions 1-7)

As discussed in *Section 4.17.2.1* above, the proposed sign would not generate demand for water, sewer, or landfills. The sign would connect to existing or planned electrical lines at the 101 Tech Office/R&D site. The proposed sign would increase impervious surfaces by approximately 130 sf, which is minimal compared to planned Office/R&D development on the site. The proposed sign would have an estimated daily electrical demand of 1.79 watt-hours per square foot or about 67 kilowatt-hours per day if operated for 24 hours per day (refer to Appendix D). This electrical demand would represent a relatively small increase in electrical demand for the office/R&D development and would not result in the need to construct new offsite electrical system infrastructure that could have environmental effects. Approval of the Development Permit would include evaluation for adequacy of the on-site and off-site stormwater collection system, and the sign would conform to applicable City policies and regulations which would avoid significant impacts to the City's utility and service systems. The proposed sign would not result in new or more significant utility and services impact than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

4.17.2.3 *Utilities and Service Systems Impacts of the River View/Irvine Residential Signs Project*

Utilities and Service System Impacts
(Checklist Questions 1-7)

The proposed residential signs would not generate demand for water, sewer, or landfills. The signs would connect to existing or planned electrical lines at the River View/Irvine site. The proposed signs would incrementally increase impervious surfaces, which would be considered minimal compared to the high-density residential development currently being constructed on-site. The proposed signs would be permitted minimal lighting and would not use significant amounts of electricity that would result in the need to construct new offsite electrical system infrastructure that could have environmental effects. The proposed signs would not result in new or more significant utility and services impacts than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact with Mitigation)]**

4.17.3 Conclusion

The proposed Sign Code Amendment would not result in a new or more significant utility and services impacts than disclosed in the certified NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

The 101 Tech Sign would not result in new or more significant utility and services impacts than disclosed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

The River View/Irvine Residential Signs would not result in new or more significant utility and services impacts than disclosed in the NSJ FPEIR. **[Same Impact as Approved Project (Less Than Significant Impact)]**

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Checklist Source(s)
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒	☐	1-14
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒	☐	1-14
3. Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☐	☒	☐	1-14
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒	☐	1-14

4.18.1 Sign Code Amendments and Sign Projects Impacts

As discussed in the individual sections, the proposed project (101 Tech Sign, River View/Irvine Residential Signs, and associated Sign Code Amendments) would not degrade the quality of the environment with the implementation of identified standard permit conditions, and conformance to applicable City and State plans, policies, and regulations. **(Less Than Significant Impact)**

4.18.2 Cumulative Impacts

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." In addition, under Section 15152(f) of the CEQA Guidelines, where a lead agency has determined that a cumulative effect has been adequately addressed in a prior EIR, the effect is not treated as significant for purposes of later environmental review and need not be discussed in detail.

Individual project sites that could support signs allowed under the proposed Sign Code Amendments were evaluated as part of planned development proposed for the North San Jose Development Area. When combined with other projects included in this land use plan, the proposed project (e.g. Sign Code Amendments and the proposed signs on private property) would contribute incrementally to significant and unavoidable impacts related to air quality, noise, and transportation. Cumulative effects from buildout of the North San Jose Development Area were already addressed in the NSJ FPIER, and as described throughout this Initial Study/Addendum the project would not result in any new or more significant environmental impacts than evaluated in the FPEIR. Per Section 15152(f) of the CEQA Guidelines, the contribution of the project to the cumulative effects from buildout of the NSJ FPEIR are not considered significant.

The City's Sign Code, Chapter 23 of the Municipal Code, governs signage within the City limits. It includes design and safety standards for a range of sign types found in urban settings. The proposed Sign Code Amendments follow a number of amendments to the Sign Code (refer to Appendix A), including for freeway signs (with programmable electronic sign faces) on large commercial sites.

Signs up to 60 feet in height are highly visible from roadways, as is the intent for commercial and noncommercial signs designed to meet economic goals. From an aesthetic standpoint, a key consideration is whether large freeway signs, cumulatively would block or modify views of hillsides and prominent peaks bordering the City, result in a substantial source of light pollution and spill over onto adjacent properties, change ambient light conditions in an area, or otherwise substantially degrade the visual character of areas of the City and adversely change the aesthetic character of the built environment. Cumulatively, changes to the Sign Code would allow large freeway signs, with programmable and/or nonprogrammable components, on a limited number of shopping center sites citywide and office/R&D sites in the North San José Development Area, in conformance with standards related to design and illumination.

The cumulative Sign Code amendments would not result in direct impacts to scenic features in hillside areas of the City and as previously described, blockage of scenic vistas from the sites where freeway signs would be allowed in North San Jose, would be limited. Allowed freeway signs would be for on-site uses and design review is required for compatibility with surrounding urban design, including the mass, scale, color and materials of surrounding structures. With the limits on spacing between signs and limits to larger shopping center and office/R&D sites in the employment center of North San Jose, the proposed project, along with other cumulative sign projects, would not result in a cumulative aesthetic impact to man-made or natural vistas in San José, including those along major freeways and attractive major roads. As previously described, implementation of the proposed sign code amendments and sign projects would not result in a cumulatively considerable contribution to greenhouse gas emissions impacts.

The proposed Sign Code Amendments and impacts from the proposed signage on private properties would not result in cumulatively considerable impacts when viewed in connection with the effects of past, current, or future projects. **(Less Than Significant Cumulative Impact)**

4.18.3 Short-term Environmental Goals vs. Long-term Environmental Goals

The proposed Sign Code Amendment would allow an increase of programmable electronic freeway signs in the North San Jose Development Area. Future signs resulting from approval of the proposed Sign Code Amendment, such as the proposed 101 Tech Sign (which is the subject of this Addendum), would result in an irreversible and irretrievable commitment of resources and energy during construction and operation, as described below.

The proposed Freeway Sign Code Amendment would allow freeway signs on properties that support Office/R&D land uses in the North San Jose Area which are over 10 acres in size and have at least 800 linear feet of freeway frontage. Similarly, the proposed Residential Sign Code Amendment would allow taller signs on certain residential properties. The signs would support tenants of existing development on each respective site, therefore, approval of the Sign Code Amendment would not result in the loss or indirect conversion of a greenfield site to urban uses or otherwise commit resources in a wasteful or inefficient manner.

Construction of the signs would require the use of nonrenewable construction material, such as concrete, metals, and plastics. Nonrenewable resources and energy would also be consumed during the manufacturing and transportation, and construction of the signs. Operation of the signs would consume energy for lighting and other electronics. Energy, in the form of fossil fuels, would be used to fuel vehicles travelling to and from the site to repair or maintain the signs. As described in *Section 4.16 Transportation*, however, vehicle maintenance trips would be irregular (less than one per month), and the operation of the signs would not generate daily trips.

Based on the above discussion, the project will not achieve short-term environmental goals to the disadvantage of long-term environmental goals. **(Less Than Significant Impact)**

4.18.4 Direct or Indirect Adverse Effects on Human Beings

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include air pollutants, geological hazards, hazardous materials, and noise and vibration. The proposed project, with the implementation of identified standard permit conditions and policies described in the certified NSJ FPEIR, would not result in significant direct or indirect adverse effects on human beings. **(Less Than Significant Impact)**

Checklist Sources

1. Professional judgment and expertise of the environmental specialist preparing this assessment, based upon a review of the site and surrounding conditions, as well as review of project plans.

2. City of San Jose. North San Jose Development Policies Update FPEIR. 2005.

3. City of San Jose. *Envision San Jose 2040 General Plan EIR. 2011.*

4. Lighting Design Alliance. *Lighting Impact Analysis: 101 Tech Sign Survey.* December, 2014.

5. California Department of Conservation, Division of Land Resource Protection. *Santa Clara County Important Farmland 2012.* Published August, 2014.

6. City of San Jose. *Municipal Code.* December 2014.

7. Bay Area Air Quality Management District. *Bay Area 2010 Clean Air Plan.* September 15, 2010.

8. Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines.* May 2011.

9. Santa Clara County. *Valley Habitat Conservation Plan.* August 2012.

10. City of San Jose. *101 Tech Initial Study.* September 2012.

11. City of San Jose. *Wyse Property Addendum.* January 2008. [River View/Irvine Property]

12. WRA. *Re: Orchard Parkway Proposed Electronic Sign and Potential Impacts to Wildlife.* January, 2015.

13. City of San Jose. *San Jose Riparian Corridor Policy.* 1995.

14. Federal Emergency Management Agency (FEMA). Flood Insurance Rate Map, Community Panel Number 0603490068 H, dated May 18, 2009.

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

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