

JAPANTOWN CORPORATION YARD REDEVELOPMENT PROJECT ENVIRONMENTAL IMPACT REPORT

STATE CLEARINGHOUSE NO. 2007102015

FILE NO. PDCo7-073 and GPo7-03-04



January 2008

January 23, 2008

Ladies and Gentlemen:

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT, FOR THE JAPANTOWN CORPORATION YARD REDEVELOPMENT PROJECT FILE NO. PDC07-073 & GP07-03-04

The Planning Commission of the City of San Jose will hold a Public Hearing to consider the Draft Environmental Impact Report (DEIR) prepared for the project described below. A copy of the DEIR is attached for your review.

Your comments regarding the significant environmental effects of this project and the adequacy of the DEIR are welcome. **Written comments, submitted to the Department of Planning, Building and Code Enforcement by 5:00 p.m., March 10, 2008, will be included in the EIR and be considered by the Planning Commission at this public hearing.** *If you make comments through a state or regional clearinghouse, please send a copy of your comments to the contact person listed below to insure prompt consideration.* If we receive no comments (nor a request for an extension of time) from you by the specified date, we will assume you have none to make.

Project Description and Location:

Japantown Corporation Yard Redevelopment Project is located at 696 North 6th Street and 675 North 6th Street. The proposed project would include up to 600 market-rate residential units, up to 30,000 square feet of retail space, 10,000 to 20,000 square foot community amenity space, and up to 900 underground/surface parking spaces on the Corporation Yard site. As a variation on the proposed project, up to 15,000 square feet of retail space may be replaced with up to 24 live/work units. The existing surface parking lot would be redeveloped as an affordable senior housing complex including up to 85 units of affordable housing and 40 parking spaces. Project buildings would range from 6 to 14 stories for the residential/mixed-uses and 1 to 2 stories for the community amenity uses. As the location and height of project buildings is conceptual at this time, this EIR evaluates a 14-story building envelope for the Corporation Yard site. A 6-story building envelope is evaluated for the surface parking lot site. The proposed project includes a General Plan Amendment (File # GP07-03-04) and an amendment to the Jackson-Taylor Residential Strategy to change the land use designation to allow the proposed mix of uses, allow increased height and density on the project site, increase the caps on development to the extent required, and amend relevant design principles. The site would be rezoned to A (PD) Planned Development Zoning District (File # PDC07-073).

Tentative Hearing Date: April 21, 2008

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Sincerely,

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JAPANTOWN CORPORATION YARD REDEVELOPMENT PROJECT ENVIRONMENTAL IMPACT REPORT

STATE CLEARINGHOUSE NO. 2007102015

FILE NO. PDCo7-073 and GPo7-03-04

Submitted to the:

City of San Jose
Department of Planning, Building,
and Code Enforcement
200 East Santa Clara Street, 3rd Floor
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Prepared by:

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January 2008

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I. INTRODUCTION

A. PURPOSE OF THE EIR

In compliance with the California Environmental Quality Act (CEQA), this report describes the environmental consequences of the *Japantown Corporation Yard Redevelopment Project* (proposed project).

This Environmental Impact Report (EIR) is designed to fully inform City of San Jose decision-makers, other responsible agencies, and the general public of the proposed project and the potential environmental consequences of its approval. This EIR also examines various alternatives to the proposed project, and recommends a set of mitigation measures to reduce or avoid potentially significant impacts. The City of San Jose is the lead agency for the environmental review of the proposed project. This EIR will be used by the City of San Jose in its consideration of the proposed project and the various approvals required as described in Chapter III, Project Description.

B. PROPOSED PROJECT

The proposed project would redevelop a total of 5.78 acres adjacent to North 6th Street between Jackson and Taylor Streets in the City of San Jose. The project site consists of two separate parcels, the 5.23-acre Corporation Yard site and the 0.55-acre surface parking lot site. The proposed project would include up to 600 market-rate residential units, up to 30,000 square feet of retail space, a 10,000 to 20,000 square foot community amenity space, and up to 900 underground/surface parking spaces on the Corporation Yard site. As a variation on the proposed project, up to 15,000 square feet of proposed retail space could be replaced with up to 24 live/work units. The existing surface parking lot would be redeveloped as an affordable senior housing complex including up to 85 units of affordable housing and up to 40 parking spaces. Residential/mixed use buildings would range from 6 to 14 stories and community amenity uses would range from 1 to 2 stories. An in-depth description of the project appears in Chapter III, Project Description.

C. EIR SCOPE

On October 3, 2007 the City circulated a Notice of Preparation (NOP) to help identify the types of impacts that could result from the proposed project, as well as potential areas of controversy. The NOP was mailed to public agencies (including the State Clearinghouse) and neighborhood organizations considered likely to be interested in the proposed project and its potential impacts. Additionally, a community meeting/public scoping session was held on November 29, 2007, to introduce the proposed project and CEQA process. Comments received by the City on the NOP were taken into account during the preparation of this Draft EIR. The NOP, written comments, and the distribution list are provided in Appendix A.

This Draft EIR focuses on the areas of concern identified in the NOP, comments submitted on the NOP, and comments provided at the public scoping session. The following environmental topics are addressed in this EIR:

- A. Land Use
- B. Population, Employment and Housing
- C. Transportation, Circulation and Parking
- D. Air Quality
- E. Noise
- F. Geology, Soils and Seismicity
- G. Hydrology and Water Quality
- H. Hazards
- I. Cultural and Paleontological Resources
- J. Biological Resources
- K. Visual Resources
- L. Shade/Shadow and Light/Glare
- M. Utilities
- N. Public Services and Facilities
- O. Energy and Mineral Resources
- P. Global Climate Change

D. REPORT ORGANIZATION

This EIR is organized into the following chapters:

- *Chapter I – Introduction:* Discusses the overall EIR purpose; provides a summary of the proposed action and environmental review process; identifies potentially significant issues and concerns; and summarizes the organization of the EIR.
- *Chapter II – Summary:* Provides a summary of the impacts that would result from implementation of the proposed project, and describes mitigation measures recommended to reduce or avoid significant impacts.
- *Chapter III – Project Description:* Provides a description of the project's objectives, location and site conditions, details of the project itself, required approval process, and uses of the EIR.
- *Chapter IV – Consistency with Plans and Policies:* Identifies relevant regional and local plans and evaluates the proposed project's consistency with these plans and policies.
- *Chapter V – Setting, Impacts and Mitigation Measures:* Describes the following for each environmental technical topic: existing conditions (setting); potential environmental impacts and their level of significance; and mitigation measures recommended to mitigate identified impacts. Potential adverse impacts are identified by levels of significance, as follows: less-than-significant impact (LTS), significant impact (S), and significant and unavoidable impact (SU). The significance of each impact is categorized before and after implementation of any recommended mitigation measure(s).
- *Chapter VI – Cumulative Impacts:* Provides the required analysis of potential environmental impacts that are individually limited, but cumulatively significant, resulting from the proposed project alone, or together with other reasonably anticipated projects.

- *Chapter VII – Alternatives:* Provides an evaluation of five alternatives to the proposed project, including the No Project alternative.
- *Chapter VIII – Significant Unavoidable Effects:* Identifies any significant adverse impacts which, even after implementation of any and all recommended mitigation measures, would not be reduced to levels that would be less than significant.
- *Chapter IX – Growth-Inducing Impacts:* Discusses the ways in which the proposed project could foster economic or population growth, either directly or indirectly, in the surrounding environment.
- *Chapter X – Significant Irreversible Changes:* Identifies any significant irreversible environmental changes that would be caused by the proposed project being analyzed. Irreversible environmental changes may include current or future commitments to the use of non-renewable resources, or secondary or growth-inducing impacts that commit future generations to similar uses.
- *Chapter XI – Authors and Consultants:* Identifies the authors and consultants involved in the preparation of this EIR.
- *Chapter XII – References and Contacts:* Provides a list of the reference documents, publications, and literature reviewed and cited, and identifies the persons and agencies contacted during report preparation.

II. SUMMARY

A. PROJECT UNDER REVIEW

This Draft EIR has been prepared to evaluate the environmental impacts of the Japantown Corporation Yard Redevelopment Project in the City of San Jose. The proposed project would redevelop a total of 5.78 acres consisting of the City's former Corporation Yard and associated surface parking lot as a mixed-use development. The proposed project would include up to 600 market-rate residential units, up to 30,000 square feet of retail space, a 10,000 to 20,000 square foot community amenity space, and up to 900 underground/surface parking spaces on the Corporation Yard site. As a variation on the proposed project, up to 15,000 square feet of retail space could be replaced with up to 24 live/work units. The City surface parking lot would be redeveloped as an affordable senior housing complex including up to 85 units of affordable housing and 40 parking spaces. The proposed project would require City entitlement actions including subsurface demolition, construction, and development permits. A more detailed description of the proposed project is provided in Chapter III, Project Description.

B. SUMMARY OF IMPACTS AND MITIGATION MEASURES

This summary provides an overview of the analysis contained in Chapter V, Setting, Impacts, and Mitigation Measures. CEQA requires a summary to include discussion of: (1) potential areas of controversy; (2) significant impacts; (3) cumulative impacts; (4) significant irreversible and unavoidable impacts; and (5) alternatives to the proposed project.

1. Potential Areas of Controversy

Letters received as comments on the Notice of Preparation (NOP) raised a number of topics that the writers wanted addressed in the EIR, including: safety concerns associated with increased traffic and the adjacent rail corridor, effects of increased traffic and noise on an adjacent historic district, provision of adequate parking, landscaping and architectural design with respect to visual resources, use of energy, and the potential release of hazardous substances. In addition, some of the comments offered in the NOP comment letters address the merits of the project itself and not the potential adverse environmental impacts that are the subject of this EIR. Verbal comments offered by those in attendance at the CEQA Scoping Session, held on November 29, 2007, included many of those offered in writing as comments on the NOP.

2. Significant Impacts

Under CEQA, a significant impact on the environment is defined as, "...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." Implementation of the proposed project has the potential to result in adverse environmental impacts in several environmental areas. Impacts in the following areas would be significant

without the implementation of mitigation measures, but would be reduced to a less-than-significant level if the mitigation measures noted in this report are implemented:

- air quality
- noise
- geology, soils and seismicity
- hydrology and water quality
- hazards and hazardous materials
- cultural and paleontological resources
- biological resources
- visual resources
- utilities

3. Cumulative Impacts

The project in conjunction with other foreseeable projects would also result in cumulative impacts to transportation, air quality, and noise.

4. Significant Unavoidable Impacts

As discussed in Chapter VIII of this EIR, implementation of the proposed project would result in the following significant unavoidable adverse impacts:

- The level of service would drop below acceptable levels for three protected intersections: North 1st Street/Taylor Street during the PM peak hour, North 10th Street/Hedding Street during the AM peak hour, and 10th Street/Taylor Street during the PM peak hour;
- Traffic volumes on congested roadways in close proximity to the project site (which requires a General Plan Amendment) would increase during the PM peak hour;
- The volume to capacity ratio and traffic volumes on congested roadways included in parallel facilities located south of SR 87 and I-880 (Link Set #2: SR 87, North First Street, North Fourth Street, and North Tenth Street) would increase during the PM peak hour;
- Total vehicle miles traveled and vehicle hours traveled would exceed the significance criteria for all roadways in Santa Clara County during both the AM and PM traffic periods, significantly increase peak direction traffic volumes across all three special subarea cordon lines and significantly increase the volume-to-capacity ratio across regional screenline links in the cumulative condition; and
- Long-term regional project emissions would exceed the Bay Area Air Quality Management District thresholds of significance for reactive organic gasses.

5. Alternatives to the Proposed Project

The five alternatives to the proposed project analyzed in Chapter VII of this EIR are discussed below.

The **No Development** alternative would involve the Corporation Yard and City parking lot sites remaining as vacant lots. It is assumed both sites would be fenced off from public use.

The **Existing General Plan** alternative would develop the site in accordance with existing General Plan land use designations. On the Corporation Yard site, the maximum density would be 50 units/acre with a maximum height of 65 feet. Approximately 30,000 square feet of neighborhood serving retail and up to 20,000 square feet of community amenity space would be developed at the ground floor level. A total of 585,000 square feet of development would occur above the ground level, including 210 market rate housing units, 52 affordable senior units, and 80,000 square feet of office use. The southerly portion of the site would be improved with an approximately one-acre park. For the surface parking lot site, the maximum residential density would be 25 units/acre, or approximately 14 market rate housing units.

The **Reduced Density** alternative would develop the site substantially the same as the proposed project with the exception of the number of residential units. The number of market-rate residential units on the Corporation Yard site would be reduced to a maximum of 350 units.

The **Diridon Area** alternative would redevelop a 5.49-acre site in the Diridon Area of San Jose with the same amount of development proposed for the project site. Redevelopment of the Corporation Yard and parking lot sites would not occur as part of the proposed project.

The **North 10th Street** alternative would redevelop a 5.38-acre site two blocks north and two blocks east of the project site with the same amount of development proposed for the project site. Redevelopment of the Corporation Yard and parking lot sites would not occur as part of the proposed project.

C. SUMMARY TABLE

Information in Table II-1, Summary of Impacts and Mitigation Measures, has been organized to correspond with environmental issues discussed in Chapter V. The table is arranged in four columns: (1) impacts; (2) level of significance prior to mitigation; (3) mitigation measures; and (4) level of significance after mitigation. Levels of significance are categorized as follows: SU = Significant and Unavoidable; S = Significant; and LTS = Less Than Significant. A series of mitigation measures is noted where more than one mitigation measure is required to achieve a less-than-significant impact, and alternative mitigation measures are identified when available. For a complete description of potential impacts and recommended mitigation measures, please refer to the specific discussions in Chapter V.

Table II-1: Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
A. LAND USE			
<i>There are no significant land use impacts.</i>			
B. POPULATION, EMPLOYMENT AND HOUSING			
<i>There are no significant population, employment and housing impacts.</i>			
C. TRANSPORTATION, CIRCULATION AND PARKING			
<u>TRANS-1:</u> When measured against the City of San Jose level of service impact criteria, three protected study intersections out of the five would be significantly impacted by the project: North 1st Street and Taylor Street (PM peak hour), North 10th Street and Hedding Street (AM peak hour) and 10th Street and Taylor Street (PM peak hour).	S	<u>TRANS-1:</u> Feasible mitigation measures are not available to reduce this impact to a less than significant level.	SU
<u>TRANS-2:</u> Based on the impact criteria for the proximity analysis, the significant increases in PM peak hour traffic volumes on the congested roadways in close proximity to the proposed GPA site constitute a significant adverse traffic impact.	S	<u>TRANS-2:</u> Feasible mitigation measures are not available to reduce this impact to a less than significant level.	SU
<u>TRANS-3:</u> Based on the results of the proposed GPA screenline analysis, the significant increases in V/C and the corresponding significant increases in traffic volumes on the congested (LOS E/F) roadways included in link set #2 during the PM peak hour constitutes a significant adverse traffic impact	S	<u>TRANS-3:</u> Feasible mitigation measures are not available to reduce this impact to a less than significant level.	SU
<u>TRANS-4:</u> The proposed project would cumulatively cause the total VMT and VHT to exceed the significance criteria for all roadways in Santa Clara County during both the AM and PM traffic periods, significantly increase peak direction traffic volumes across all three special subarea cordon lines and significantly increase V/C across regional screenline links.	S	<u>TRANS-4:</u> Feasible mitigation measures are not available to reduce this impact to a less than significant level.	SU

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
D. AIR QUALITY			
<u>AIR-1</u> : Demolition and construction period activities could generate significant dust, exhaust, and organic emissions.	S	<u>AIR-1</u> : Consistent with guidance from the BAAQMD, the following actions shall be required of construction contracts and specifications for both the Corporation Yard site and the City parking lot site. <i>Demolition</i> . The following controls shall be implemented during demolition: • Water during demolition work, including the break-up of pavement and infrastructure, to control dust generation; • Cover all trucks hauling demolition debris from the site; and • Use dust-proof chutes to load debris into trucks whenever feasible. <i>Construction</i> . The following controls shall be implemented at all construction sites: • Water all active construction areas at least twice daily and more often during windy periods; active areas adjacent to existing land uses shall be kept damp at all times, or shall be treated with non-toxic stabilizers to control dust; • Cover all trucks hauling soil, sand, and other loose materials; • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites; • Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality; • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets; • Apply non-toxic soil stabilizers to inactive construction areas; • Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
AIR-1 <i>Continued</i>		- Limit traffic speeds on unpaved roads to 15 mph; - Install sandbags or other erosion control measures to prevent silt runoff to public roadways; - Replant vegetation in disturbed areas as quickly as possible; - Install baserock at entryways for all exiting trucks, and wash off the tires or tracks of all trucks and equipment in designated areas before leaving the site; and - Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.	
<u>AIR-2</u> : Long-term project-related regional emissions would exceed the BAAQMD thresholds of significance for the ozone precursor ROG.	S	<u>AIR-2</u> : The BAAQMD CEQA Guidelines document identifies potential mitigation measures for various types of projects. The following are considered to be feasible and effective in further reducing vehicle trip generation and resulting emissions from the project: - Provide transit facilities (e.g., bus bulbs/turnouts, benches, shelters). - Provide bicycle lanes and/or paths, connected to community-wide network. - Provide sidewalks and/or paths, connected to adjacent land uses, transit stops, and/or community-wide network. - Provide secure and conveniently located bicycle and storage. - Implement feasible transportation demand management (TDM) measures including a ride-matching program, coordination with regional ridesharing organizations and provision of transit information.	SU
E NOISE			
<u>NOI-1</u> : Noise levels from construction activities may range up to 91 dBA L _{max} at the nearest sensitive land uses to the project site.	S	<u>NOI-1a</u> : All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers	LTS
		<u>NOI-1b</u> : The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site as much as is reasonably feasible.	
		<u>NOI-1c</u> : The construction contractor shall locate equipment staging in areas that would create the greatest distance feasible between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.	

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
NOI-1 <i>Continued</i>		<u>NOI-1d</u> : Except as otherwise permitted, construction activities shall be restricted to between 7:00 a.m. and 7:00 p.m. Monday through Friday. No construction shall be permitted on Sundays or federal holidays.	
<u>NOI-2</u> : Groundborne noise and vibration levels from construction activities may range up to 96 VdB L_{max} at the nearest sensitive land uses to the project site.	S	<u>NOI-2a</u>: The City parking lot site project applicant shall prepare a vibration impact assessment to determine potential construction-related groundborne vibration impacts to the historic structure located at 665 North 6th Street. If mitigation measures cannot be identified that would reduce groundborne vibration impacts to below the groundborne vibration damage criteria of 96 VdB for fragile structures then the measures outlined in the Cultural Resources section Mitigation Measure CULT-4a and -4b shall be incorporated into construction plans for the project. <u>NOI-2b</u>: If utility construction would occur within the right of way of North 6th Street and within less than 50 feet of nearby sensitive structures on North 6th Street as a result of buildout of the Corporation Yard site, the site's project applicant shall prepare a vibration impact assessment to determine potential construction-related groundborne vibration impacts. If mitigation measures cannot be identified that would reduce groundborne vibration impacts to below the groundborne vibration damage criteria of 96 VdB for fragile structures then the measures outlined in the Cultural resources section Mitigation Measure CULT-4a and -4b shall be incorporated into construction plans for the project.	LTS
<u>NOI-3</u> : The existing ambient noise environment would exceed the City of San Jose's land use compatibility guidelines.	S	<u>NOI-3a</u>: All noise sensitive development on both the Corporation Yard and City parking lot sites that are located within 310 feet of Taylor Street or within 50 feet of 7th Street shall include an alternate form of ventilation, such as an air conditioning system, in order to ensure that windows can remain closed for a prolonged period of time. <u>NOI-3b</u>: All on-site outdoor activity areas shall be located so that they are completely sheltered by buildings from direct exposure to Taylor Street. <u>NOI-3c</u>: All residential bedroom units with direct exposure to and within 320 feet of the railroad tracks shall include upgraded façade assemblies with an overall minimum sound transmission class rating of STC-36 including windows with a minimum rating of STC-38 in order to reduce nighttime train passby single event noise levels to below 50 dBA L_{max}.	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
F. GEOLOGY, SOILS AND SEISMICITY			
<u>GEO-1</u> : Seismically-induced ground shaking at the project could result in damage to life and/or property.	S	<u>GEO-1</u> : For each of the Corporation Yard and City parking lot sites, prior to the issuance of individual site-specific grading or building permits for the applicable site, a design-level geotechnical investigation shall be prepared by a licensed professional, commissioned by the project applicant, and submitted to the City of San Jose Department of Public Works for review and confirmation that the proposed development fully complies with the California Building Code (Seismic Zone 4). The reports shall describe each project site's geotechnical conditions and address potential seismic hazards, such as liquefaction. The reports shall identify building techniques appropriate to minimize seismic damage. In addition, analysis presented in the geotechnical reports shall conform to the California Division of Mines and Geology recommendations presented in the <i>Guidelines for Evaluating Seismic Hazards in California</i> . All mitigation measures, design criteria, and specifications set forth in the geotechnical and soils reports shall be followed.	LTS
<u>GEO-2</u> : Structures or property at the project could be adversely affected by expansive soils or by settlement of project soils.	S	<u>GEO-2</u> : The Corporation Yard and the City parking lot sites are underlain by expansive soils and/or non-engineered fill and the designers of building foundations and other improvements (including the sidewalks, roads, and underground utilities) shall consider these conditions. The design-level geotechnical investigations required under Mitigation Measure GEO-1 shall include measures to ensure potential damages related to expansive soils and non-uniformly compacted fill are minimized. Mitigation options may range from removal of the problematic soils and replacement, as needed, with properly conditioned and compacted fill to design and construction of improvements to withstand the forces exerted during the expected shrink-swell cycles and settlements. All mitigation measures, design criteria, and specifications set forth in the geotechnical and soils reports shall be followed.	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<u>GEO-3</u> . Differential settlement at the project site could result in damage to project buildings and other improvements.	S	<u>GEO-3</u> : For each of the Corporation Yard and City parking lot sites, as required under Mitigation Measure GEO-1, prior to the issuance of individual grading permits for the applicable site, a site-specific grading plan and geotechnical report shall be prepared by licensed professionals and submitted to the City of San Jose Department of Public Works for review and approval. The plans shall include specific recommendations for mitigating potential settlement associated with fill placement and areas of different fill thickness. All mitigations measures set forth in the geotechnical report and/or grading plan shall be followed.	LTS
<u>GEO-4</u> . Liquefaction at the project site could result in damage to buildings and other improvements.	S	<u>GEO-4</u> : Project design for each of the Corporation Yard site and the City parking lot site shall be in accordance with the recommendations contained in site-specific geotechnical reports, as required under Mitigation Measure GEO-1, prepared by a licensed professional and reviewed and approved by the San Jose Department of Public Works. The City of San Jose Department of Public Works shall approve all final design and engineering plans. Project design and construction shall be in conformance with current best standards for earthquake resistant construction in accordance with the California Building Code (Seismic Zone 4), applicable local codes and in accordance with the generally accepted standard of geotechnical practice for seismic design in Northern California. The City shall submit one copy of the approved geotechnical reports, including mitigation measures, if any, that are to be taken, to the State Geologist within 30 days of approval of the reports. The design-level geotechnical investigations shall include measures to reduce potential damage related to liquefaction to a less-than-significant level.	LTS
G. HYDROLOGY AND WATER QUALITY			
<u>HYD-1</u> : Alteration of local drainage patterns could potentially result in exceedance of the capacity of downstream stormwater conveyance structures, resulting in localized flooding.	S	<u>HYD-1</u> : As a condition of approval of the Planned Development Permit plans of the Corporation Yard and the City parking lot sites, the respective applicants shall demonstrate through the preparation of a detailed hydraulic analysis, that implementation of proposed drainage plans for the applicable development site would not increase total off-site peak flow rates, or exceed the capacities of local system components. The projects must use drainage components and methods that are designed in compliance with City of San Jose standards. The grading and drainage plans shall be reviewed for compliance with these requirements by the City of San Jose Department of Public Works. Any improvements deemed necessary by the City will be part of the conditions of approval.	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<u>HYD-2</u>: Construction activities and post-construction site uses could result in degradation of water quality in the receiving waters by reducing the quality of stormwater runoff.	S	<u>HYD-2a</u>: The applicant(s) shall each prepare a SWPPP designed to reduce potential impacts to surface water quality through the construction period of the project. The SWPPPs must be maintained on-site and made available to City inspectors and/or Water Board staff upon request. The SWPPPs shall include specific and detailed BMPs designed to mitigate construction-related pollutants. At minimum, BMPs shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater. The SWPPPs shall specify properly designed centralized storage areas that keep these materials out of the rain. An important component of the stormwater quality protection effort is the knowledge of the site supervisors and workers. To educate on-site personnel and maintain awareness of the importance of stormwater quality protection, site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPPs. The SWPPPs shall specify a monitoring program to be implemented by the construction site supervisor, which must include both dry and wet weather inspections. In addition, in accordance with State Water Resources Control Board Resolution No. 2001-046, monitoring would be required during the construction period for pollutants that may be present in the runoff that are “not visually detectable in runoff.” BMPs designed to reduce erosion of exposed soil may include, but are not limited to: soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales, and sediment basins. The potential for erosion is generally increased if grading is performed during the rainy season as disturbed soil can be exposed to rainfall and storm runoff. If grading must be conducted during the rainy season, the primary BMPs selected shall focus on erosion control; that is, keeping sediment on the site. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. If hydroseeding is selected as the primary soil stabilization method, then these areas shall be seeded by September 1 and irrigated as necessary to ensure that adequate root development has occurred prior to October 1. Entry and egress from the construction site shall be carefully controlled to minimize off-site tracking of sediment. Vehicle and equipment wash-down facilities shall be designed to be accessible and functional during both dry and wet conditions.	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HYD-2 <i>Continued</i>		The City of San Jose Department of Public Works shall review and approve the SWPPPs and drainage plans prior to approval of the planning development permit or grading plan. The Director of Public Works and City inspectors from Building, Public Works or Environmental Services Departments may require more stringent stormwater treatment measures than required by the SWPPPS, at their discretion. Implementation of this two-part mitigation would reduce this impact to a less-than-significant level. (LTS)	
		<u>HYD-2b</u>: Project applicants for both the Corporation Yard and City parking lot sites shall comply with the City of San Jose's Post-Construction Urban Runoff Management Policy (Policy Number 6-29), which requires: <i>All new and redevelopment projects to implement Post-Construction Best Management Practices (BMPs) and Treatment Control Measures (TCMs) to the maximum extent practicable. This Policy also establishes specified design standards for Post-Construction TCMs for Major Projects and minimum Post-Construction BMPs for all Land Uses of Concern, including Expansion Projects. This Policy further establishes the criteria for determining the situations in which it is impracticable to comply with the Major Project design standards, including the criteria for evaluating the equivalency of Alternative Compliance Measure(s).</i> The applicants for each of the Corporation Yard and City parking lot sites shall have a stormwater control plan prepared by a qualified professional, prior to approval of the planning development permit. In accordance and compliance with City of San Jose Policy 6-29, the stormwater control plan for each site shall include, and show, calculations in compliance with the numerical sizing criteria listed in Chapter 4 of the C.3 Stormwater manual, as issued by the SCVURPPP. As part of the determination as to suitability of the site, location-specific soil testing is required if landscape treatment is part of the treatment strategy to be employed at the site(s).	

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HYD-2 <i>Continued</i>		The stormwater control plans shall demonstrate through detailed hydraulic analysis that implementation of the proposed drainage plans would result in treatment of the appropriate percentage of the runoff from the sites (in compliance with the County NPDES permit). The permit provides for more than one methodology for calculating numeric sizing criteria; however, the amount of runoff that is typically required to be treated is about 85 percent of the total average annual runoff from the site. The qualified professionals preparing the design-level stormwater control plans shall consider additional measures designed to mitigate potential water quality degradation of runoff from all portions of the completed developments. In general, passive, low-maintenance BMPs (e.g., grassy swales, porous pavements) are preferred by the agency. The City shall ensure that both the Corporation Yard and City parking lot site project designs include features and operational BMPs to reduce potential impacts to surface water quality associated with operation of the projects to the maximum extent practicable. These features shall be included in the stormwater control plans and final development drawings. The design teams for each of the Corporation Yard and City parking lot sites shall review and incorporate as many concepts as practicable from <i>Start at the Source</i>, <i>Design Guidance Manual for Stormwater Quality Protection</i> and the California Stormwater Quality Association's <i>Stormwater Best Management Practice Handbook, New Development and Redevelopment</i>. Any use of end-of-pipe treatment systems must be accompanied by a viable maintenance program. Specifically, drainage from the project sites should be treated prior to discharge to city storm drains. The enclosed parking areas shall not be drained to the stormwater conveyance system. The garages should be dry-swept or, if washdown water is used the effluent should be discharged to the sanitary sewer system under permit from the San Jose/Santa Clara Water Pollution Control Plant. The City of San Jose Department of Public Works shall review and approve the stormwater control plans and drainage plans prior to approval of the planning development permit. The Director of Public Works and City inspectors from Building, Public Works or Environmental Services Departments may require more stringent stormwater treatment measures than required by the SWPPPS, at their discretion.	

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<u>HYD-3</u> : Dewatering discharges may contain contaminants and if not properly managed could cause impacts to construction workers and the environment.	S	<u>HYD-3</u> : As required under Mitigation Measure HYD-2a, the project applicants for both the Corporation Yard and City parking lot sites shall each have a SWPPP prepared for their sites. The SWPPPs shall include provisions for the proper management of construction-period dewatering activities. At minimum, all dewatering shall be contained prior to discharge to allow the sediment to settle out, and filtered, if necessary, to ensure that only sediment-free water is discharged to the storm or sanitary sewer system, as appropriate. The General Permit makes allowance for circumstances where limited amounts of uncontaminated dewatering effluent, from foundation excavations for example, may be released after sediment has settled out and the effluent has been filtered, in compliance with the terms of the SWPPP. This may be appropriate for the City parking lot site, however, the applicant is responsible for ensuring that any necessary field or laboratory test are performed if contamination is suspected, and appropriate steps taken. For the Corporation Yard site, in areas of suspected groundwater contamination (i.e., near sites where chemical releases are known or suspected to have occurred), the groundwater shall be analyzed by a State-certified laboratory for the suspected pollutants prior to discharge. Based on the results of the analytical testing, the project applicant(s) shall acquire the appropriate permit(s) prior to discharge of the dewatering effluent. Discharge of the dewatering effluent would require a permit from the Water Board (for discharge to the storm sewer system) and/or the San Jose/Santa Clara Water Pollution Control Plant (for discharge to the sanitary sewer system).	LTS
<u>HYD-4</u> : Redevelopment of the Corporation Yard site proposes below-ground parking structures which could be inundated by infiltrating groundwater and/or during extreme storm events.	S	<u>HYD-4a</u> : The portions of the structures of the proposed Corporation Yard site that may come into contact with groundwater shall be waterproofed using accepted building practices and approved by the City of San Jose Building Official. The methods used in waterproofing may include (but are not limited to) the placement of membranes or coatings (e.g. modified asphalt, urethanes, or rubber polymers) on the exterior surfaces of the below grade foundation components. In addition, each sublevel area shall be equipped with a sump pump to remove infiltrating ground water and garage wash-down water to the sanitary sewer system, and the effluent should be discharged to the sanitary sewer system under permit from the San Jose/Santa Clara Water Pollution Control Plant.	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HYD-4 <i>Continued</i>		<u>HYD-4b</u> : All structures of the proposed Corporation Yard site shall be built so that the potential for surface water flow into the underground parking, or other underground structures, is minimized. If the potential surface water inflow is not controlled, the sump pumps, installed primarily to remove ground water infiltration and wash-down water from garage maintenance, may be inadequate. Specifically, the entrances and exits to all below-grade structures shall be protected from all surface water inflow (including floodwater associated with the 100-year flood event) either by grade control and/or berms at the entrances and exits. The surface elevation for the entrance to the underground garage shall rise to at least one foot above the highest 'top-of-curb' point adjacent the parking entrance.	
H. HAZARDS AND HAZARDOUS MATERIALS			
<u>HAZ-1</u> : Development of the project could expose remediation/construction workers and/or the public to hazardous materials from contaminants in soil and groundwater, during and following site redevelopment activities.	S	<u>HAZ-1a</u> : Trained workers, in accordance with local, state, and federal regulations, shall remove the three existing USTs and associated pipelines and fuel dispensers from the Corporation Yard site prior to site redevelopment activities. Closure of these USTs by the local regulatory agency (Fire Department, SCCDEH, as applicable), shall be obtained prior to or at the initiation of site redevelopment activities. If contamination is found associated with these USTs, the City/RDA (or applicant) shall ensure completion of all items required for closure by the regulatory oversight agency, which may include preparation and implementation of a CAP, verification monitoring, preparation of a RRMP (if residual contamination is left in place), or other required documentation or investigations. If excavation activities are required to address on-site contamination (prior to case closure), the CAP shall include an assessment of air impacts associates with excavation activities, any applicable local dust or noise standards which may be exceeded by the excavation activities, transportation impacts from the removal or remediation activities, and risk of public upset should there be an accident at the site, or as otherwise required by the regulatory oversight agency. This mitigation measure does not apply to the City parking lot site as it does not include USTs.	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HAZ-1 <i>Continued</i>		<u>HAZ-1b</u> : Prior to approval for any grading or construction permits at each of the Corporation Yard and City parking lot sites, the contractor(s) for the applicable site shall prepare procedures to be undertaken in the event that previously unreported contamination or subsurface hazards are discovered during redevelopment activities (e.g., identified by odor or visual staining), including a contingency plan for sampling of unknown materials, and shall designate personnel responsible for implementation of these procedures. The procedures shall be submitted by the contractor(s) with the application for a grading permit(s) from the City of San Jose Department of Public Works.	
		<u>HAZ-1c</u> : Prior to development activities at the parking lot site, a minimum of four surface soil samples shall be collected below the existing site paving by a qualified environmental professional (e.g., Professional Geologist, Professional Engineer) and analyzed for lead and other metals (EPA Method 6000/7000 series), Total Petroleum Hydrocarbons as gasoline, diesel, and motor oil (EPA Method 3630/8015M), fuel-related volatile organics and oxygenates (EPA Method 8260), and polynuclear aromatic hydrocarbons (EPA Method 8270) by a California-certified laboratory. The results of the samples shall be compared to Water Board Environmental Screening Levels (ESLs) for future residential and commercial receptors and construction workers. Documentation of the sampling and comparisons of site data to ESLs shall be provided to the City/RDA and SCCEHD prior to issuance of a Planned Development Permit. If site soils contain contaminants above the ESLs for residential, commercial, and/or construction workers, any required additional site characterization, site remediation, or other required activities shall be completed by the responsible party under the direction of a regulatory oversight agency prior to site development. This mitigation measure does not apply to the Corporation Yard site, which has undergone separate subsurface investigations with regulatory oversight.	

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HAZ-1 <i>Continued</i>		<u>HAZ-1d</u>: The applicant or City/RDA shall ensure that groundwater monitoring wells associated with the LUSTs at the Corporation Yard are properly abandoned (or retained) as directed by the oversight agency, SCCDEH. All wells requested to be abandoned by SCCDEH shall be done so under a valid permit obtained by SCVWD. This mitigation measure does not apply to the City parking lot site as it does not contain groundwater monitoring wells. Implementation of this four-part measure would reduce this impact to a less-than-significant level.	
<u>HAZ-2</u>: Improper use or transport of hazardous materials during construction activities could result in releases affecting construction workers and the general public.	S	<u>HAZ-2a</u>: The contractor(s) shall designate storage areas at each of the Corporation Yard and the City parking lot sites that are suitable for material delivery, storage, and waste collection. These locations must be as far away from catch basins, gutters, drainage courses, and water bodies as possible. All hazardous materials and wastes used or generated during project site redevelopment activities shall be labeled and stored in accordance with applicable local, state, and federal regulations, and General Plan policies for Hazardous Materials and Fire Hazards. In addition, an accurate up-to-date inventory, including Material Safety Data Sheets, shall be maintained on-site to assist emergency response personnel in the event of a hazardous materials incident. All maintenance and fueling of vehicles and equipment at the Corporation Yard and parking lot sites shall be performed in a designated, bermed area, or over a drip pan that will not allow run-off of spills. Vehicles and equipment shall be regularly checked and have leaks repaired promptly at an off-site location. Secondary containment shall be used to catch leaks or spills any time that vehicle or equipment fluids are dispensed, changed, or poured.	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HAZ-2 <i>Continued</i>		<u>HAZ-2b:</u> The contractor(s) redeveloping each of the Corporation Yard and parking lot sites shall prepare emergency procedures including notification procedures in the event of spills or other on-site hazardous materials releases, evacuation procedures, spill containment procedures, and required personal protective equipment, as appropriate, in responding to the emergency. Use, storage, disposal, and transport of hazardous materials during construction activities at both sites shall be performed in accordance with existing local, state, and federal hazardous materials regulations. These emergency procedures shall be prepared by the contractor(s) and submitted to the City/RDA prior to earthworking activities. Implementation of this two-part mitigation measure would reduce this impact to a less-than-significant level	
I. CULTURAL AND PALEONTOLOGICAL RESOURCES			
<u>CULT-1:</u> Construction-related excavation may result in significant impacts to human remains.	S	<u>CULT-1:</u> If human remains are discovered during archaeological investigations or construction on the Corporation Yard site and/or the City parking lot site, any such remains shall be treated in accordance with the requirements of CCR Title 14(3) §15064.5(e), which has particular procedures that apply to the discovery of remains of Native American origin. These procedures are provided below. (1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until: (A) The coroner of the County must be contacted to determine that no investigation of the cause of death is required, and (B) If the coroner determines the remains to be Native American: 1. The coroner shall contact the Native American Heritage Commission within 24 hours. 2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American. 3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC §5097.98, or	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
CULT-1 <i>Continued</i>		(2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. (A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission; (B) The descendent identified fails to make a recommendation; or (C) The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner. Compliance with the requirements of CCR Title 14(3) §15064.5(e) shall be coordinated with the Native American community contacts already established for this project. If, following the fulfillment of the notification requirements described above, human remains are discovered that are determined to <u>not</u> be of Native American origin, then the City shall consult with the appropriate descendent community regarding means for treating or disposing of the human remains, and any associated items, with appropriate dignity.	

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<u>CULT-2</u>: Construction-related excavation (including site remediation) may result in impacts to significant archaeological resources.	S	<u>CULT-2a</u>: Research conducted by the Anthropological Studies Center has established that it is likely that the project area, including construction on both the Corporation Yard and City parking lot sites, may contain significant archaeological resources associated with historic-era Japanese and Chinese settlement. To identify these resources in the field, an appropriate Testing Strategy is necessary to specify the appropriate investigative methods and approaches. If resources are identified, they will require evaluation to determine if they qualify as significant archaeological resources. The evaluation shall be conducted through the application of the principles contained in the Archaeological Research Design (described below). To achieve the steps outlined above, the Director of Planning (or their designated representative) shall require that an Archaeological Research Design, Testing, and Evaluation Plan (ARDTEP), currently in preparation, be implemented prior to project construction. The ARDTEP will guide fieldwork and help to determine if identified archaeological remains constitute significant archaeological resources. The ARDTEP is being prepared by professionals who meet the Secretary of the Interior's Professional Qualifications Standards in historical archaeology, prehistoric archaeology, and history (36 CFR Part 61, Appendix A). The <i>research design</i> component of the document will contain the following major sections: - Introduction and Purpose - Project Location and Description - Regulatory Context - Methods and Sources - Holocene Landscape Evolution - Prehistory and Ethnography - History - Previous Archaeological Research - Prehistoric Archaeology - Historical Archaeology - Archaeological Research Design - Geoarchaeology	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
CULT-2 <i>Continued</i>		Archival and Oral History Research Block Histories by Address Research Context: Prehistoric Archaeology Research Themes and Issues Data Requirements Property Types: Prehistoric Archaeology Archaeological Sensitivity: Prehistoric Research Context: Historical Archaeology Research Themes and Issues Data Requirements Property Types: Historical Archaeology Archaeological Sensitivity: Historical Archaeology. The <i>testing strategy</i> component of the document will contain the following major sections: Introduction and Purpose Test Areas and their Potential Significance Fieldwork Methods Hazardous Materials, Health, and Safety Treatment of Human Remains and Burial Goods Public Involvement Laboratory Work Laboratory Methods Archaeological Evaluation Plan: Evaluation Procedures and Criteria Integrity Infield Evaluation Post-field Evaluation Reporting and Dissemination of Results Public Outreach Curation The ARDTEP shall be subject to review and approval by the Director of Planning (or their designated representative) in consultation with the City of San Jose Historic Preservation Officer. On approval, the Planning Director (or their designated representative) shall require that the terms of the ARDTEP be carried out by professionals who meet the Secretary of	

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
CULT-2 <i>Continued</i>		the Interior's Professional Qualifications Standards in historical archaeology, prehistoric archaeology, and history (36 CFR Part 61, Appendix A). The ARDTEP will be used to inform the City's decision regarding project design, and will be carried out prior to project construction. Following implementation of the ARDTEP, the project archaeologist shall submit a report (the content of which is specified in the ARDTEP) of his/her findings to the Planning Department. If the project archaeologist, in consultation with the Planning Department, determines that significant archaeological resources are present, and that such resources may be impacted by the project, then the Planning Department shall require the preparation and implementation of an Archaeological Treatment Plan to mitigate project impacts. The Plan may include archaeological data recovery, archaeological monitoring, and/or public interpretation of important remains. The Archaeological Treatment Plan is described below in Mitigation Measure CULT-2b.	
		<u>CULT-2b:</u> Unavoidable project impacts on significant archaeological resources shall be treated according to the requirements of an Archaeological Treatment Plan (ATP). The Director of Planning (or their designated representative) shall review, authorize, and require the implementation of the ATP, which shall be prepared by professionals who meet the Secretary of the Interior's Professional Qualifications Standards in historical archaeology, prehistoric archaeology, and history (36 CFR Part 61, Appendix A), and who will work in consultation with the City and the appropriate descendent communities. The ATP shall specify the treatment of previously identified significant archaeological resources, as well as the treatment of property types that may be uncovered during additional archaeological excavation. Depending on the nature of the resources and project impacts, the ATP may include requirements for any or all of the following: additional archaeological identification efforts, data recovery (scientific excavation), laboratory analysis, preparation of technical and interpretive reports, <i>in situ</i> preservation of remains, archaeological monitoring during construction, and the preparation of feasible public outreach products. Treatment, including archaeological data recovery, shall be limited to significant archaeological resources that may be adversely impacted by the project.	

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
CULT-2 <i>Continued</i>		The ATP shall contain the following sections, as appropriate to the resources under consideration: Introduction and Purpose Project Description Impact Locations Historic Resources Data Recovery Plan: Field Methods Site Security Measures Laboratory Methods Artifact Discard and De-accession Policy Final Reporting and Dissemination of Results Curation Public Interpretation Plan Archaeological Monitoring Plan. After the City has approved the project design and the ATP has been implemented, the City, in consultation with the project archaeologist, may determine that it is necessary to prepare an Archaeological Monitoring Plan. This decision will be based on information about field conditions collected during the Archaeological Monitoring Plan's implementation, and will specifically address the likelihood that undiscovered, significant archaeological resources may be present in the project area and may be impacted by project activities. The decision shall be made by the Director of Planning (or their designated representative).	

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
CULT-2 <i>Continued</i>		<u>CULT-2c:</u> The purpose of the Archaeological Monitoring Plan (AMP) will be to ensure that significant archaeological resources discovered during construction are identified, evaluated, and appropriately treated. The City will review, authorize, and require the implementation of the AMP. The AMP shall be reviewed, authorized, and its implementation required by the Director of Planning (or their designated representative). The AMP shall include the following requirements: - Construction monitoring shall be undertaken by an individual who meets the Secretary of the Interior's Professional Qualifications Standards in historical archaeology and/or prehistoric archaeology (36 CFR Part 61, Appendix A), as appropriate in relation to the anticipated resources. A Native American cultural monitor shall be present if previous archaeological excavations indicate that Native American archaeological deposits may be discovered. The cultural monitor's function shall be to advise the project archaeologist and the City regarding the respectful treatment of any prehistoric archaeological remains that are uncovered. - The City, in consultation with the project archaeologist, shall determine which project activities and/or which portions of the project area will be archaeologically monitored. This information will be included in the AMP. In most cases, all soil-disturbing activities in sensitive portions of the project area—such as demolition, foundation removal, excavation, grading, utilities installation, and foundation work—will require archaeological monitoring. The project archaeologist shall have the authority to redirect construction personnel and equipment while discoveries are being assessed. The monitoring and project archaeologists would make every effort to ensure that evaluation and treatment of remains is carried out with as little disruption as possible. If it is necessary to suspend construction for more than one working day, the project archaeologist shall consult with the City to assess the appropriate course of action. During construction monitoring, if the project archaeologist and the City determine that the finds in question represent significant archaeological resources, and that these resources may be adversely impacted by the project, then the City shall require the implementation of the appropriate portions of the Archaeological Treatment Plan to mitigate project effects on significant resources. These efforts may include archaeological data recovery and public interpretation of important remains.	

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<u>CULT-3</u>: New construction may result in significant impacts to the integrity of setting and feeling of the San Jose Japantown Historic District.	S	<u>CULT-3a</u>: The proposed project shall have regular commercial ground-floor entries along the following portions of North 6th Street: (1) that portion of the project area directly across from Buildings 8-12 (i.e., within the Corporation Yard site); and (2) that portion of the project area adjacent to Building 16 (i.e., the City parking lot site). While of varying scales and designs, the nine contributing buildings along the west side of North 6th Street, although interrupted by vacant parcels and surface parking lots, create a pedestrian-scaled rhythm of ground floor entries and storefronts. Buildings 13 through 16 will be across North 6th Street from a proposed public open space; Buildings 8 through 12, however, will be across the street from proposed buildings. These proposed buildings, along with the proposed structure immediately adjacent to Building 16, shall maintain and extend the scaled rhythm established by the contributing buildings along North 6th Street. The project should not “wall off” this portion of North 6th Street with an undifferentiated, continuous façade. Nor shall the buildings of this portion of the project be set so far back from the street that North 6th Street fails to feel like a commercial-lined street. Building to the property line on North 6th Street from Jackson Street to approximately Building 12 (APN 249-39-012) is desirable. <u>CULT-3b</u>: The proposed project shall employ setbacks and horizontal façade elements to reflect the scale of the San Jose Japantown Historic District along the following portions of North 6th Street: (1) that portion of the project area directly across from Buildings 8-12 (i.e., the Corporation Yard site); and (2) that portion of the project area adjacent to Building 16 (i.e., the City parking lot site). This mitigation measure shall not be construed to require specific building materials or design elements. Proposed buildings directly across North 6th Street from Buildings 8-12, along with the proposed structure immediately adjacent to Building 16, shall incorporate horizontal façade elements to distinguish the first story or two from the stories above. Such elements will prevent the taller proposed buildings from overwhelming the contributing one- and two-story buildings on the west side of North 6th Street.	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
CULT-3 <i>Continued</i>		Maximum building heights fronting North 6th Street in proximity to Buildings 8 through 12 and Building 16 shall be mid-rise in order to be compatible with the mid-rise scale of the greater Japantown area and the low-rise scale of the identified Japantown Historic District. Proposed buildings on the Corporation Yard site directly across North 6th Street from Buildings 8 through 12, along with the proposed structure immediately adjacent to Building 16 on the City parking lot site, shall incorporate horizontal façade elements to distinguish the first story or two from the stories above. The third through sixth stories on buildings proposed across North 6th Street from Buildings 8 through 12 shall be set back 10 to 15 feet from second stories. Such elements will prevent the taller proposed buildings from overwhelming the contributing one- and two-story buildings on the west side of North 6th Street. A two-part review process would be used to ensure that proposed designs meet the objectives of Mitigation Measures CULT-3a and 3b. First, conceptual elevations and architectural standards for the proposed development shall be subject to City Council approval, following community input at the Planning Department zoning stage. Then, final elevations will be subject to the approval of the Director of Planning, following community input at the Planned Development Permit stage.	
<u>CULT-4</u>: New construction may result in significant impacts to the integrity of design, materials, and workmanship of the San Jose Japantown Historic District.	S	<u>CULT-4a</u>: Should the implementation of Mitigation Measure NOI-2a and -2b demonstrate that construction-related vibration levels may be in excess of the damage threshold, a qualified geologist or other professional with expertise in ground vibration and its effect on existing structures shall determine the likelihood that such vibration would damage any of the contributing buildings of the San Jose Japantown Historic District (Building 16, in particular). If such damage is likely, the qualified professional shall develop specifications regarding the restriction and monitoring of construction activities that shall be incorporated into the contract. Project modifications recommended by the qualified professional shall be made prior to project construction to reduce vibrations to below damage threshold levels.	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
CULT-4 <i>Continued</i>		<u>CULT-4b</u> : The monitoring architect (described above) shall establish a training program for construction personnel to emphasize the importance of protecting the historical buildings in the vicinity of the project area. This program shall include information on recognizing historic fabric and materials, and directions on how to exercise care when working around and operating equipment near historical buildings, including the proper storage of materials. The program shall also include information on ways to minimize vibrations from demolition and construction, as well as ways to monitor and report any potential damage to historical buildings from such vibration. A provision for establishing this training program shall be incorporated into the contract, and the contract provisions would be reviewed and approved by the City of San Jose's Historic Preservation Officer.	
<u>CULT-5</u> : New construction may result in inadvertent damage to paleontological resources.	S	<u>CULT-5</u> : If paleontological resources are encountered during project subsurface construction on the Corporation Yard and/or City parking lot sites, the all work within 25 feet of the discovery shall be redirected and a qualified paleontologist contacted to evaluate the finds and make recommendations. If the exposed geological formation is found to contain significant paleontological resources, such resources shall be avoided by project activities, if feasible. If project activities cannot avoid the paleontological resources, the resources shall be evaluated for their significance. If the resources are found to be significant, adverse effects shall be mitigated. Mitigation may include, but is not limited to, monitoring, data recovery and analysis, and accessioning of all fossil material to a paleontological repository. A final report documenting the methods, findings, and recommendations of the consulting paleontologist shall be prepared and submitted to the paleontological repository.	LTS
J. BIOLOGICAL RESOURCES			
<u>BIO-1</u> : Construction of the proposed project could result in the removal of ordinance-size trees.	S	<u>BIO-1</u> : Loss of ordinance size trees will be mitigated by implementation of landscaping plans approved by the City of San Jose, in conformance with the City of San Jose Landscape and Irrigation Guidelines and City of San Jose Planning Department specifications. For private projects, the City of San Jose requires tree replacement for those trees greater than 18 inches in diameter with 24-inch box trees at a ratio of 4:1 (trees planted to trees removed). The project applicant shall submit a landscape plan at the development permit stage illustrating the details by which these trees will be replaced and maintained.	LTS

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<u>BIO-2</u> : Construction activities may disturb nesting Cooper's hawks and other native birds.	S	<u>BIO-2</u> : All work on trees proposed for removal or pruning as part of redevelopment of the Corporation Yard site and the City parking lot site should occur during the non-breeding season (August 1 to February 28) in the year prior to the start of grading if feasible. If tree pruning or removal cannot occur in the non-breeding season, then a preconstruction survey for active bird nests shall be conducted. Surveys to determine the presence of active raptor and bird nests on or adjacent to the construction area shall be conducted by a qualified biologist no more than 30 days prior to the initiation of construction-related activities, including removal of existing vegetation or facilities. Results from the survey shall be submitted to the Environmental Principal Planner in the Department of Planning, Building and Code Enforcement. If native birds are observed nesting on or within 100 feet from the site, exclusion zones shall be established around all active nests. The size of the exclusion zone shall be determined based on consultation with the CDFG, which typically requires a zone of 50 to 300 feet around the nest, depending on the bird species. Active Cooper's hawk nests within urban areas would likely require a 100-foot exclusion zone. No activity shall be allowed inside the exclusion zone until a qualified biologist has determined that the young have successfully fledged from the nest or that the nest is no longer active.	LTS
K. VISUAL RESOURCES			
<u>VIS-1</u> : The proposed project could detract from the existing visual character of historic resources located adjacent to the project site.	S	<u>VIS-1</u> : Implement Mitigation Measures CULT-3a and 3b, which require project design modifications to reduce the project's impacts to the San Jose Japantown Historic District's integrity of setting and feeling. This would be achieved by designing new construction that is sympathetic to the district's existing architectural context and historical qualities.	LTS
<u>VIS-2</u> : The removal of all ordinance sized trees from the project site would substantially damage scenic resources.	S	<u>VIS-2</u> : Implement Mitigation Measure BIO-1, which requires mitigation for the loss of ordinance sized trees by implementation of landscaping plans approved by the City of San Jose. Tree replacement for those trees greater than 18 inches in diameter shall occur at a ratio of 4:1 (trees planted to trees removed) with 24-inch box trees.	LTS
L. SHADE/SHADOW AND LIGHT/GLARE			
<i>There are no significant shade/shadow and light/glare impacts.</i>			

Table II-1 *Continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
M. UTILITIES			
<u>UTIL-1</u> : The proposed project could exceed the capacity of some sewer lines in the vicinity of the project site.	S	<u>UTIL-1</u> : As a condition of project approval, the applicant for redevelopment of the Corporation Yard site shall verify with survey data, to be submitted to the San Jose Department of Public Works, that the 8-inch VCPs on North 7th Street between Jackson Street and Taylor Street and on North 6th Street between Jackson Street and Taylor Street could accommodate any proposed lateral connections from the below grade garage. If the VCPs cannot accommodate the proposed laterals from the below grade garage, then the applicant shall contract with a qualified engineering firm to design a system that could include ejector pumps and backflow preventors. This mitigation measure does not apply to the City parking lot site as redevelopment of this site does not include a below grade garage, basement or other subsurface areas that could require lateral connections.	LTS
N. PUBLIC SERVICES AND FACILITIES			
<i>There are no significant public services and facilities impacts.</i>			
O. ENERGY AND MINERAL RESOURCES			
<i>There are no significant energy and mineral resources impacts.</i>			
P. GLOBAL CLIMATE CHANGE			
<i>There are no significant global climate change impacts.</i>			

Source: LSA Associates, Inc., 2008.

III. PROJECT DESCRIPTION

This chapter describes the proposed Japantown Corporation Yard Redevelopment Project (proposed project), that is evaluated in this Environmental Impact Report (EIR). A description of the proposed project's regional and local context, background, and objectives is included, in addition to a discussion of the proposed project itself and required project approvals and entitlements.

A. PROJECT OVERVIEW

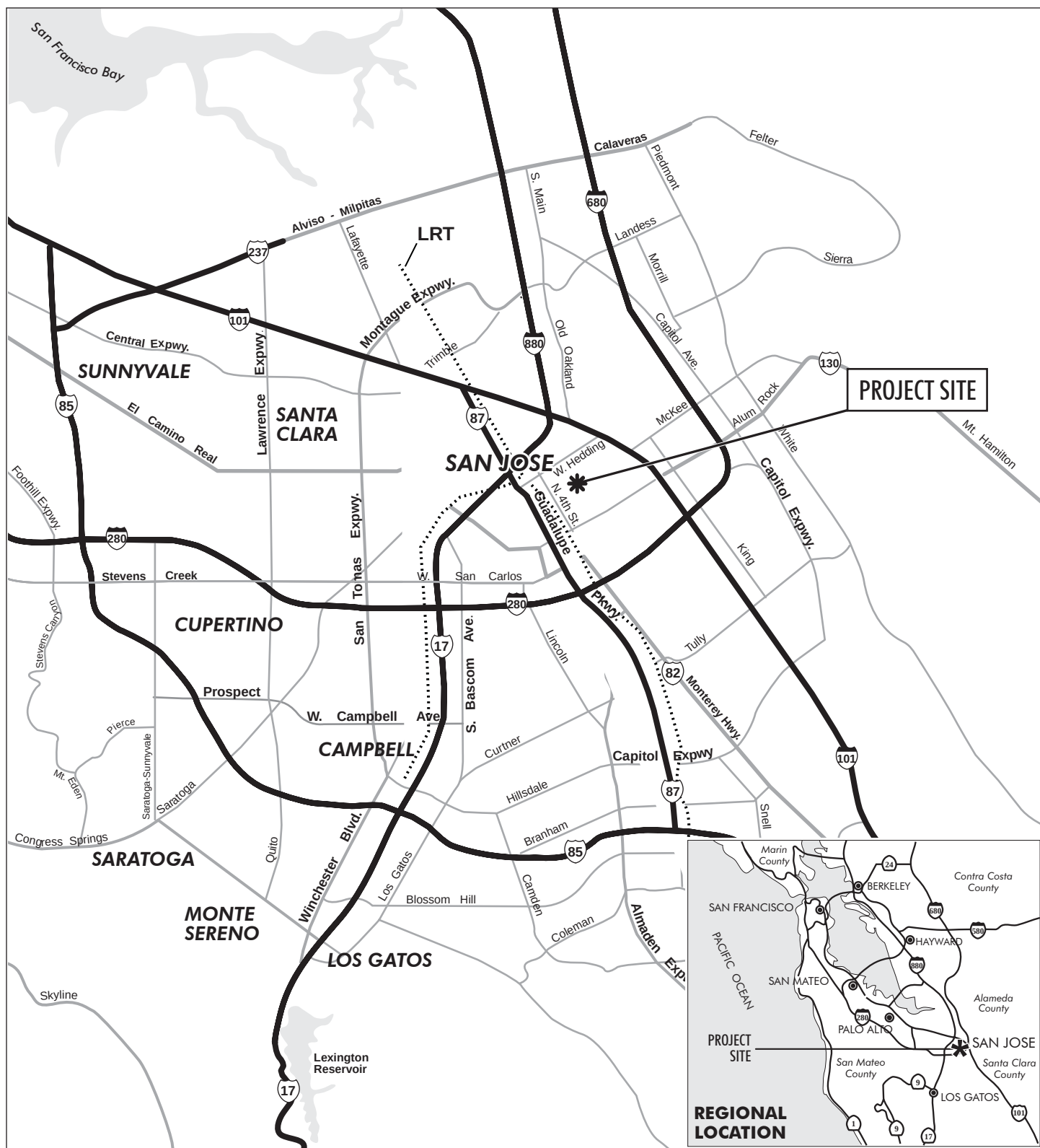
The proposed project would redevelop a total of 5.78 acres consisting of the City's former Corporation Yard and associated surface parking lot as a mixed-use development. The proposed project would include up to 600 market-rate residential units, up to 30,000 square feet of retail space, a 10,000 to 20,000 square foot community amenity space, and up to 900 underground/surface parking spaces on the Corporation Yard site. As a variation on the proposed project, up to 15,000 square feet of retail space could be replaced with up to 24 live/work units. The existing surface parking lot would be redeveloped as an affordable senior housing complex including up to 85 units of affordable housing and 40 parking spaces. Project buildings would range from 6 to 14 stories for the residential/mixed-uses and 1 to 2 stories for the community amenity uses. As the location and height of project buildings is conceptual at this time, this EIR evaluates a 14-story building envelope for the Corporation Yard site. A 6-story building envelope is evaluated for the surface parking lot site. The location and height of buildings would be determined based on standards to be established in the Planned Development Zoning for the Corporation Yard Site and the City parking lot site. The proposed project would require City entitlement actions including subsurface demolition, construction, and development permits.

B. PROJECT LOCATION

The following section describes the proposed project location as well as site characteristics and land uses. A description of surrounding land uses is included in Section V.A, Land Use.

1. Location

As shown in Figure III-1, the project site is situated in the South San Francisco Bay Area, within the City of San Jose, in Santa Clara County. The project site is located immediately north of the Downtown, within the Japantown Redevelopment Project Area. Regional access to the site is provided by Interstate 880 (I-880) to the north, US 101 to the east, and State Route 87 (SR 87) and Santa Clara Valley Transportation Authority (SCVTA) light rail lines to the west.



LSA



*Japantown Corporation Yard
Redevelopment Project EIR*
Regional Location Map

SOURCE: LSA ASSOCIATES, INC., 2007.

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The project site is comprised of two parcels totaling approximately 5.78 acres. The larger of the two parcels comprises 5.23 acres and consists of the City's former Japantown Corporation Yard (the Corporation Yard site).¹ As shown in Figure III-2, this parcel is bordered on the north by Taylor Street, on the east by North 7th Street, on the south by Jackson Street, and on the west by North 6th Street. The smaller parcel comprises approximately 0.55 acres and is located on the northern half of the block that is bounded by Taylor Street, North 6th Street, Jackson Street and North 5th Street, immediately west of the former Corporation Yard site.² This parcel was used as a surface parking lot for City employees working at the Corporation Yard.

2. Site Characteristics

The Corporation Yard site is improved with seven single-story buildings, consisting of one administration office and six shop/warehouse/storage structures, all of which are currently unoccupied. The total building area is approximately 85,000 square feet. The remainder of the site consists of paved areas. Several street trees are also planted around the perimeter of the site.

In Spring 2007 the City of San Jose expanded operations at its Central Service Yard on Senter Road and the uses of the Japantown Corporation Yard were transferred to the Central Service Yard. On November 6, 2007, in furtherance of the Redevelopment Plan, the San Jose Redevelopment Agency Board approved a contract for surface demolition activities at the Corporation Yard (Project #PP07-224). Hazardous materials abatement activities at the site were completed and demolition activities commenced at the site in mid-January 2008. Demolition activities are anticipated for completion in March 2008. As such, the baseline condition utilized in this EIR assumes that surface demolition has been completed and the existing buildings have been removed.

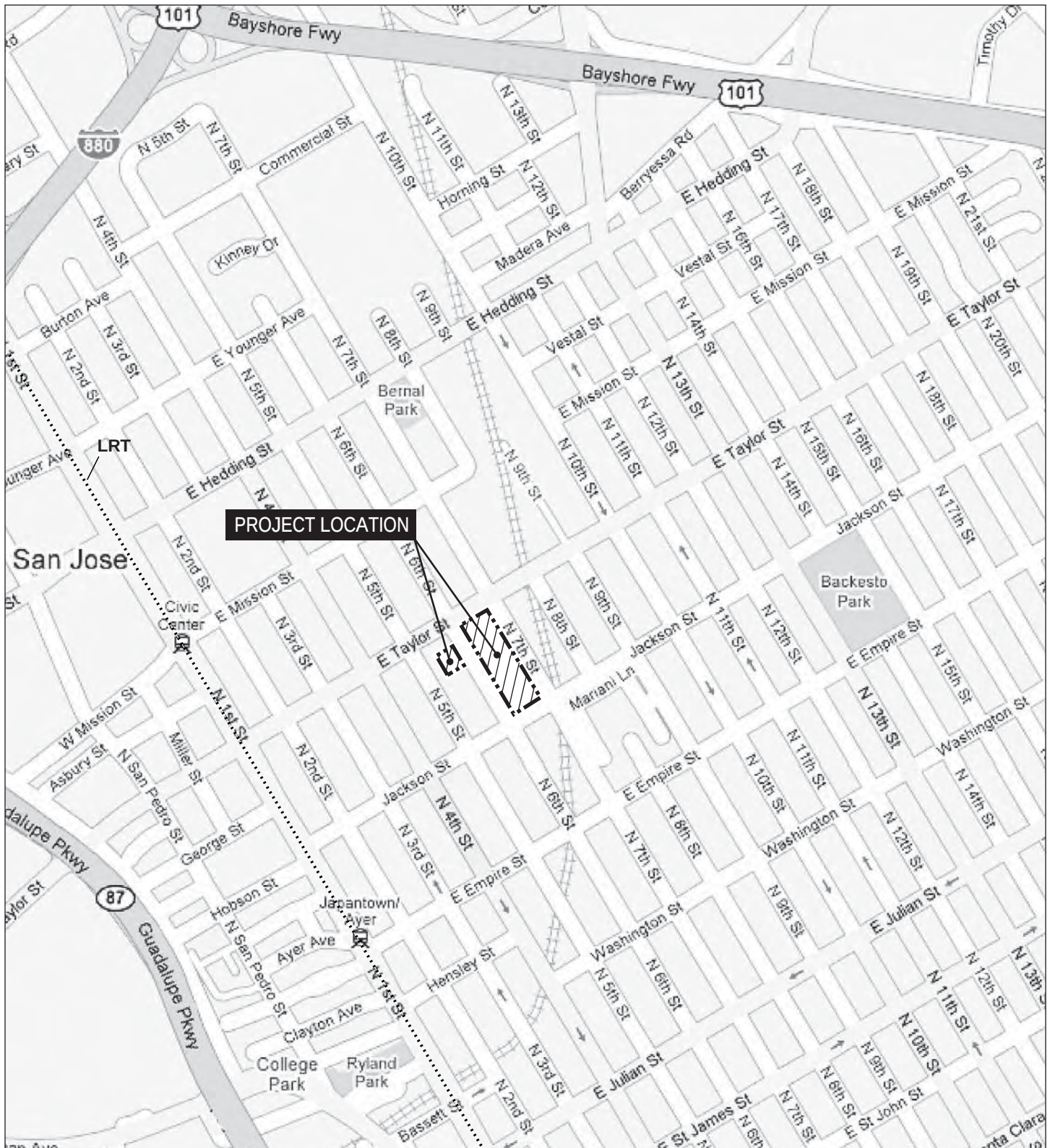
The Corporation Yard site is located within the Jackson-Taylor Planned Residential Community (PRC), within the San Jose General Plan. Currently, the General Plan land use designation for the northern portion of the Corporation Yard site is Mixed-Use #2. The southern portion of the site is designated Public Park/Open Space. The General Plan land use designation for the City surface parking lot site across North 6th Street is Medium High Density Residential. Both sites are zoned Light Industrial on the City's Zoning Map.

In addition to the General Plan and Zoning Ordinance, the project site is subject to the following local plans and policies, which are discussed in detail in Chapter IV, Planning Policy:

- Jackson-Taylor Neighborhood Revitalization Plan;
- Jackson-Taylor Residential Strategy; and
- Japantown Redevelopment Plan.

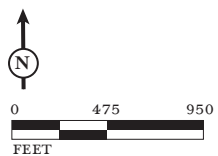
¹ The addresses of the Corporation Yard include the following: 696 North 6th St, 650 North 6th Street, 675 North 7th St., San Jose, California, APN 249-39-039.

² The address of the parking lot is 681 North 6th Street, San Jose, California 95112, APN 240-39-011.



LSA

FIGURE III-2



*Japantown Corporation Yard
Redevelopment Project EIR
Site Location*

SOURCE: GOOGLE MAPS, 2007.

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C. PROJECT BACKGROUND

The project site is located within the Japantown neighborhood, which developed in the early 20th Century as a distinct Japanese business district, consisting primarily of grocery and clothing stores and boarding houses. The City of San Jose purchased the site in 1931 and proceeded to demolish many of the buildings, but did little to develop the site at that time. In the late 1940s and early 1950s, the City began to use the site for the fire department and general services. The most expansive period of development occurred between 1958 and 1962 at which time the Corporation Yard's existing footprint and architectural aesthetic took shape.³

The RDA has invested approximately \$25.8 million in the Japantown Redevelopment Area since 1984. RDA investments include: facade improvements, themed streetscapes, banners, and landmarks; the Northside Community Center; major improvements to Bernal Park; and the Miraido mixed-use development which is home to a number of Asian businesses. The City has also significantly invested in the business association, and the local community and arts organizations.

The Japantown neighborhood is generally concentrated in the area bounded by Taylor Street on the north, North 7th Street on the east, Empire Street on the south, and North 1st Street on the west. Today's Japantown is a diverse neighborhood with a distinct, walkable business district home to some 90 stores and over 20 restaurants including many Asian-American and family owned establishments. The neighborhood continues to be the cultural center for the Japanese-American community and numerous cultural, religious and arts organizations. Separate from the proposed project, the community is currently working with the RDA to build a dramatic sculptural landmark and improved streetscape with Japanese-style seating areas.

On June 29, 2005, the RDA issued a Request for Qualifications (RFQ) for development of the project site. An Addendum to the 2005 RFQ was issued on December 4, 2006. This Addendum was open to the six firms who were previously interviewed for the project in late 2005. As stated in the RFQ, the Japantown community desires to see the project site developed as a mixed-use project with housing and active ground floor retail/commercial, integrated with the Japantown district. On February 3, 2007, all four development teams publicly presented their proposals to a seven-member selection panel (comprised of three neighborhood representatives, three City senior staff, and one RDA senior staff) and the community at-large. More than 40 members of the Japantown community and surrounding neighborhoods attended this session. On February 15, 2007, the selection panel concluded that the team of First Community Housing/Williams & Dame Development, Inc. should be selected to enter into an Exclusive Negotiations Agreement (ENA) with the City. The ENA was approved by the City Council and the RDA Board on June 26, 2007.

D. PROJECT OBJECTIVES

The primary objective of the proposed project is to redevelop the City's Japantown Corporation Yard and associated surface parking lot as a mixed-use development. Other objectives of the proposed project, as provided by the project applicant, are summarized as follows:

³ Carey and Co. Inc., 2007. San Jose Corporation Yard Historic Resources Evaluation.

- Redevelop two underutilized sites owned by the City of San Jose to revitalize the City's Japantown Redevelopment Plan area;
- Create a vibrant mix of housing, retail, and community amenity space that will contribute to and complement the livability of the City's Downtown Frame Area and the Japantown area;
- Create a community amenity space that would reflect the diverse economic, ethnic, and cultural make-up of the City and the Japantown area;
- Provide market-rate new housing opportunities for buyers seeking housing within the City's Greater Downtown area;
- Provide affordable housing opportunities for senior citizens;
- Strengthen local-serving commercial and retail activity by providing ground floor spaces for such uses;
- Advance the goals of the Japantown Redevelopment Plan by eliminating blight, strengthening the economic base, furthering development of underutilized properties, and attracting additional private investment and employment in the Japantown Redevelopment Plan Area and adjoining areas;
- Advance the goals of the Jackson-Taylor Residential Strategy to create a mixed-use residential and commercial core that is urban in character and at a scale and density that is economically feasible;
- Further achieve the recommendation of the Jackson-Taylor Neighborhood Revitalization Plan to convert older industrial areas located in the heart of the Jackson-Taylor neighborhood to residential and neighborhood supporting commercial uses;
- Advance the goals of the City of San Jose Housing Initiative, which include encouraging high density residential and supporting mixed-use development near transit facilities;
- Create a public park/plaza or other gathering spot to serve as a focal point of interaction among neighborhood residents;
- Develop a pedestrian-friendly mix of housing and retail that is well integrated with its surroundings and encourages walkability in the neighborhood; and
- Develop a project that is both financially feasible and sustainable.

E. PROPOSED PROJECT

First Community Housing (FCH)/Williams & Dame Development, Inc. (the project sponsor) proposes to redevelop the project site as a mixed-use development. The proposed project includes: a General Plan Amendment; an amendment to the Jackson-Taylor Residential Strategy; and Planned Redevelopment Rezonings of the project sites. See Chapter IV, Planning Policy for a determination of the proposed project's consistency with applicable plans and policies. The proposed project would also require City entitlement actions including subsurface demolition, construction, and development permits. The various components of the proposed project are described below.

1. Mixed-Use Development

The proposed project would redevelop the 5.78-acre project site as a mixed-use development. As the location and height of project buildings is only conceptual at this time, this EIR evaluates a 175-foot (14-story) building envelope for the Corporation Yard site. An 85-foot (six-story) building envelope is evaluated for the surface parking lot site. The location and height of individual buildings will be determined based on standards established in the Planned Development Rezoning for the Corporation Yard and surface parking lot sites, and in the subsequent Planned Development permits. This approach provides a "worst case" analysis, in that the project will not include 14-story buildings on the entire Corporation Yard site or six-story buildout over the entire City parking lot site. Development assumptions for the Corporation Yard and surface parking lot sites are described below.

a. Corporation Yard Site. The proposed project would redevelop the 5.23-acre former Corporation Yard site with up to 600 market-rate residential units, up to 30,000 square feet of ground-floor retail space, a 10,000 to 20,000 square foot community amenity space, and up to 900 underground/surface parking spaces. Figure III-3 depicts the conceptual ground floor development plan for the corporation yard site. As a variation on the proposed project, up to 15,000 square feet of retail space could be replaced with up to 24 live/work units. The appropriate mix of retail and/or live/work ground-floor uses within each building would be determined at the time that the Planned Development permits for each building are filed, and would depend on the current market conditions.

Development on the Corporation Yard site would consist of approximately four mid- to high-rise buildings, ranging in height from between 65 to 175 feet (6 to 14 stories), with variations in height designed to provide visual interest, view corridors, and site image. Conceptual building sections are depicted in Figures III-4a and 4b. Development of the Corporation Yard site would also include a public park/plaza to provide a gathering space and enhance street level dining and pedestrian activity. This park/plaza area would be accessed from North 6th Street and North 7th Street. The 10,000 to 20,000 square foot community amenity space would consist of one or more one- to two-story buildings within or adjacent to the public park/plaza area. The intent of the community amenity space is to reflect the diverse economic, ethnic, and cultural make-up of Japantown and San Jose. The community space would accommodate an approximately 6,500 square foot Taiko⁴ practice facility, with 10 to 15 people attending each of several daily practice sessions, and approximately 3,500 to 13,500 square feet of flexible community space for small theater productions and exhibitions/art displays as well as storage. The Taiko facility would be designed with appropriate noise attenuation features as to not disrupt adjacent land uses. Private open space would be developed in the form of amenity spaces and courtyards atop the retail and parking podiums as well as residential balconies. Conceptual building elevations along North 6th Street, North 7th Street and at the plaza level are shown in Figures III-5a, 5b, and 5c, respectively.

b. Surface Parking Lot Site. The proposed project would redevelop the 0.55-acre City surface parking lot across North 6th Street as an affordable senior housing complex including up to 85 units of affordable housing in an approximately 85-foot (six-story) building and accommodating up to 40 parking spaces. Conceptual parking level and podium level site plans are depicted in Figures III-6 and III-7, respectively.

⁴ The Japanese word *taiko* translated into English means "big drum," but generally refers to all drums used in ensemble groups.

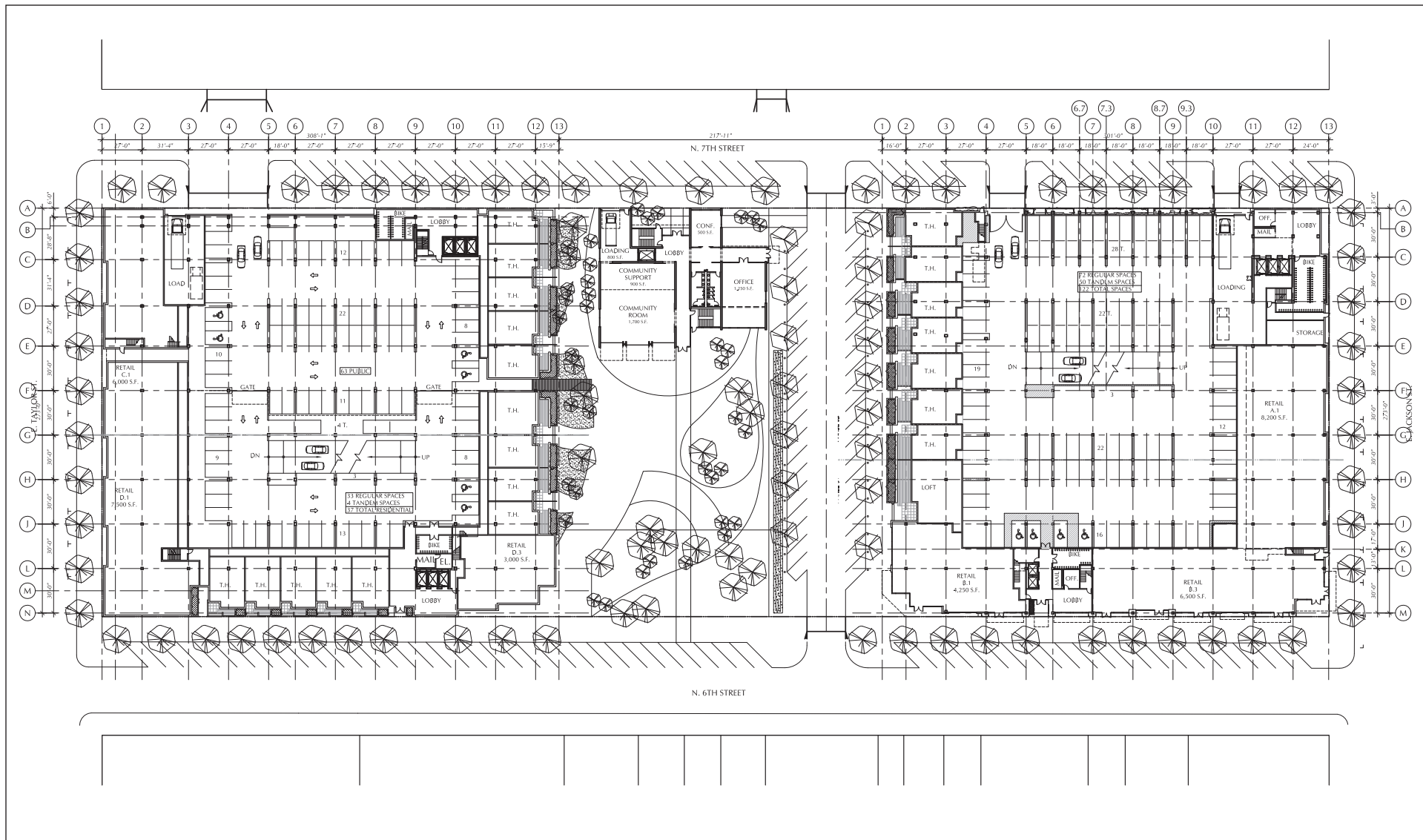


FIGURE III-3

*Japantown Corporation Yard
Redevelopment Project EIR
Coporation Yard Site -
Conceptual Site Plan*



LSA

FIGURE III-4a



Japantown Corporation Yard
Redevelopment Project EIR
Coporation Yard Site -
Conceptual Building Sections



LSA

FIGURE III-4b



NOT TO SCALE

Japantown Corporation Yard
Redevelopment Project EIR
Coporation Yard Site -
Conceptual Building Sections

SOURCE: ANKROM MOISAN, JANUARY 2008

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LSA

FIGURE III-5a

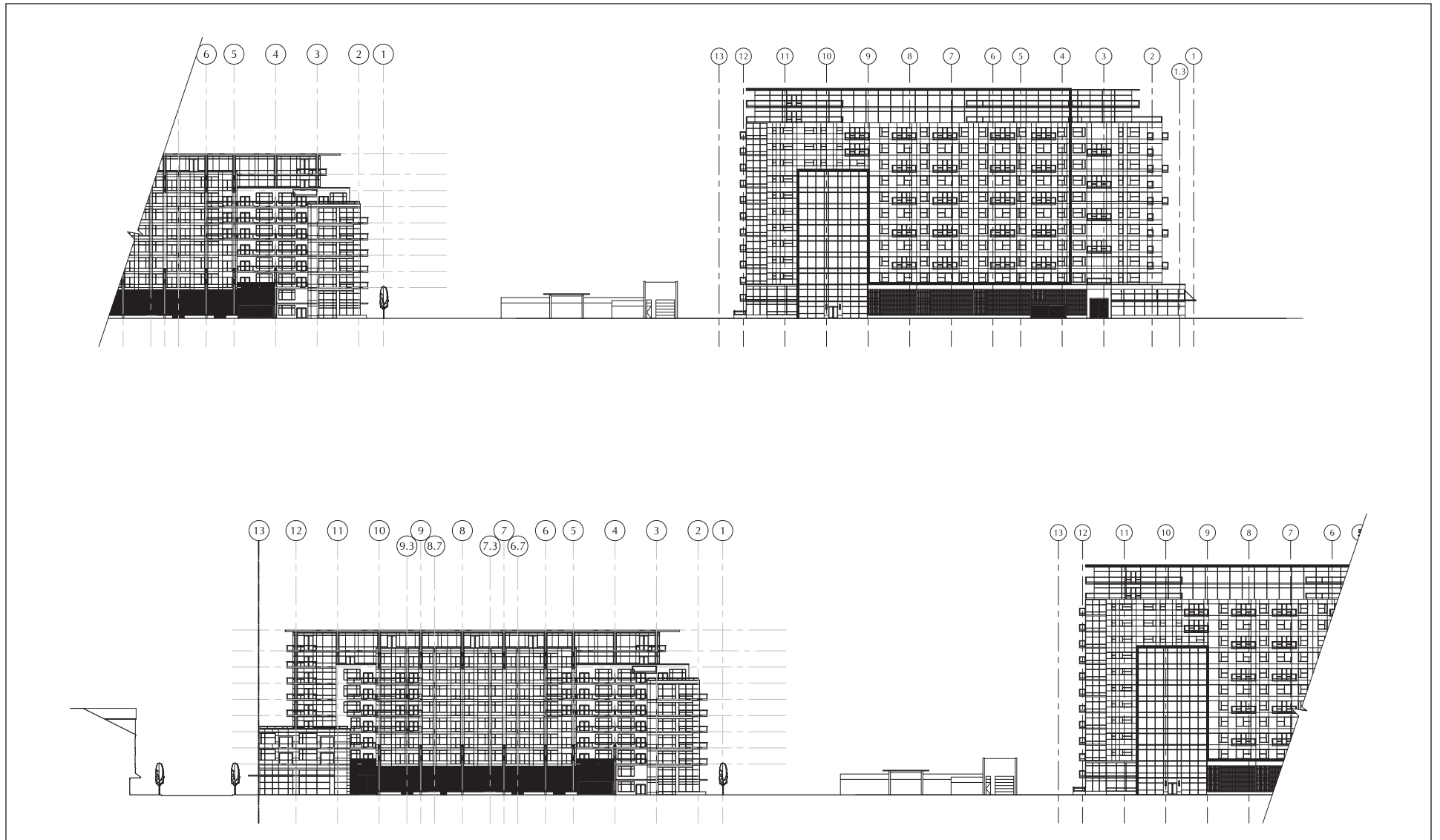


NOT TO SCALE

*Japantown Corporation Yard
Redevelopment Project EIR
Coporation Yard Site -
Conceptual Building Elevations*

SOURCE: ANKROM MOISAN, JANUARY 2008

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FIGURE III-5b

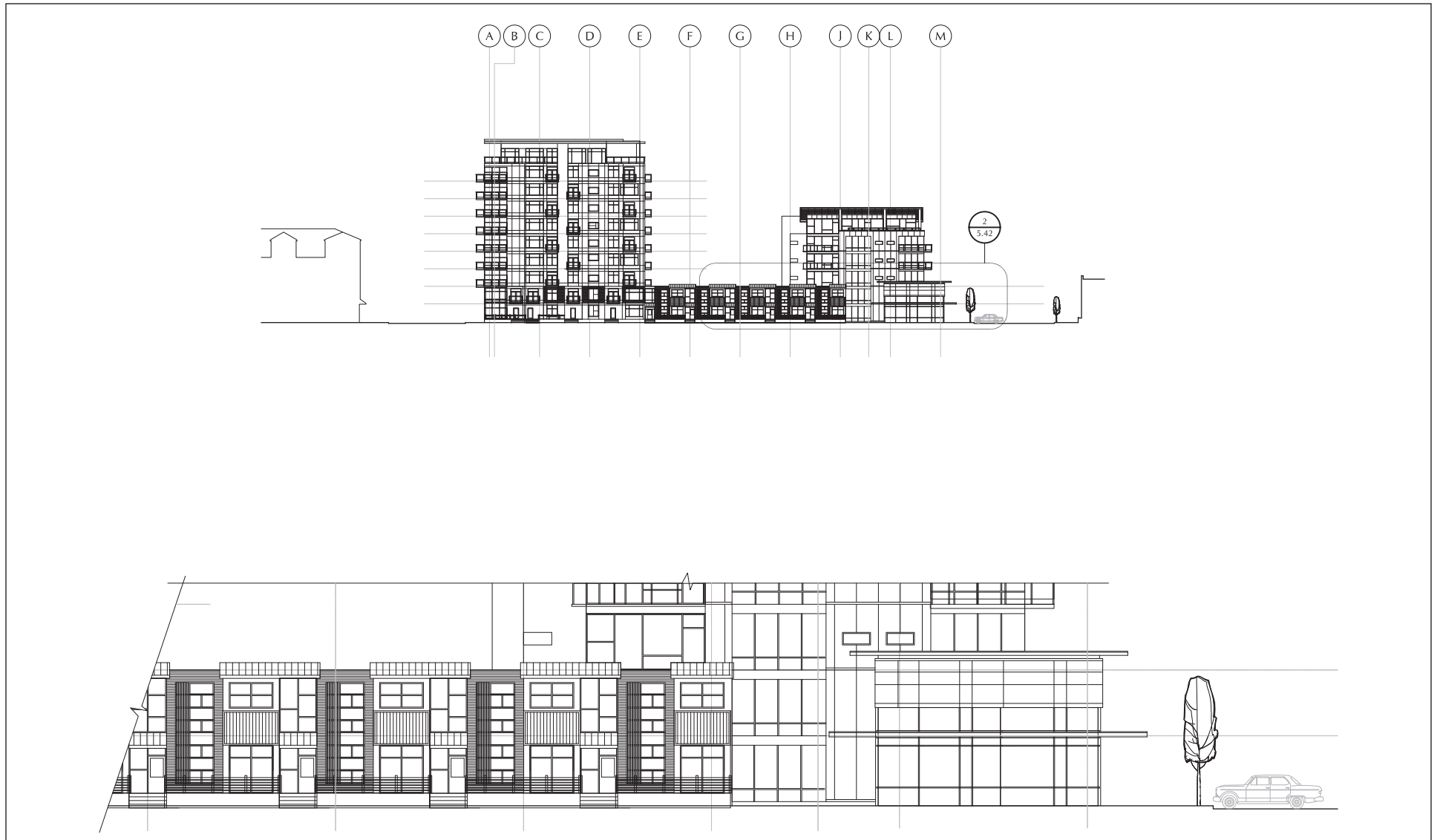


NOT TO SCALE

*Japantown Corporation Yard
Redevelopment Project EIR
Coporation Yard Site -
Conceptual Building Elevations*

SOURCE: ANKROM MOISAN, JANUARY 2008

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FIGURE III-5c

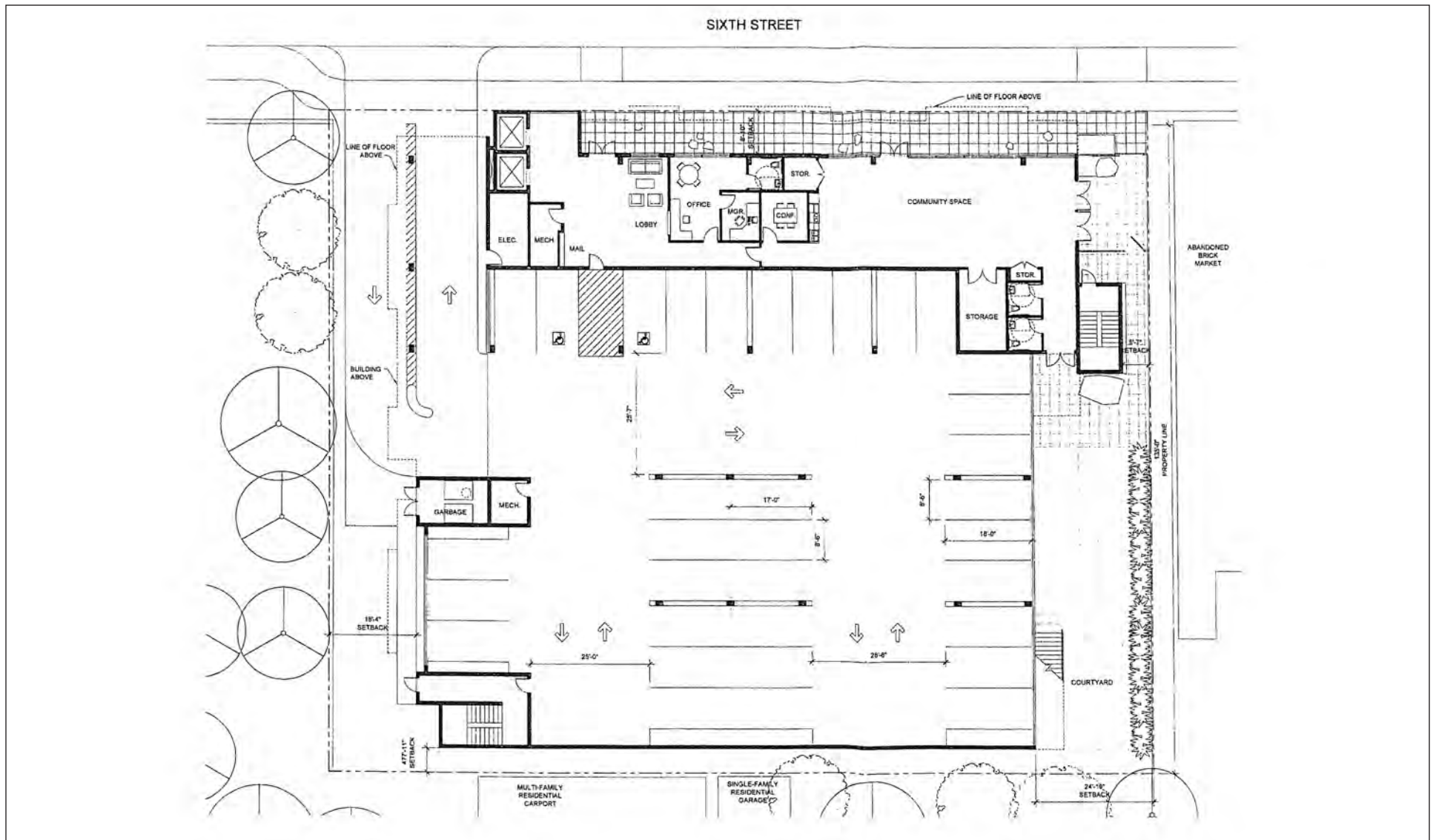


NOT TO SCALE

*Japantown Corporation Yard
Redevelopment Project EIR
Coporation Yard Site -
Conceptual Building Elevations*

SOURCE: ANKROM MOISAN, JANUARY 2008

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LSA

FIGURE III-6

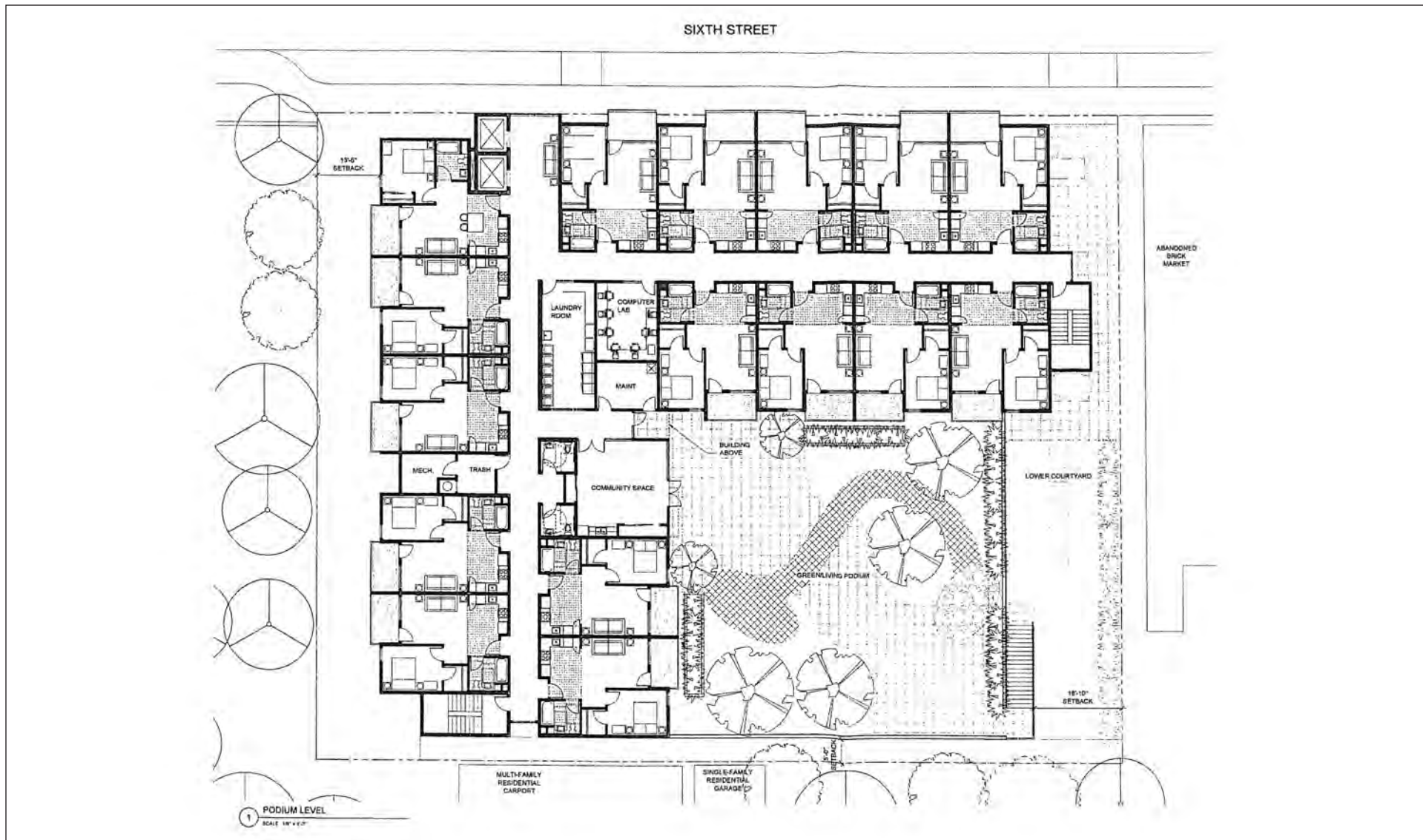


NOT TO SCALE

*Japantown Corporation Yard
Redevelopment Project EIR
Parking Lot Site -
Conceptual Parking Level Site Plan*

SOURCE: OJK, SEPTEMBER 2007

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LSA

FIGURE III-7



NOT TO SCALE

*Japantown Corporation Yard
Redevelopment Project EIR
Parking Lot Site -
Conceptual Podium Level Site Plan*

SOURCE: OJK, SEPTEMBER 2007

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2. Project Design Standards

While the project design is only conceptual at this time, the proposed project would adhere to the following design principals, consistent with City design guidelines. The proposed project would be subject to design review prior to project approval.

- *Height.* The buildings on the Corporation Yard site would be stepped down from tower heights (6 to 14 stories) to 3 to 4 stories at the Taylor and Jackson Street edges. Uses within these "podium" areas will include retail, townhomes, and live-work units.
- *Mass.* Primary building elements (living areas, retail bays, entrances, etc.) on the Corporation Yard site would be designed to reflect those in the vicinity creating a streetscape consistent with the existing 3 to 6 story experience. Building massing would be articulated with porches, bays and balconies. Variations in floor level, facades, roof styles, architectural details, materials and colors would be employed to create architectural diversity. The parking lot site will have its massing along 6th Street and near the adjoining Fuji Towers.
- *Scale.* Building facades on the Corporation Yard site would be varied and articulated to provide visual interest to pedestrians. Facade elements (windows, balconies, porches, parapets, pilasters, etc.) would contain horizontal and vertical relief, variety and texture to reinforce a vital inside/outside connection necessary for a thriving mixed use street. Ground level parking on the parking lot site will be screened from 6th Street by a lobby and community rooms, which will provide a sense of pedestrian scale and interest on 6th Street.
- *Access.* Building openings would face the street and sidewalk to enliven the pedestrian environment. Building entrances would orient to the sidewalk and public plaza. First floor residential units would be accessed directly from the street whenever possible. Street-facing garage entrances would be as narrow as is consistent with safety and would be spaced no less than 200 feet apart.
- *Materials.* Wood, stone, brick, metal, stucco and glass would likely be among the primary exterior materials. Their composition and arrangement would be designed to convey interior function, purpose and activity. The overarching design intent would be to reinforce a sense of permanence and connection with the building's basic functions at different levels.
- *Colors.* The chosen color palate would likely be a combined respond to historical precedents (both historically accurate and domestically interpreted.)
- *Mechanical and lighting.* All mechanical ventilation systems would be screened with louvers, screen walls, or porches and vent away from pedestrian areas. All parking garage lighting would be shielded to minimize light penetration to exterior spaces at night.
- *Public Space.* Outdoor plazas would be located over the parking podium with both common and private access. Ground level open space would be provided as an outdoor public amenity. Residential balconies on the parking lot site will face 6th Street.

3. Circulation and Parking

The proposed project would include an east-west internal roadway through a portion of the Corporation Yard site connecting North 7th Street and North 6th Street. This internal street would provide vehicular and pedestrian access to the internal portion of the site and would provide surface

level parking on both sides. Building storefronts and the public park/plaza would front the internal roadway. Surface parking would also be provided generally around the perimeter of the site. The majority of the 900 parking spaces provided at the Corporation Yard site would be located within the podium structure. One level of subsurface parking would be provided. Parking would be provided at a minimum ratio of 1.5 to 2 spaces per residential unit, and 1 per 400 net square feet of retail as part of the proposed project. Access to structured parking areas would be provided by two new driveways located along North 7th Street.

Up to 40 parking spaces would be provided at the ground floor level on the parking lot site. Access would be provided by a single driveway located along North 6th Street.

4. Utilities and Infrastructure

Because the project site is developed with industrial uses and is located in an urban area, public utilities are available to serve the project site, including water, sanitary sewer, storm water drainage, power and communications.

5. General Plan Amendment

As shown in Figure III-8, the Corporation Yard site was within the Jackson-Taylor Planned Residential Community (Jackson-Taylor PRC), which was established by the General Plan to increase high density housing opportunities and supportive mixed-use in the central area of the City and in close proximity to transit. The Jackson-Taylor PRC is intended to accommodate up to 1,675 dwelling units, 107,000 square feet of retail space, and 459,000 square feet of office uses. The General Plan establishes a Specific Land Use Plan for the Jackson-Taylor PRC, which establishes land use designations for the area.

Currently, the General Plan land use designation for the northern portion of the Corporation Yard site is Jackson-Taylor PRC Mixed-Use #2, as shown in Figure III-9. The Mixed-Use designation allows a mix of high density residential (including condominiums and apartments), retail (primarily neighborhood serving), office and a limited amount of other commercial uses, and encourages vertical mixed-use. The Mixed-Use #2 designation specifically allows High Density Residential (25 to 50 dwelling units per acre) uses, 150 senior housing units, a 40-room inn, up to 80,000 square feet of office, and between 33,000 and 53,750 square feet of retail. The commercial square footage may also include a cultural center. Within the Mixed-Use #2 land use designation, the height limit is 65 feet and all parking should be below ground or internal to the building. The existing General Plan designation for the southern portion of the Corporation Yard site is Public Park/Open Space. As shown in Figure III-8, the existing General Plan land use designation for the City surface parking lot site across North 6th Street is Medium High Density Residential (12 to 25 dwelling units per acre).

The project site would require a General Plan Amendment to designate the entire Corporation Yard site Jackson-Taylor PRC Mixed-Use #2A, which would constitute a new land use designation within the City's General Plan. The parking lot site would not require a General Plan Amendment because the proposed senior housing complex could be found in conformance with the General Plan through use of the Discretionary Alternative Use Policy for location of projects proposing 100 percent affordable housing. With respect to the Corporation Yard site, Mixed-Use #2A would allow residential uses at a density of up to 115 dwelling units per net acre. Further, it would allow over the

entire Corporation Yard site up to 30,000 square feet of retail, and up to 20,000 square feet of community amenity space. The General Plan Amendment would also establish a height limit of up to 175 feet, and allow limited surface parking. As a variation, Mixed Use #2A would allow up to 15,000 square feet of retail space to be replaced with up to 24 live/work units.

The existing Mixed Use #2 designation would continue to allow a 40-room inn, 150 senior housing units, and up to 80,000 square feet of office. The project would also require a General Plan Amendment to increase the total cap on dwelling units to 2,024 dwelling units in the Jackson Taylor Planned Residential Community.

The project site is located within the Japantown Neighborhood Business District Overlay, as shown on Figures III-8 and III-9. The purpose of the overlay is to recognize the variety of commercial and non-commercial uses which contribute to neighborhood identity by focusing neighborhood activity. The overlay facilitates the implementation of the Neighborhood Business District (NBD) Program by identifying target areas. The NBD Program seeks to preserve, enhance, and revitalize San Jose's older neighborhood serving commercial areas through the coordination of public and private improvements, such as streetscape beautification, facade upgrading, business organization activities, business development, and promotional events. In areas designated with the Neighborhood Business District overlay, any new development or redevelopment must conform to both the underlying land use designation and the overlay designation. Consistent with the intent of the NBD Program, the project applicant will request an amendment to the NBD Overlay boundary on the San Jose 2020 General Plan Land Use/Transportation diagram to include the entirety of the project site currently not within the NBD Overlay.

6. Planned Development Rezoning

The project site, including both Corporation Yard site and the surface parking lot site, is currently zoned Light Industrial (LI), as shown in Figure III-10. The proposed project includes a rezoning of the Corporation Yard and a separate rezoning for the City parking lot sites to a Planned Development District with a base zoning district of A, Agricultural (i.e., A [PD]), which allows for and guides residential and mixed-use residential and retail development on the site consistent with the Jackson-Taylor PRC and the Residential Strategy (discussed below).

It is anticipated that the proposed PD zoning for the Corporation Yard site would allow a maximum of 600 market-rate residential units, 30,000 square feet of retail space (or up to 15,000 square feet of retail and 24 live/work units), and 10,000 to 20,000 square feet of community amenity space on the Corporation Yard site. The proposed PD zoning for the City parking lot would allow a maximum of 85 senior housing units on the surface parking lot site. The proposed PD Rezoning would also establish development standards for use of the sites, building configuration and massing, circulation and parking configuration, as well as maximum building heights, required parking, and minimum setbacks. The Corporation Yard site would conform to the following development standards contained in the proposed Planned Development Rezoning:

- A maximum height of 175 feet for the Corporation Yard site from grade level to top of parapet and mechanical/penthouse or architectural features;



LSA



NOT TO SCALE

LEGEND

- MEDIUM LOW DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- MEDIUM HIGH DENSITY RESIDENTIAL
- HIGH DENSITY RESIDENTIAL
- TRANSIT CORRIDOR RESIDENTIAL
- NEIGHBORHOOD COMMUNITY COMMERCIAL
- RESIDENTIAL SUPPORT FOR THE CORE AREA

- GENERAL COMMERCIAL
- OFFICE
- LIGHT INDUSTRIAL
- PUBLIC/QUASI-PUBLIC
- PUBLIC PARK/OPEN SPACE
- PLANNED COMMUNITY
- NEIGHBORHOOD BUSINESS DISTRICT

- TRANSIT-ORIENTED DEVELOPMENT CORRIDOR
- MIXED USE OVERLAY
- LIGHT RAIL STATION
- PEDESTRIAN CORRIDOR
- AREA OF HISTORIC SENSITIVITY
- PROJECT SITE

FIGURE III-8

*Japantown Corporation Yard
Redevelopment Project EIR
General Plan
Land Use Designations*

SOURCE: CITY OF SAN JOSE, DEPT. OF PLANNING, BUILDING AND CODE ENFORCEMENT, MAY 24, 2007

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LSA



ZONING DISTRICTS

A	AGRICULTURAL
R-1-8	SINGLE-FAMILY RESIDENTIAL
R-2	TWO-FAMILY RESIDENTIAL
R-M	MULTI-FAMILY RESIDENTIAL
CO	COMMERCIAL OFFICE
CP	COMMERCIAL PEDESTRIAN
CN	COMMERCIAL NEIGHBORHOOD

CG	COMMERCIAL GENERAL
LI	LIGHT INDUSTRIAL
(PD)	PLANNED DEVELOPMENT

ZONING LABELS (SAMPLE)

A(PD)	ZONING DISTRICT
93050	ZONE CHANGE FILE NUMBER
34.0/DU/A	APPROVED RESIDENTIAL DENSITY

MAP LEGEND

	ZONE DISTRICT BOUNDARY
	HISTORIC DISTRICT BOUNDARY
	HISTORIC CITY LANDMARK
	PROJECT SITE

FIGURE III-10

*Japantown Corporation Yard
Redevelopment Project EIR
Zoning Designations*

- Building setbacks fronting public streets of zero feet, minimum, and zero feet for ground floor building elements and architectural projections;
- An on-site circulation system that includes an east-west internal “spine” connecting North 7th Street to North 6th Street; and
- An internal private street with approximately 45 diagonal parking stalls.

The following parking standards are contained in the proposed Planned Development Rezoning applicable to the Corporation Yard site. The City would determine the parking standards for the community amenity space after the space is programmed and before project approval.

- One bedroom units at 1.5 spaces per unit;
- Two bedroom units at 1.8 spaces per unit;
- Three bedroom units at 2.0 spaces per unit; and
- 1 parking space per 400 square feet of net retail area (for retail uses within the Neighborhood Business District where net retail area is 85 percent of the total retail square footage).

The City parking lot site would conform to the following development standards contained in the proposed Planned Development Rezoning:

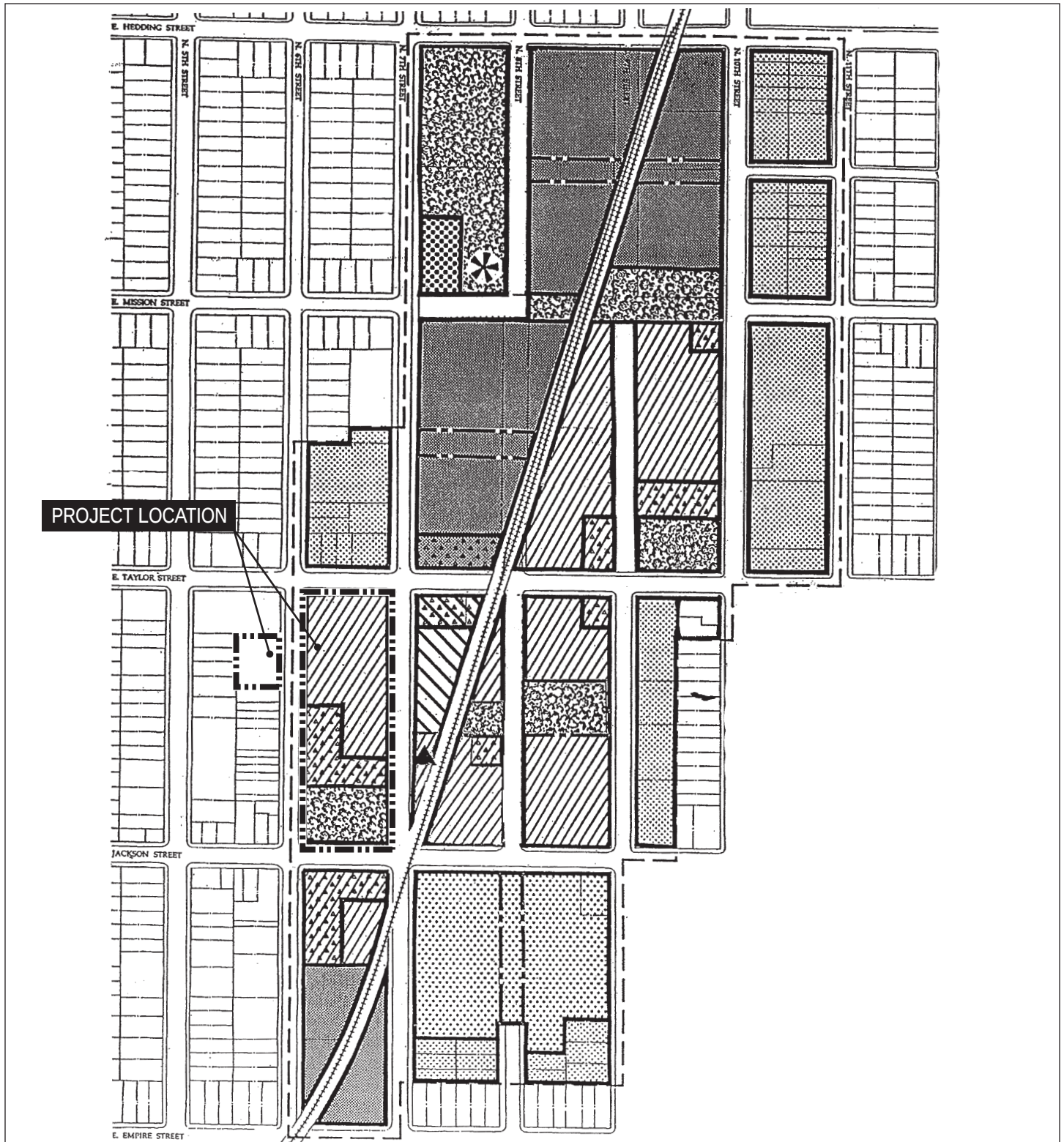
- A maximum height of 85 feet from grade level to top of parapet and mechanical/penthouse or architectural features;
- Building setbacks of 20 feet for side yards and 5 feet for rear yard, and zero setback from front property line; and
- A minimum of 0.5 parking space per senior unit.

The precise site plan would be determined upon approval of Planned Development Permits when buildings are reviewed for compliance with these development standards.

7. Jackson-Taylor Residential Strategy

As noted above, the Corporation Yard site is located within the Jackson-Taylor PRC. The Jackson-Taylor PRC is based on the Jackson-Taylor Residential Strategy (October 1992), which provides policy direction for the review of rezoning and development permit applications within the Jackson-Taylor PRC. The Jackson-Taylor Residential Strategy includes a Jackson-Taylor Illustrative Land Use Plan (shown in Figure III-11) that represents a preferred land use pattern for the area. Under the Jackson-Taylor Illustrative Land Use Plan, the northern portion of the Corporation Yard site is designated Mixed-Use; the central portion is designated Mixed-Use with ground floor retail recommended; and the southern portion is designated Park. The Jackson-Taylor Illustrative Land Use Plan identifies the Corporation Yard site as the Japantown Complex. The Jackson-Taylor Residential Strategy contains similar development caps as identified in the General Plan for the Jackson-Taylor PRC.

The Residential Strategy identifies the Corporation Yard site as an area where other land uses are recommended in addition to those contemplated under the Illustrative Land Use Plan. In particular, the Residential Strategy identifies the San Jose Nihonmachi Corporation as a potential developer of



LSA

FIGURE III-11

NOT TO SCALE

PROJECT SITE

- LEGEND
- RESIDENTIAL (12-25 units/acre)
 - RESIDENTIAL (25-50 units/acre)
 - MIXED USE (Resid./Office/Retail)
 - INDUSTRIAL
 - PARKING STRUCTURE
 - PARK
 - DAYCARE
 - GROUND FLOOR RETAIL RECOMMENDED AT THIS LOCATION
 - GENERAL COMMERCIAL
 - COMMUNITY CENTER
 - PUBLIC ACCESS-WAYS
 - TRANSIT STOP

Japantown Corporation Yard
 Redevelopment Project EIR
 Jackson-Taylor Residential
 Strategy Land Use Plan

the Japantown Complex, and specifies that if the site is not developed by the Nihonmachi Corporation, it should be developed with the mixed-use development type described in the Jackson-Taylor PRC set forth in the City's General Plan. To ensure consistency between the proposed amendments to the General Plan and the Residential Strategy, the project would amend the Residential Strategy to be consistent with the General Plan amendments described above. This amendment to the Residential Strategy would identify the entire Corporation Yard Site and the City surface parking lot site as Mixed Use under the Jackson-Taylor Illustrative Site Plan.

With respect to the Corporation Yard Site, the amendment would allow residential uses at a density of up to 115 dwelling units per gross acre (not including the possible live/work units) over the entire site, up to 30,000 square feet of retail, and 10,000 to 20,000 square feet of community amenity space; establish a height limit of up to 175 feet; and allow limited surface parking. As a variation on the proposed project, the amendment would allow up to 15,000 square feet of retail to be replaced with up to 24 live/work units. With respect to the City surface parking lot site, the Amendment would allow residential uses at a density of up to 155 dwelling units per acre; establish a height limit of up to 85 feet; and allow approximately 40 parking spaces. In addition, the amendments would: allow residential and live/ work uses to line the podium (in addition to commercial uses already permitted); allow some buildings to contain exclusively residential uses; and, allow zero-setback lines.

The Residential Strategy would also be amended to modify the Residential Strategy's policies and design guidelines as necessary to implement the project. The project also would amend the Residential Strategy to increase the cap on dwelling units to 2,000 dwelling units.

7. Demolition and Grading Activities

The proposed project includes subsurface demolition work consisting of the removal of existing pavements and any subsurface infrastructure. As noted previously, the Redevelopment Agency Board approved a contract on November 6, 2007 for demolition work of all above-grade improvements on the site and demolition activities are anticipated for completion in March 2008. Therefore, for the purposes of this EIR, it is assumed that buildings currently located on the project site have already been removed. Subsurface parking and building foundations on the Corporation Yard site would require the off haul of approximately 100,000 cubic yards of soil. The City parking lot site would require a minimal amount of grading and subsurface parking is not proposed.

8. Phasing

The description of phasing is preliminary and subject to change based on environmental, market, and other conditions.

It is anticipated that the Corporation Yard site would be constructed in approximately four phases, each of which will consist of approximately 100 to 200 units and 5,000 to 10,000 square feet of retail. The first phases of development on the Corporation Yard site are anticipated to occur on the portion of the block near Jackson Street, and the last phases of development are anticipated to occur on the portion of the block near Taylor Street.

It is anticipated that the City parking lot site would be constructed in a single phase during the first phase of construction on the Corporation Yard site.

F. USES OF THE EIR

The City of San Jose may use the EIR for actions necessary to implement this project, including the following approvals:

- General Plan Amendment
- Amendment to Jackson-Taylor Residential Strategy
- Planned Development Rezonings
- Planned Development Permit(s)
- Tentative Map Permit and other subdivision approvals
- Japantown NBD Overlay Boundary Amendment
- Development Agreement
- Disposition and Development Agreement or similar agreement with RDA
- Grading, building, encroachment and other construction permits
- Stormwater Pollution Prevention Plan (SWPPP)

The EIR may also be used by the following agencies for other regulatory reviews and approvals that may be necessary to implement the proposed project:

- Bay Area Regional Water Quality Control Board (RWQCB)
- Santa Clara Valley Water District (SCVWD)
- Bay Area Air Quality Management District (BAAQMD)

IV. CONSISTENCY WITH PLANS AND POLICIES

This chapter includes a discussion of the proposed project's relationship with planning-related policies (including land use policies). This discussion is provided in a stand-alone chapter of the EIR (versus it being incorporated into Chapter V, Setting, Impacts and Mitigation Measures) since a policy inconsistency is not in and of itself considered a significant environmental impact under CEQA. A project's inconsistency with a policy is only considered significant if such inconsistency would cause *physical* environmental impacts. Policies are discussed in select topical sections of the EIR where applicable policies relate to physical elements and are intended to focus on those physical environmental issues.

In reviewing this chapter, it is important to understand that the determination of whether a project is consistent with a specific policy can be subjective. As a result, policy consistency determinations are ultimately made by the local decision-making body (i.e., City Council). The analysis in this chapter is intended to provide the decision-makers with a list of the goals and policies that are pertinent to the project and site. The analysis represents the findings of policy review by the EIR authors and is intended to provide a guide to the decision-makers for policy interpretation.

A. REGIONAL PLANS AND POLICIES

Regional plans and policies applicable to the project site include: The 2005 Ozone Strategy; the San Francisco Bay Basin Water Quality Control Plan; the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP); the Municipal Regional Urban Runoff Phase I NPDES Permit; the Santa Clara Valley Congestion Management Program (CMP); and the Land Use Plan for Areas Surrounding Santa Clara County Airports. The proposed project's consistency with these plans is discussed below.

1. Bay Area 2005 Ozone Strategy: ABAG/BAAQMD/MTC

The Bay Area 2005 Ozone Strategy is the joint responsibility of three agencies: Association of Bay Area Governments (ABAG); Bay Area Air Quality Management District (BAAQMD); and Metropolitan Transportation Commission. It establishes regional policies and guidelines to meet the requirements of the Clean Air Act, as amended. The Bay Area is a non-attainment area for ozone because federal standards have been exceeded for this pollutant. The updated 2005 Ozone Strategy, adopted in 2006, outlines measures and improvements to help the Bay Area comply with the State's ozone standard. The 2005 Ozone Strategy proposes the adoption of transportation, mobile source and stationary source controls on a variety of pollutant sources to offset population growth and provide improvement in air quality. The consistency of the proposed project with this regional plan is primarily a question of the consistency with the population/employment assumptions utilized in developing the 2005 Ozone Strategy. The 2005 Ozone Strategy is based on population and employment projections developed by ABAG.¹

¹ Association of Bay Area Governments (ABAG), 2003. *Projections 2003, Forecasts for the San Francisco Bay Area to the Year 2030*. July.

The current General Plan land use designation for the northern portion of the Corporation Yard site, which was also in effect in 1999, is Mixed Use #2. The General Plan designation for the southern portion of the Corporation Yard site is Public Park/Open Space. The General Plan land use designation for the City surface parking lot site across North 6th Street is Medium High Density Residential.

Consistency: The Bay Area 2005 Ozone Attainment Plan discussed above is the relevant regional air quality plan. The BAAQMD uses the CAP to evaluate a project's potential cumulative air quality impacts. The BAAQMD CEQA Guidelines state that "for any project that does not individually have significant operational air quality impacts, the determination of significant cumulative impacts should be based on an evaluation of the consistency of the project with the local general plan and the general plan with the regional air quality plan." The BAAQMD CEQA Guidelines present the following elements for evaluation of consistency between the General Plan and the CAP:

- General Plan population projections are consistent with CAP and ABAG projections;
- Rate of increase in vehicle miles traveled (VMT) does not exceed rate of increase in population;
- General plan implements CAP transportation control measures; and
- General plan provides buffer zones around sources of odors, toxics and accidental releases.

The proposed project would require a General Plan Amendment to allow the development of the proposed project. The General Plan Amendment would allow for the project's mixed use and housing density. The project would increase the City's population by between 2,078 and 2,154 persons. This increase in population would represent less than one percent of the City's 2005 and 2010 population, respectively. The proposed project would not result in substantial population growth beyond that planned for the City, therefore the project would not conflict with implementation of the 2005 Ozone Attainment Plan. See Section V.B, Population, Employment and Housing for a detailed discussion of the proposed project's projected population increase.

The Association of Bay Area Governments (ABAG) projects that the City of San Jose will build 18,630 new housing units between 2005 and 2010 and 150,632 new housing units between 2000 and 2035. The proposed project would fulfill 3.6 percent of the units between 2005 and 2010 and less than one percent of the units between 2000 and 2035. The increase in population and VMT associated with the proposed project would be consistent with CAP and ABAG projections for the City of San Jose.

The City of San Jose's General Plan is in general conformance with the CAP and the proposed project would not expose sensitive receptors to objectionable odors, toxics, or accidental releases of hazardous materials.

2. Water Quality Control Plan for the San Francisco Bay Basin

The quality of surface water and groundwater in the vicinity of the project site is affected by past and current land uses at the site and within the watershed, and the composition of geologic materials in the vicinity. Water quality in surface and groundwater bodies is regulated by the State Water Resources Control Board and Regional Water Quality Control Boards. The project site is under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (Water Board), which is responsible for implementation of state and federal water quality protection regulations and

guidelines in the Bay Area. The Water Board implements the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan), a master policy document for managing water quality issues in the region. The Basin Plan establishes beneficial water uses for waterways and water bodies within the region. Designated beneficial uses for South San Francisco Bay, which is the receiving water for drainage from the project site, include estuarine habitat, fish migration, preservation of rare and endangered species, water contact and non-contact water recreation, fish spawning, and wildlife habitat. South San Francisco Bay is listed on the State's 303(d) list as impaired for several pesticides (chlordane, DDT, diazinon, and dieldrin), dioxin compounds, exotic species, furan compounds, mercury, PCBs, and selenium (the Water Board has determined that the assimilative capacity of the Bay for these pollutants has already been exceeded).

Consistency: The proposed project would be consistent with the provisions of the Basin Plan which seek to protect surface water quality. The contaminants that have been identified as causing the water quality impairment of South San Francisco Bay are unlikely to be used at the project site and the proposed project would not introduce exotic species to South San Francisco Bay or increase the impact of existing exotic species. Measures to reduce runoff water quality impacts of development are proposed in Section V.G, Hydrology and Water Quality. Implementation of these measures would ensure that the proposed project is consistent with the Basin Plan.

3. Santa Clara Valley Urban Runoff Pollution Prevention Program

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) was developed in accordance with the requirements of the 1986 San Francisco Bay Basin Water Quality Control Plan, for the purpose of reducing water pollution associated with urban stormwater runoff. This program was also designed to fulfill the requirements of Section 304(1) of the Federal Clean Water Act, which mandated that the Federal Environmental Protection Agency (EPA) develop National Pollutant Discharge Elimination System (NPDES) Permit application requirements for various stormwater discharges, including those from municipal storm drain systems and construction sites. The State Water Resources Control Board implemented a NPDES general construction permit for the Santa Clara Valley. For properties of 1 acre or greater, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction.

Recent changes to the permit held by the SCVURPPP are detailed in Water Board Order No. R2-2005-0035 (NPDES Permit No. CAS029718). Participating agencies (including the City of San Jose) are required to manage development-related increases in peak runoff flow, volume and duration ("hydromodification"), where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams and creeks. On May 19, 2005, the San Jose City Council approved the Hydromodification Management Plan (HMP) Final Report, which was prepared for SCVURPPP, to meet the Permit's hydromodification control measure (HCM) requirements. The San Jose City Council approved Policy 8-14 (Post-Construction Hydromodification Management) for immediate implementation of the plan on October 18, 2005.

Consistency: Development of the project site would be required to conform to the requirements of the NPDES permitting program. The project would comply with the City's National Pollutant Discharge Elimination System (NPDES) permit compliance guidance which requires development to incorporate construction and post-construction mitigation measures to control the discharge of pollutants into the storm drainage system to the maximum extent practicable. Measures to reduce water quality impacts of development are proposed in Section V.G, Hydrology and Water Quality.

Implementation of these measures would ensure that the proposed project is consistent with the provisions of the Santa Clara Valley Urban Runoff Pollution Prevention Program.

4. Municipal Regional Urban Runoff Phase I NPDES Stormwater Permit (MRP)

The Water Board is preparing a draft for an updated Municipal Regional Urban Runoff Phase I NPDES permit, which is currently in review and undergoing agency comment. This new version of the MRP is intended to increase compliance by simplifying the complex NPDES permit system, making the requirements more uniform, and lessening the number of separate regulatory documents necessary to effectively communicate the goals and standards.

In the previous NPDES permit issuances, the detailed actions to be implemented by the Permittees (agencies) were contained in Stormwater Management Plans, which were separate from the NPDES permits, and incorporated, by reference. Since those plans were actually part of the NPDES permits, and were required to undergo complete public notice and comment, it is a natural evolution in process that this latest MRP permit reissuance incorporates those plan level details in the permit. This permit specifies the actions necessary to reduce the discharge of pollutants in stormwater to the maximum extent practicable, in a manner designed to achieve compliance with water quality standards and objectives, and effectively prohibit non-stormwater discharges into municipal storm drain systems and watercourses within the Permittees' jurisdictions. This set of specific actions is equivalent to the requirements that in past permit cycles were included in a separate Stormwater Management Plan for each Permittee, or Countywide group of Permittees. With this permit reissuance, that level of specific compliance detail is integrated into the permit language, and is not a separate document.

The revised MRP will include requirements for the following components:

- Municipal Maintenance Activities
- New Development and Redevelopment
- Industrial and Commercial Inspections
- Illicit Discharge and Elimination
- Construction Inspections
- Public Information and Outreach
- Water Quality Monitoring
- Pesticides Load Reduction
- Trash Reduction
- Mercury Load Reduction
- PCBs Load Reduction
- Copper Load Reduction
- Polybrominated Diphenyl Ethers (PBDE), Legacy Pesticides and Selenium
- Exempt and Conditionally Exempt Discharges

The new permit will become effective once it is accepted by the agencies and then adopted and issued by the Water Board.

Consistency. The proposed project may be subject to the new MRP permit; however, the timing of the Water Board's adoption of the permit is unknown at this time. This proposed project would comply with the terms and conditions of the new permit, if applicable.

5. Santa Clara Valley Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) oversees the Santa Clara County Congestion Management Program (CMP). This legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. The CMP legislation requires that each CMP contain five mandatory elements: (1) a system definition and traffic level of service standard element; (2) a transit service and standards element; (3) a trip reduction and transportation demand management element; (4) a land use impact analysis program element; and (5) a capital improvement element.

The Santa Clara County CMP includes subregional roadways within San Jose that are identified as CMP road facilities. The CMP intersections and the roadway segments that could be impacted by the proposed project are identified and analyzed in Section V.C, Transportation, Circulation and Parking.

a. CMP Intersections. The level of service results for the CMP intersections under project conditions are summarized in Section V.C, Transportation, Circulation and Parking. The traffic analysis shows that, measured against the CMP level of service standards, the same CMP study intersection projected to operate at an unacceptable LOS F under background conditions would remain unacceptable under project conditions. When measured against the CMP level of service standards, however, the CMP study intersection would not be significantly impacted by the project.

b. CMP Freeway Segments. The results of the CMP freeway level of service analysis are summarized in Table V.C-8. Traffic volumes on the study freeway segments under project conditions were estimated by adding project trips to the existing volumes obtained from the 2005 CMP Annual Monitoring Report. Initial results indicate the project would only impact one freeway segment (I-880 North 1st Street to US 101) in the project area, however, the monitoring report does not take into account the City's planned HOV lane project on I-880 that includes this study segment. The I-880 HOV lane project, which extends from Old Bayshore Highway in San Jose to Route 237 in Milpitas, will add 4.3 miles of HOV lanes in both the northbound and southbound directions. The improvement from a 6-lane to an 8-lane facility will mainly consist of outside widening and includes modifications of various existing on and off-ramps within the project limits.

This improvement project is considered fully funded and, therefore, should be considered a background condition when determining capacity of this freeway segment. The freeway data obtained from the 2005 Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study did not include the improvements associated with the I-880 HOV lane project. With the planned improvements in place, the level of service of this freeway segment would improve and the project would not result in a significant freeway impact. Please refer to Section V.C, Transportation, Circulation and Parking for a more detailed discussion of transit.

Consistency: The analysis of CMP roadways and intersections that is called for by the Santa Clara Valley Congestion Management Program is provided in Section V.C, Transportation, Circulation and Parking. The proposed project would not result in any significant impacts to CMP intersections or freeway segments; therefore, the proposed project at the proposed location would be consistent with this program.

6. Land Use Plan for Areas Surrounding Santa Clara County Airports

The *Land Use Plan for Areas Surrounding Santa Clara County Airports*, adopted by the Santa Clara County Airport Land Use Commission (ALUC) in September 1992, established land use policies that provide for the orderly growth of the areas surrounding airports in Santa Clara County. The ALUC has established provisions for the regulation of land use, building height, safety, and noise insulation within areas adjacent to each of the public airports in the county. The project site is located within the ALUC height restriction boundary for the San Jose International Airport. However, the project site is not subject to the requirements of the ALUC land use plan.

Although the site is not currently located within any federal or locally-designated safety zone, development on the site is subject to height restrictions set forth by Federal Aviation Regulations (FAR), Part 77, administered by the Federal Aviation Administration (FAA) and incorporated into the ALUC policy. These federal regulations define a set of imaginary surface restrictions which radiate out several miles from an airport's runways. Proposed development requiring notification to the FAA under Federal Aviation Regulations, Part 77, must receive a Determination of No Hazard prior to development permit approval in compliance with General Plan Aviation Policy #47. Developments that include structures exceeding the FAA's imaginary surface standards or exceed 200 feet in height, are required to include incorporation of any FAA requirements specified in a Determination of No Hazard (to be obtained prior to development approval) as well as dedication of navigation easements to the City of San Jose in compliance with General Plan Aviation Policy #49.

In addition, the City of San Jose is currently working to initiate amendments to the General Plan and other key policy documents to restrict maximum building heights of new development to elevations which would not impact airline emergency procedures criteria (known as One Engine Inoperative [OEI]) and are otherwise acceptable to the FAA. Under Federal Aviation Regulations Part 25, airlines must design emergency flight procedures in the event of a total power loss in one engine during takeoff. These OEI procedures are designed such that aircraft would gain some altitude and follow a simple flight path over the lowest terrain and any obstacles that would eventually allow a safe return to the airport. The intent of the proposed amendments is to protect OIE airspace surfaces from high rise development in the Downtown. The OEI surface restrictions would apply to two corridors within the Downtown: one in the core east of Route 87 and one west of Route 87. The project site is located outside of the City's proposed OEI height restriction boundary.²

Consistency: The project site is not located within an ALUC-designated safety area or within the 65 dBA CNEL noise contour for the San Jose International Airport. The proposed project includes rezoning of the site allowing buildings up to 175 feet in height; which would exceed the FAA's 145-

² Leigh Fisher Associates, 2006. Draft Comparison of TERPS vs. OEI Areas of Influence with Noise Contours. October 5.

foot³ imaginary surface standards for the site. As such, the proposed project would require a Determination of No Hazard from the FAA prior to any specific development approval and would require dedication of an aviation easement over the project site. The project site is located outside of the proposed OEI boundary, and would not be subject to reduced height restrictions beyond those required by the FAA.

B. LOCAL PLANS AND POLICIES

Local plans and policies applicable to the project site include: the San Jose 2020 General Plan (General Plan); the City of San Jose Zoning Ordinance; the Jackson-Taylor Neighborhood Revitalization Plan; the Jackson-Taylor Residential Strategy; and the Japantown Redevelopment Plan. Applicable land use plans and maps are included in Chapter III, Project Description.

1. San Jose 2020 General Plan

The City's General Plan, *San Jose 2020 General Plan* (General Plan), was adopted in August 1994 by the City Council. The General Plan is an adopted statement of policies for the physical development of the City. As such, it seeks to determine the shape that future development will take within a broad environmental, social, and economic framework. It is intended for use by both City officials and private citizens in providing a structure for future growth. The General Plan contains each of the State-mandated elements, but since the elements are intrinsically interrelated, they are combined in the document and are not separated according to topic.

The General Plan identifies specific goals and policies for city concept; community development; housing; services and facilities; aesthetics, cultural and recreational resources; natural resources; hazards; and sustainability. One of the key elements of the General Plan is the Land Use/Transportation Diagram, which also includes a rail transit, bicycle network, and scenic routes and trails diagram. The Land Use/Transportation Diagram provides a geographical reference and a spatial context to the goals and policies of the General Plan. It identifies various land use designations, special strategy areas, and planned residential communities/planned communities. An overview of the land use designations applicable to the proposed project is provided below. A discussion of the General Plan's major strategies and relevant policies and their relationship to the proposed project is also provided.

a. Land Use Designations. The General Plan Land Use/Transportation Diagram identifies the designated land uses for all property within the City's Sphere of Influence. The Diagram also illustrates the relationship between land uses and the transportation network.

As shown in Figure III-8, the Corporation Yard site is located within the Jackson-Taylor Planned Residential Community (Jackson-Taylor PRC) and is designated Mixed Use #2 and Public Park/Open Space in the Jackson-Taylor PRC Land Use Plan. As shown in Figure III-8, the General Plan land use designation for the City surface parking lot site across North 6th Street is Medium High Density Residential, which allows 12 to 25 dwelling units per acre. The project site is also located within the Japantown Neighborhood Business Overlay District. The Jackson-Taylor PRC and Neighborhood Business Overlay District are discussed in more detail below.

³ Greene, Cary, 2007. Airport Planner, City of San Jose Airport Department. Memorandum to Ron Eddow, City of San Jose Planning Department. September 19.

(1) Jackson-Taylor Planned Residential Community. As shown in Figure III-8, the Corporation Yard site is located within the Jackson-Taylor Planned Residential Community (Jackson-Taylor PRC) which provides a Specific Land Use Plan for the community (see Figure III-9) based on the Jackson-Taylor Residential Strategy (discussed later in this section). The Jackson-Taylor PRC Land Use Plan provides development guidelines for an approximately 80-acre urban area bounded by Hedding, 11th, Empire, and 6th Streets. The goal of the Jackson-Taylor PRC is to increase high density housing opportunities and supportive mixed uses in the central area of the City and in close proximity to transit. The Jackson-Taylor PRC was adopted October 10, 1992. General and specific policies and guidelines for development within the Jackson-Taylor PRC are contained in the Jackson-Taylor Residential Strategy.

The Jackson-Taylor PRC is intended to accommodate up to 1,675 dwelling units, 107,000 square feet of retail space, and 459,000 square feet of office uses. The Corporation Yard site is designated Mixed Use #2 and Public Park/Open Space in the Jackson-Taylor PRC Land Use Plan, as shown on Figure III-9. Mixed Use #2 also includes the northern portion of the block to the south of the Corporation Yard site. The Mixed Use designation allows a mix of high density residential uses (including condominiums and apartments), retail (primarily neighborhood serving), office and a limited amount of other commercial uses, and encourages vertical mixed use. The Mixed Use #2 designation specifically allows High Density Residential (25 to 50 dwelling units per acre) uses, 150 senior housing units, a 40-room inn, up to 80,000 square feet of office, and between 33,000 and 53,750 square feet of retail. The commercial square footage may also include a cultural center. Within the Mixed Use #2 land use designation, the height limit is 65 feet and all parking should be below ground or internal to the building.

(2) Japantown Neighborhood Business District Overlay. The project site, within approximately 110 feet of Jackson Street, is also located within the Japantown Neighborhood Business District Overlay. The purpose of the overlay is to recognize the variety of commercial and non-commercial uses which contribute to neighborhood identity by serving as a focus for neighborhood activity. The overlay facilitates the implementation of the Neighborhood Business District (NBD) Program by identifying target areas. The NBD Program seeks to preserve, enhance, and revitalize San Jose's older neighborhood serving commercial areas through the coordination of public and private improvements, such as streetscape beautification, facade upgrading, business organization activities, business development, and promotional events. In areas designated with the Neighborhood Business District overlay, any new development or redevelopment must conform to both the underlying land use designation and the overlay designation.

Consistency: The proposed project would require a General Plan Amendment to designate the entire Corporation Yard site and the City surface parking lot site to Jackson-Taylor PRC Mixed-Use #2A, which would constitute a new land use designation within the City's General Plan.

With respect to the Corporation Yard site, Mixed-Use #2A would allow residential uses at a density of up to 115 dwelling units per gross acre (not including the possible live/work units) over the entire site, up to 30,000 square feet of retail, and 10,000 to 20,000 square feet of community amenity space; establish a height limit of up to 175 feet; and allow limited surface parking. As a variation on the proposed project, the General Plan Amendment would allow up to 15,000 square feet of retail to be replaced with up to 24 live/work units. Mixed Use #2A would also allow an approximately 0.9-acre public park/plaza open space area.

With respect to the City surface parking lot site, residential uses at a density of up to 155 dwelling units per acre, a height limit of up to 85 feet; and approximately 40 parking spaces could be allowed with a discretionary alternate use policy for affordable housing projects.

The proposed project would generally be consistent with the intent of the Jackson-Taylor PRC, once amended.

In addition, consistent with the intent of the NBD Program, the project applicant will request an amendment to the NBD Overlay boundary on the San Jose 2020 General Plan Land Use/Transportation diagram to include the entirety of the Corporation Yard site currently not within the NBD Overlay.

b. Major Strategies. The Major Strategies identify the principal objectives of the General Plan. They establish the basic framework for planning in San Jose. The strategies also express the philosophy that the City should take a leadership role in the planning process, while encouraging community and private sector participation. All of the strategies are interrelated and supportive of each other. A summary of the major strategies and policies that apply to the proposed project is presented below:

- Economic Development Major Strategy: The City of San Jose's Economic Development Strategy strives to make San Jose a more "balanced community" by: (1) encouraging more commercial and industrial growth to balance the existing residential development; (2) equitably distributing jobs and housing; and (3) controlling the timing of development.

Consistency: The proposed project would utilize a pair of blighted, vacant parcels located immediately north of Downtown San Jose. It would also provide employment and housing opportunities within the City helping to balance the commercial and residential relationship, and would contribute to the financial base of the City.

- Growth Management Major Strategy: The Growth Management Major Strategy addresses the need to balance the urban service demand of new development with the need to balance the City's budget. One of the key components of this Major Strategy is to support infill development as a way of decreasing the costs associated with the provision of public services through increased efficiency.

Consistency: The project is consistent with the Growth Management Major Strategy. It is an infill project, which would invigorate a blighted vacant site, and in doing so, possibly forestall development in outlying areas which would require increased expansion of services and costs to serve the development.

- Urban Conservation Preservation Major Strategy: The Strategy underscores the importance of protecting and enhancing San Jose's neighborhoods and historical resources to promote community identity and pride. This Strategy encourages infill development while recognizing that nearby neighborhoods should be protected from impacts. Encouraging economic development will enable the City to maintain current levels of service and help maintain the neighborhoods.

Consistency: The proposed project is located within the Japantown area of the City. The proposed project would be consistent with this Strategy by promoting community identity and pride, and potential impacts to surrounding historic structures would be reduced to a less-than-significant level with the implementation of mitigation measures recommended in this EIR (see Chapter V.I, Cultural and Paleontological Resources).

- **The Greenline Major Strategy:** This is a strategy to define the ultimate perimeter of urbanization in San Jose and preservation of hillsides, the baylands and the rural/agricultural area in the south Coyote Valley.

Consistency: See the discussion on the Growth Management Strategy above. The proposed project is an infill project north of the Downtown.

- **Housing Major Strategy:** The Housing Strategy is designed to promote housing opportunities.

Consistency: The proposed project would provide a total of 685 residential units (or 709 residential units if 24 live/work units are added) on the site, including 85 affordable senior housing units.

- **Sustainable City Major Strategy:** The Sustainable City Strategy reflects San Jose's desire to become an environmentally and economically sustainable city, minimizing waste, and efficiently using its natural resources.

Consistency: The proposed project would utilize a vacant infill site north of the Downtown area and would develop residential uses as well as various neighborhood serving retail and community uses on the site. In addition, the proposed project would include a public park/plaza area serving residents both within the development and within the surrounding neighborhood. This component of the project supports the City's strategy related to developing a sustainable city.

c. General Plan Goals and Policies. The key goals and policies that are relevant to the proposed project are discussed below.

- **Urban Conservation Policy 2:** The City should encourage new development which enhances the desirable qualities of the community and existing neighborhoods.

Consistency: The proposed project would develop the project site with residential uses as well as retail and community uses including a public park/plaza area. As described in applicable planning documents, these are all desirable uses for the proposed project site.

- **Balanced Community Policy 1:** The City should foster development patterns which will achieve a whole and complete community in San Jose, particularly with respect to improving the balance between jobs and economic development on the one hand, and housing resources and a resident work force on the other. A perfect balance between jobs and housing may not be achievable but the City should attempt to improve this balance to the greatest extent feasible.

Consistency: The proposed project would provide new retail and housing opportunities on a site that is currently blighted and in an area that is currently underserved. The proposed project would provide additional jobs and tax revenues for the City.

- **Balanced Community Policy 2:** Varied residential densities, housing types, styles, and tenure opportunities should be equitably and appropriately distributed throughout the community and integrated with transportation systems. Higher densities are encouraged near light rail lines and other major transportation facilities to support the use of public transit.

Consistency: The proposed project would develop high density residential uses on the project site, including market-rate condominiums and affordable senior housing. The project site is located approximately five blocks east of existing light rail lines located along North 1st Street.

- **Residential Land Use Policy 1:** Residential development at urban densities (one dwelling unit per acre or greater) should be located only where adequate services and facilities can be feasibly provided.

Consistency: The project site is located immediately north of Downtown San Jose, in a decidedly urban environment. The project site is located near a variety of services and community facilities available to project residents.

- Residential Land Use Policy 3: Higher residential densities should be distributed throughout the community. Locations near commercial and financial centers, employment centers, the light rail transit stations, and along bus routes are preferable for higher density housing.

Consistency: The proposed project would provide high density residential uses immediately north of the Downtown area, near commercial, financial, and employment centers. The project site is also located five blocks east of the light rail line.

- Residential Land Use Policy 7: Housing developments designed for senior citizens should be located in neighborhoods that are within reasonable walking distance of health and community facilities and services or accessible by public transportation.

Consistency: The proposed project is located in an urban area, immediately north of the Downtown. A variety of health and community services including several community centers, doctor's offices and clinics, pharmacies, and parks are easily accessible from the project site, which is also near major roadways providing light rail and bus services.

- Residential Land Use Policy 11: Residential developments should be designed to include adequate open spaces in either private yards or common areas to partially provide for residents' open space and recreation needs.

Consistency: The proposed project would include the development of a public park/plaza on the project site, which would provide for the open space and recreation needs of project residents. In addition, private open space would be developed in the form of amenity spaces and courtyards atop the retail and parking podiums and residential balconies.

- Commercial Land Use Goal: Provide a pattern of commercial development which best serves community needs through maximum efficiency and accessibility.

Consistency: The proposed project would redevelop a blighted light industrial property which is unused and vacant, and would provide retail opportunities which would serve surrounding neighborhoods. The project site is located in an urbanized area and adjacent to major roads, public transit, and bicycle and pedestrian paths within the City. In addition, the proposed project would provide a continuation of a pedestrian-oriented commercial street.

- Commercial Land Use Policy 1: Commercial land in San Jose should be distributed in a manner that maximizes community accessibility to a variety of retail commercial outlets and services and minimizes the need for automobile travel. New commercial development should be located near existing centers of employment or population or in close proximity to transit facilities and should be designed to encourage pedestrian and bicycle access through techniques such as minimizing building separation from the street, providing convenient and pleasant pedestrian connections, secure bike storage, etc. Employee intensive uses should be encouraged to locate along multi-modal transit corridors.

Consistency: The proposed project would redevelop light industrial properties which are vacant, and provide retail opportunities which would serve surrounding neighborhoods, including providing services to proposed housing on the site. The project site is located in an urbanized area and adjacent to major roads, public transit, and bicycle and pedestrian paths within the City. The proposed project would provide a continuation of a pedestrian-oriented commercial street and

would include sidewalks for pedestrian linkages across the site and to public streets. Parking lots would be located underground, a limited amount of surface parking would also be provided.

- Economic Development Goal 1: Create more job opportunities for existing residents, particularly those who suffer from chronic unemployment, to improve the balance between jobs and resident workers.

Consistency: The proposed project would include the development of retail and commercial buildings. These establishments would provide jobs within the City of San Jose (many of which would be entry-level positions for less skilled or experienced workers), and would help to improve the balance between jobs and available workers.

- Urban Design Policy 1: The City should continue to apply strong architectural and site design controls on all types of development for the protection and development of neighborhood character and for the proper transition between areas with different types of land uses.

Consistency: The proposed project would be subject to the City of San Jose design review procedures and adhere to all appropriate site design standards.

- Urban Design Policy 2: Private development should include adequate landscaped areas. Landscaped areas should utilize water efficient plant materials and irrigation systems. Energy conservation techniques such as vegetative cooling and wind shielding should also be utilized. All landscaped areas should include provision for ongoing landscape maintenance.

Consistency: The proposed project would include landscaped areas such as a park/plaza area in the middle of the block. Additionally, ornamental landscaping would be located throughout the proposed project. A detailed landscape plan would be submitted to the City for approval prior to the construction of the project.

- Urban Design Policy 10: Residential building height should not exceed 45 feet in height except: Mixed use development in the Jackson-Taylor Planned Residential Community shall not exceed 65 feet in height as defined in the mixed use section of the Jackson-Taylor Residential Strategy.

Consistency: The proposed project would consist of a mixed use development including both retail and residential uses and would amend the building height limits to allow structures up to 175 feet in height.

- Historical, Archaeological and Cultural Resources Policy 8: For proposed development sites which have been identified as archaeologically sensitive, the City should require investigation during the planning process in order to determine whether valuable archaeological remains may be affected by the project and should also require that appropriate mitigation measures be incorporated into the project design.

Consistency: Please refer to Section V.I, Cultural and Paleontological Resources, for discussion of potential cultural resources impacts and suggested mitigation measures.

- Hazardous Materials Policy 3: The City should incorporate soil and groundwater contamination analysis within the environmental review process for development proposals. When contamination is present on a site, the City should report this information to the appropriate agencies that regulate the cleanup of toxic contamination.

Consistency: Mitigation measures related to potential hazards on the site are outlined in Section V.H, Hazards. The proposed project would be consistent with this policy.

2. San Jose Greenprint

The San Jose Greenprint, A 20-Year Strategic Plan for Parks and Community Facilities and Programs (Greenprint) was adopted by the City in 2000. The Greenprint provides a vision for the City's parks, community facilities, programs, and neighborhood services. The vision seeks to further the following core values: accessibility, inclusivity, affordability, equity, and diversity. The Greenprint discusses goals, strategies, and performance measures to implement the vision.

The Greenprint describes Council District 3, where the project site is located, as parkland deficient at present and projected to remain so in the future. The district had only 190 acres of neighborhood/community serving parkland as of 2000, which is the lowest number of parkland acres of any council district. In order to meet the overall level of service objective of 3.5 acres per 1,000 residents, the district would need 246 additional acres of parkland. Given the existing development density and pattern of the area, it is not possible to acquire this amount of land. The Greenprint proposes that the best parkland strategy is to develop small public and private parks and improve access to existing facilities outside the district.⁴ Within the district, it describes the area north of Julian Street, east of First Street, south of Taylor Street, and west of Tenth Street as one of four "underserved park areas." The project site is located within this area. The Greenprint recommends that the southern portion of the City-owned Japantown Corporation Yard be developed as a future park (consistent with the existing General Plan designation), and recommends developing new parkland on the site in conjunction with neighborhood redevelopment efforts. The San Jose Parks, Recreation and Neighborhood Services Department is currently updating *Greenprint* and plans to publish in early 2008.

Consistency. The proposed project would provide a public park/plaza area on the Corporation Yard site to serve both project residents and the community. The project would also provide a 10,000 to 20,000 square foot community center on the site. The provision of the public park/plaza and community amenity space on the site would be generally consistent with the goals and intent of the Greenprint, which aims to increase the parkland acreage within Council District 3 through the provision of small public and private parks.

3. City of San Jose Zoning

Zoning is a tool utilized to implement the General Plan. It provides more specific direction for the use and development of the property. The project site, including both the Corporation Yard site and the surface parking lot site, is currently zoned Light Industrial (LI), as shown in Figure III-10. The LI District is intended for a variety of industrial uses and excludes uses with unmitigated hazardous or nuisance effects.

The proposed project includes a rezoning of the Corporation Yard site and a separate rezoning of the City parking lot site to a Planned Development District with an alternative base zoning district of Agricultural (i.e., A [PD]) to allow for and guide residential and mixed-use residential and retail development on the site consistent with the Jackson-Taylor PRC and the Residential Strategy.

⁴ San Jose, City of, 2000. *San Jose Greenprint, A 20-Year Strategic Plan for Parks and Community Facilities and Programs*. June.

It is anticipated that the proposed PD zoning for the Corporation Yard site would allow a maximum of 600 market-rate residential units, up to 30,000 square feet of retail space (or up to 15,000 square feet of retail and 24 live/work units), and 10,000 to 20,000 square feet of community amenity space on the Corporation Yard site. The proposed PD zoning for the City parking lot would allow a maximum of 85 senior housing units on the surface parking lot site. The proposed PD Rezoning would also establish development standards for use of the sites, building configuration and massing, circulation and parking configuration, building height and setbacks. The Corporation Yard site would conform to the following development standards and all other such standards contained in its proposed Planned Development Rezoning:

- A maximum height of 175 feet for the Corporation Yard site from grade level to top of parapet and mechanical/penthouse or architectural features;
- Building setbacks fronting public streets of zero feet, minimum, and zero feet for ground floor building elements and architectural projections;
- An on-site circulation system that includes an east-west internal “spine” connecting North 7th Street to North 6th Street; and
- An internal private street with approximately 45 diagonal parking stalls.

The following parking standards are contained in the proposed Planned Development Rezoning and would also be applicable to the Corporation Yard site. Parking standards for the community amenity space would be determined by the Redevelopment Agency once the space is programmed.

- One bedroom units at 1.5 spaces per unit;
- Two bedroom units at 1.8 spaces per unit;
- Three bedroom units at 2.0 spaces per unit; and
- 1 parking space per 400 square feet of net retail area (for retail uses within the Neighborhood Business District where net retail area is 85 percent of the total retail square footage).

The City parking lot site would conform to the following development standards and all other such standards contained in its proposed Planned Development Rezoning:

- A maximum height of 85 feet from grade level to top of parapet and mechanical/penthouse or architectural features;
- Building setbacks of 20 feet for side yards and 5 feet for rear yard, and zero setback from front property line; and
- A minimum of 0.5 parking space per senior unit.

The precise site plan would be determined upon approval of Planned Development Permits when buildings are reviewed for compliance with these development standards.

Consistency: The proposed project would be consistent with the allowed uses, development standards, and other applicable provisions and requirements of the Planned Development District.

4. Jackson-Taylor Neighborhood Revitalization Plan

The Corporation Yard site is subject to the Jackson-Taylor Neighborhood Revitalization Plan.⁵ The Revitalization Plan focuses on the long-term elimination of incompatible land uses, the preservation of residential areas from non-residential encroachment, the revitalization and the reinforcement of the Jackson Street Neighborhood Business District and the improvement of the overall quality of the residential environment. The Revitalization Plan identifies both the Corporation Yard site and the City parking lot site as locations for the City to “evaluate City-owned property for possible community center use.” The Revitalization Plan establishes goals of relocating the Corporation Yard and converting industrial areas to residential uses through redevelopment or Specific Plan actions.

Consistency: Both of the desired actions described above have since occurred, as the original Japantown Redevelopment Plan was adopted in 1993 and the Jackson-Taylor Residential Strategy was adopted in 1992 (each of these are discussed below). The City relocated the Corporation Yard in early 2007 as part of a separate project. The project would be consistent with the goals and strategies of the Revitalization Plan, and no amendment to the Revitalization Plan is required for the proposed project.

5. Jackson-Taylor Residential Strategy

The Jackson-Taylor Residential Strategy⁶ provides policy direction for the review of rezoning and development permit applications within the Jackson-Taylor PRC. The Jackson-Taylor Residential Strategy includes a Jackson-Taylor Illustrative Land Use Plan (shown in Figure III-11) that represents a preferred land use pattern for the area. Under the Land Use Plan, the northern portion of the Corporation Yard site is designated Mixed Use; the central portion is designated Mixed Use with ground floor retail recommended; and the southern portion is designated Park. The Illustrative Site Plan identifies the Corporation Yard site as the Japantown Complex. The Jackson-Taylor Residential Strategy contains similar development caps as identified in the General Plan for the Jackson-Taylor PRC.

The Residential Strategy identifies the Corporation Yard site as an area where other land uses are recommended in addition to those contemplated under the Illustrative Land Use Plan. In particular, the Residential Strategy identifies the San Jose Nihonmachi Corporation as a potential developer of the Japantown Complex, and specifies that if the site is not developed by the Nihonmachi Corporation, it should be developed with the mixed-use development type described in the Jackson-Taylor PRC set forth in the City’s General Plan.

Consistency: To ensure consistency between the proposed amendments to the General Plan and the Residential Strategy, the proposed project would amend the Residential Strategy to be consistent with the General Plan amendments described above. This amendment to the Residential Strategy would identify the entire Corporation Yard Site and the City surface parking lot site as Mixed Use under the Illustrative Site Plan.

With respect to the Corporation Yard Site, the amendment would allow residential uses at a density of up to 115 dwelling units per gross acre over the entire site, up to 30,000 square feet of retail, and

⁵ San Jose, City of, 1987. *The Jackson-Taylor Neighborhood Revitalization Plan*. December.

⁶ Calthorpe Associates and Bay Area Economics, 1992. *Jackson-Taylor Residential Strategy*. Approved October 6, Amended November 16, 1996 and November 20, 1997.

10,000 to 20,000 square feet of community amenity space; establish a height limit of up to 175 feet; and allow limited surface parking. As a variation on the proposed project, the amendment would also permit up to 15,000 square feet of retail to be replaced with up to 24 live/work units.

In addition, the amendments would: allow residential and live/work uses to line the podium (in addition to commercial uses already permitted); allow some buildings to contain exclusively residential uses; and, allow zero-setback lines for ground floor uses. The Residential Strategy would also be amended to modify the Residential Strategy's policies and design guidelines as necessary to implement the project. The project also would amend the Residential Strategy to increase the cap on dwelling units to 2,000 dwelling units.

6. Japantown Redevelopment Plan

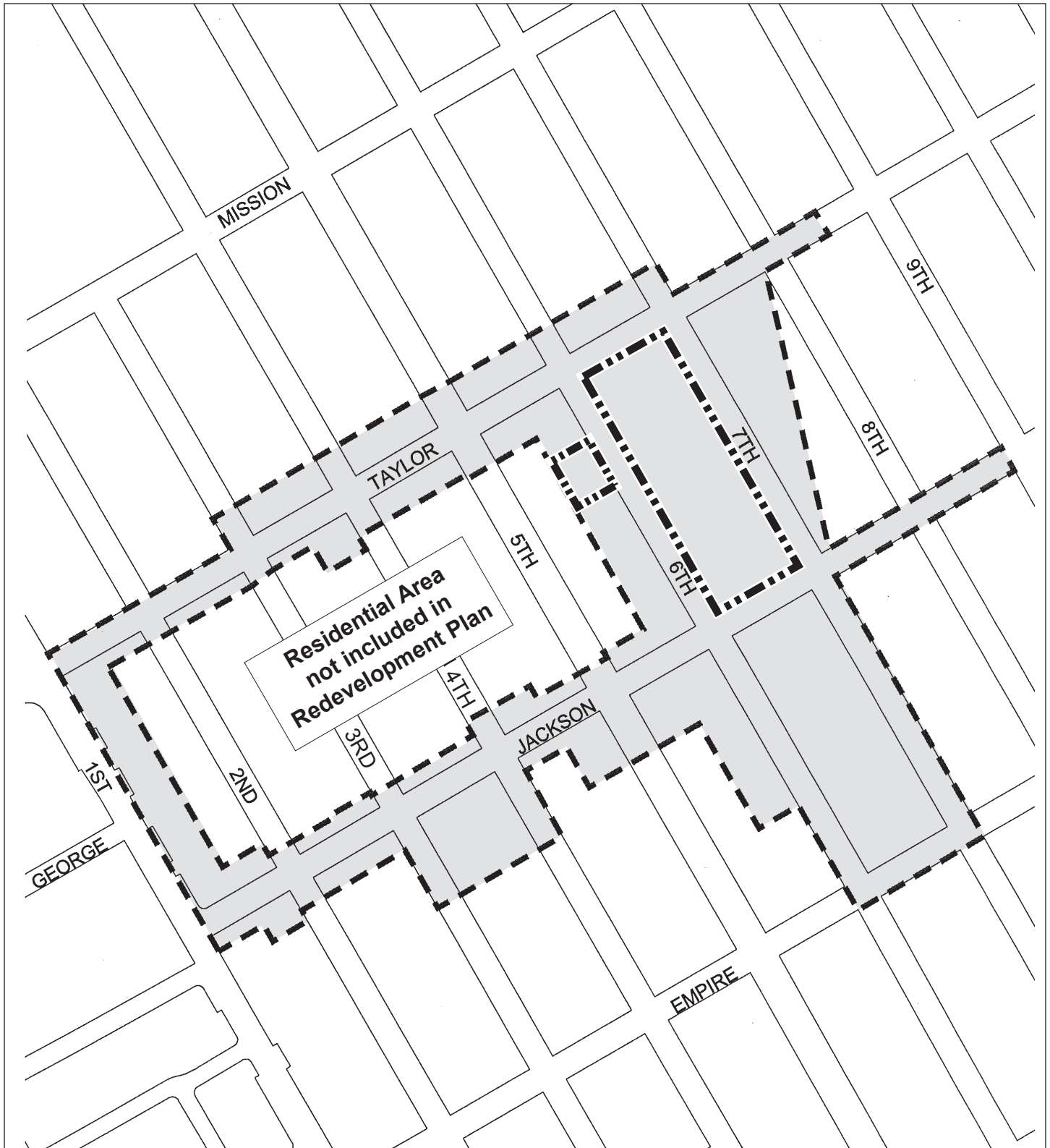
The project site is located within the City of San Jose Redevelopment Agency's Japantown Redevelopment Project Area and is subject to the Japantown Redevelopment Plan.⁷ The Japantown Redevelopment Plan Area is generally bounded by Taylor Street on the north, North 7th Street on the east, Empire Street on the south, and North 1st Street on the west (see Figure IV-1).

The goals of the Redevelopment Plan include:

- Elimination, by public and private actions, of blighting conditions in the area.
- Strengthening the economic base of the project area and the community in general by providing necessary assistance to stimulate revitalization and new commercial expansion.
- Replanning, redesign, and further development of underdeveloped areas that are economically stagnant, physically constrained, and/or underutilized.
- Rehabilitation or replacement of substandard and deteriorated public improvements in the area.
- Provision of more adequate parking resources.
- Encouragement, by the provision of appropriate assistance, of the rehabilitation and seismic strengthening of commercial buildings in the area.
- Creation of a more attractive environment as a means of attracting more people and an activity to this unique commercial district.
- Attraction of additional private investment and employment into the Redevelopment Area and adjoining areas.

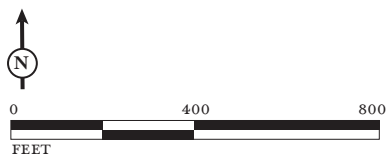
According to the Redevelopment Plan, land uses permitted in the project area are those land uses provided in the General Plan as they currently exist or as they may from time to time be amended. Because the proposed project would amend the General Plan, the proposed project would not be required to amend the Redevelopment Plan. The project site is also subject to the Redevelopment Agency's Five-Year Implementation Plan (2005 to 2009). Under the Five-Year Implementation Plan, the Redevelopment Agency seeks to develop strategies and complete environmental analyses to develop the Corporation Yard into a mixed-use project that retains the cultural heritage of Japantown. The proposed project is consistent with and will further this strategy.

⁷ San Jose, City of, Redevelopment Agency, 1993. *Japantown Redevelopment Plan*. Adopted December 2. Amended through August 29, 2006.



LSA

FIGURE IV-1



*Japantown Corporation Yard
Redevelopment Project EIR
Japantown Redevelopment Plan Map*

SOURCE: THE REDEVELOPMENT AGENCY OF THE CITY OF SAN JOSE, 2007

E:\WDD0701 japantown\figures\Fig_IV1.ai (8/14/07)

Consistency: The proposed project would generally meet the goals of the Redevelopment Plan. The proposed project would redevelop land which is currently underutilized. The proposed project would include residential, retail, and community amenity uses, parking, landscaping and open space. The proposed project would provide additional commercial services and job opportunities to the surrounding neighborhoods.

V. SETTING, IMPACTS AND MITIGATION MEASURES

This chapter contains an analysis of each potentially significant environmental issue that has been identified in the Notice of Preparation (NOP) prepared for the Japantown Corporation Yard Redevelopment Project (proposed project), and, as such, constitutes the major portion of the EIR. A copy of the NOP and the comment letters received are included as Appendix A in this EIR. Sections A through P of this chapter describe the environmental setting of the proposed project site as it relates to each specific environmental issue. The impacts resulting from implementation of the proposed project and mitigation measures that would reduce impacts of the project, if necessary, are also presented in each of the sections.

DETERMINATION OF SIGNIFICANCE

Under CEQA, a significant effect is defined as a substantial, or potentially substantial, adverse change in the environment.¹ The *CEQA Guidelines* direct that this determination be based on scientific and factual data. Each impact and mitigation measure section of this chapter is prefaced by a summary of criteria of significance. These criteria have been developed using the *CEQA Guidelines* and applicable City policies, such as the *San Jose 2020 General Plan* (General Plan).

1. Issues Addressed in the EIR

The following environmental issues are addressed in this chapter:

- Land Use
- Population, Employment and Housing
- Transportation, Circulation and Parking
- Air Quality
- Noise
- Geology, Soils and Seismicity
- Hydrology and Water Quality
- Hazards
- Cultural and Paleontological Resources
- Biological Resources
- Visual Resources
- Shade/Shadow and Light/Glare
- Utilities
- Public Services and Facilities
- Energy and Mineral Resources
- Global Climate Change

Preliminary analysis determined that the proposed project would not result in significant impacts to agricultural resources. Consequently, this issue is not examined in this chapter of the EIR.

¹ Public Resources Code 21068.

2. Format of Issue Sections

Each environmental topic considered in this chapter is comprised of two primary sections: (1) Setting, and (2) Impacts and Mitigation Measures. An overview of the general organization and the information provided in the two sections is provided below:

- *Setting.* The Setting section for each environmental topic generally provides a description of the applicable physical setting for the project site and its surroundings at the beginning of the environmental review process (e.g., existing land uses, existing soil conditions, existing traffic conditions). An overview of regulatory considerations that are applicable to the specific environmental topic is also provided.
- *Impacts and Mitigation Measures.* The Impacts and Mitigation Measures section for each environmental topic presents a discussion of the impacts that could result from implementation of the proposed Japantown Corporation Yard Redevelopment Project. The section begins with the criteria of significance, establishing the thresholds to determine whether an impact is significant. The latter part of this section presents the impacts from the proposed project and mitigation measures, if required. The impacts of the proposed project are delineated into separate categories based on their significance according to the criteria listed in each topical section: less-than-significant impacts, which do not require mitigation measures, and significant impacts, which do require mitigation measures. Where impacts and mitigations vary for the Corporation Yard site and the City surface parking lot site, the responsibility and timing for implementation of the recommended mitigation measures is noted for each project site.

Impacts are numbered and shown in bold type, and the corresponding mitigation measures are numbered and indented. Impacts and mitigation measures are numbered consecutively within each topic and begin with an acronymic reference to the impact section (e.g., LU). The following symbols are used for individual topics:

LU:	Land Use
POP:	Population, Employment and Housing
TRANS:	Transportation, Circulation and Parking
AIR:	Air Quality
NOISE:	Noise
GEO:	Geology, Soils and Seismicity
HYDRO:	Hydrology and Water Quality
HAZ:	Hazards
CULT:	Cultural and Paleontological Resources
BIO:	Biological Resources
VIS:	Visual Resources
SHADE/GLARE:	Shade/Shadow and Light/Glare
UTIL:	Utilities
PUB:	Public Services and Facilities
ENRG:	Energy and Mineral Resources
CLIM:	Global Climate Change

Impacts are also categorized by type of impact, as follows: Less-than-Significant (LTS), Significant (S), and Significant and Unavoidable (SU). These notations are provided following each impact and each mitigation measure to identify their significance before and after mitigation.

A. LAND USE

This section describes existing land uses at the proposed project site and vicinity and evaluates potential land use impacts that could result from development of the proposed project.

1. Setting

The following section provides an overview of the land uses within the project site and surrounding areas. The section begins by discussing the regional setting, and then provides more specific information about the project site and vicinity. Land uses at and adjacent to the project site are generally identified in the aerial photo provided in Figure V.A-1. Photographs of the site and surrounding area are provided in Figures V.A-2a through V.A-2d. These photos correspond to the viewpoint locations (1 through 8) noted on Figure V.A-1.

a. Regional Setting. The project site is located in the Santa Clara Valley, situated at the southern part of the San Francisco Bay within the City of San Jose, as shown in Figure III-1. The Valley was historically used for agricultural production. However, due in part to the establishment and growth of the electronics industry, the Santa Clara Valley today consists largely of urban development.

The 5.78-acre project site is located immediately north of Downtown San Jose. Regional access to the site is provided by Interstate 880 (I-880) to the north, US 101 to the east, and State Route 87 (SR 87) and light rail to the west.

b. Local Setting. As described in Chapter IV, Planning Policy, the project site is situated within the Japantown Redevelopment Area and the Jackson-Taylor Planned Residential Community. The Japantown neighborhood is generally concentrated in the area bounded by Taylor Street on the north, North 6th Street on the east, Empire Street on the south, and North 3rd Street on the west. Japantown is a diverse neighborhood with a distinct, walkable business district that is home to some 90 stores and over 20 restaurants including many Asian-American and family owned establishments. The neighborhood continues to be the cultural center for the Japanese-American community and numerous cultural, religious and arts organizations.

The Corporation Yard site is generally bounded by Taylor Street on the north, North 7th Street on the east, Jackson Street on the south, and North 6th Street on the west. The surface parking lot site is located on the west side of North 6th Street, immediately west of the Corporation Yard site.

c. Existing Land Uses on the Project Site. The project site is owned by the City of San Jose and was formerly utilized as the City's Japantown Corporation Yard. The Corporation Yard served as a City maintenance and storage facility; uses at the site consisted of storage area for gravels and other inert materials, a wood shop, a vehicle maintenance shop, fuel storage and maintenance administration. As shown in Figure V.A-1, as of September 2007, the Corporation Yard site includes seven single-story buildings, totaling approximately 85,000 square feet. Existing buildings on the project site include one administration office and six shop/warehouse/storage structures. Photo 1 depicts the general industrial character of the Corporation Yard site. A fueling station is located approximately at the center of the site (shown in Photo 2). The administration building is depicted in Photo 3. The remainder of the site is paved and street trees and fencing are located along the perimeter of the site. Current access to the site is provided by a driveway on North 6th Street and North 7th Street. The

smaller of the two sites is currently developed as a surface parking lot, as shown in Photo 4. Both sites are currently vacant.

d. Baseline Condition of Land Uses on the Project Site. In furtherance of the Redevelopment Plan, the San Jose Redevelopment Agency Board approved a contract for surface demolition activities at the Corporation Yard on November 6, 2007. As such, the baseline condition utilized in this EIR assumes that surface demolition has been completed and the existing buildings have been removed. However, pavements and subsurface infrastructure would remain and their removal is part of the proposed project considered in this EIR.

e. Land Uses in the Vicinity of the Project Site. A variety of land uses are found in the vicinity of the project site. Surrounding land uses are described below and illustrated in the following photos.

(1) Land Uses to the North. The parking lot site is bordered to the north by a six-story apartment building located along Taylor Street, a four-lane roadway. The corporation yard site is bordered to the north by Taylor Street. On the opposite side of Taylor Street, land uses consist of an automotive repair shop (shown in Photo 5), a small apartment complex, a single-family residence, and a vacant lot. Land uses further to the north consist of one- to two-story single-family residences to the northwest and three- to four-story townhome and condominium complexes to the northeast. Bernal Park is located less than 0.25 miles to the north of the project site and provides active recreation areas including a baseball diamond, play structures, and open lawn areas and public pathways. Further north, land uses consist primarily of industrial and employment uses. The San Jose International Airport is also located approximately one mile northwest of the project site.

(2) Land Uses to the East. North 6th Street, a two-lane roadway, forms the eastern boundary of the parking lot site. The corporation yard site is located east of the parking lot site, on the opposite side of North 6th Street. North 7th Street, a two-lane roadway, forms the eastern boundary of the corporation yard site. As shown in Photo 6, on the opposite side of North 7th Street is a vacant, triangular parcel that has an approved Planned Development Permit (File No. PD04-076) for 138 residential units and 12,000 square feet of commercial uses. The Union Pacific Railroad (UPRR) tracks border this parcel to the east. Beyond the railroad tracks, land uses consist of a block of three-story townhomes. Beyond the townhomes are warehouse/outdoor storage uses followed by several blocks of single-family residences and small apartment complexes.

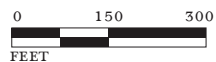
(3) Land Uses to the South. The parking lot site is bordered to the south by a vacant brick building. The corporation yard site is bordered to the south by Jackson Street, a two-lane roadway. On the opposite side of Jackson Street is a new four-story condominium complex with ground-floor retail, as shown in Photo 7. This photo also shows existing townhomes located at the intersection of Jackson Street and North 7th Street. The UPRR tracks continue south of the condominium development and curve to the west. Adjacent to the railroad tracks there are some commercial and outdoor storage uses; however, beyond the tracks the predominant use consists of low-medium density residential housing, including townhomes, apartment complexes, and single-family residences. To the southwest, along Jackson Street is the center of Japantown business district, which consists of several commercial, service, and restaurant establishments.

(4) Land Uses to the West. North 6th Street, a two-lane roadway, borders the corporation yard site to the west. The surface parking lot site is located on the west side of North 6th Street,



LSA

FIGURE V.A-1



PROJECT SITE



VIEWPOINT LOCATIONS

*Japantown Corporation Yard
Redevelopment Project EIR
Aerial View of Project Site and
Land Use Photo Location Map*

SOURCE: GOOGLE EARTH, 2007

I:\WDD0701 japantown\figures\Fig_VA1.ai (8/3/07)



Photo 1: Corporation Yard site



Photo 2: Fueling area on Corporation Yard site

LSA

FIGURES V.A-2a

*Japantown Corporation Yard
Redevelopment Project EIR
Existing Site Conditions and
Surrounding Land Uses*



Photo 3: Corporation Yard Administration Building



Photo 4: Surface parking lot site

LSA

FIGURES V.A-2b

*Japantown Corporation Yard
Redevelopment Project EIR
Existing Site Conditions and
Surrounding Land Uses*



Photo 5: Automotive service station, north of the Corporation Yard site



Photo 6: Vacant land, east of the Corporation Yard site

LSA

FIGURES V.A-2c

*Japantown Corporation Yard
Redevelopment Project EIR*
Existing Site Conditions and
Surrounding Land Uses



Photo 7: Ground floor retail, condominium, and townhome complexes, south of the Corporation Yard site



Photo 8: Japantown restaurants, west of the Corporation Yard site

LSA

FIGURES V.A-2d

*Japantown Corporation Yard
Redevelopment Project EIR
Existing Site Conditions and
Surrounding Land Uses*

opposite the corporation yard site. The parking lot site itself is bordered to the west by an apartment complex and single-family residences. Opposite North 6th Street, land uses reflect the context and character associated with the Japantown neighborhood. Several restaurants and businesses are established within the historic structures located along this street, as shown in Photo 8. Beyond the parking lot site to the west, land uses consist of a mix of commercial uses, medium density single-family homes, and apartment complexes.

f. San Jose 2020 General Plan. The City of San Jose 2020 General Plan includes the following land use related policies that apply to the proposed project:

- *Urban Conservation Policy 2:* The City should encourage new development which enhances the desirable qualities of the community and existing neighborhoods.
- *Balanced Community Policy 1:* The City should foster development patterns which will achieve a whole and complete community in San Jose, particularly with respect to improving the balance between jobs and economic development on the one hand, and housing resources and a resident work force on the other. A perfect balance between jobs and housing may not be achievable but the City should attempt to improve this balance to the greatest extent feasible.
- *Balanced Community Policy 2:* Varied residential densities, housing types, styles, and tenure opportunities should be equitably and appropriately distributed throughout the community and integrated with transportation systems. Higher densities are encouraged near light rail lines and other major transportation facilities to support the use of public transit.
- *Residential Land Use Policy 1:* Residential development at urban densities (one dwelling unit per acre or greater) should be located only where adequate services and facilities can be feasibly provided.
- *Residential Land Use Policy 3:* Higher residential densities should be distributed throughout the community. Locations near commercial and financial centers, employment centers, the light rail transit stations, and along bus routes are preferable for higher density housing.
- *Residential Land Use Policy 7:* Housing developments designed for senior citizens should be located in neighborhoods that are within reasonable walking distance of health and community facilities and services or accessible by public transportation.
- *Residential Land Use Policy 11:* Residential developments should be designed to include adequate open spaces in either private yards or common areas to partially provide for residents' open space and recreation needs.
- *Commercial Land Use Policy 1:* New commercial development should be located near existing centers of employment or population or in close proximity to transit facilities and should be designed to encourage pedestrian and bicycle access through techniques such as minimizing building separation from the street, providing convenient and present pedestrian connections, secure bike storage, etc.

2. Impacts and Mitigation Measures

The following section presents a discussion of the impacts related to land use that could result from the implementation of the proposed project. The section begins with the criteria of significance, establishing the thresholds to determine whether an impact is significant. The latter part of this section presents the land use impacts from the proposed project and the mitigation measures, if required. Impacts are delineated into separate categories based on their significance according to the criteria listed below: less-than-significant impacts, which do not require mitigation, and significant impacts, which do require mitigation.

This section of Chapter V (A, Land Use) addresses issues of land use compatibility. The related issues of aesthetics and shade and shadow effects are separately addressed in sections that follow (Sections V.J and V.K).

a. Criteria of Significance. The proposed project would have a significant impact if it were to:

- Divide the physical arrangement of an established community;
- Introduce new land uses that would conflict with established or proposed uses; or
- Conflict with applicable land use plans, policies, or regulations adopted by agencies with jurisdiction over the project including, but not limited to, the specific plans or zoning ordinance adopted for the purpose of avoiding or mitigating an environmental effect.

b. Less-than-Significant Land Use Impacts. Less-than-significant land use impacts of the proposed project are discussed below.

(1) Divide an Established Community. The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas. For instance, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside of the community.

The Corporation Yard site is bounded by Taylor Street to the north, North 7th Street to the east, Jackson Street to the south, and North 6th Street to the west. The surface parking lot site is bounded by North 6th Street to the east and existing development on the north, south, and west. The proposed project would not divide the physical arrangement of an established community. The proposed project would provide a mix of land uses, including commercial, residential, and community uses on a vacant and underutilized site that is currently isolated from the existing Japantown neighborhood. It is the intent of the proposed project to develop the existing site consistent with the vision of applicable plans for the area, including the Japantown Redevelopment Plan and the Jackson-Taylor Neighborhood Revitalization Plan. The proposed project would provide greater public access through and within the site by providing an east-west internal street which would allow vehicular and pedestrian access between North 6th Street and North 7th Street. The proposed park/plaza area and community center at the project site would serve to connect the surrounding community to the project site. In this way, development on this site would fill a large hole in the urban fabric of the area, and serve to connect the established surrounding neighborhoods.

(2) Land Use Conflicts. Land uses on the project site, and in the immediate vicinity of the project site, have historically been industrial and commercial in nature. However, land uses to the south and east of the project site have transitioned to medium density residential uses. The proposed project would include the development of housing, retail, and community amenity space ranging from 6 to 14 stories in height. This change in land use and increase in land use intensity would alter the existing character of the project area; however, the proposed project would not substantially conflict with established or planned uses surrounding the site.

It should be noted that the types of land use conflicts that would be considered significant here are those that have an intrinsic land use basis. Land uses with a high potential to be incompatible include power plants, factories, or other noise, air pollution, or hazard-generating uses. In today's world of advanced design solutions and building materials (in which creative site planning and sensitive building massing can ameliorate many conflicts of adjacency, and noise suppressing window treatments, landscaping, and air conditioning can reduce physical impacts), land use impacts *per se* are rare.

- North of the site, across Taylor Street, is a mix of uses, consisting primarily of medium density single-family homes, townhomes, and apartment complexes, with commercial uses concentrated along the Taylor Street corridor. The proposed ground-floor commercial uses and high density residential development would not conflict with land uses existing north of the site. Although project buildings would be considerably taller than uses existing to the north, the proposed project would compliment these uses, and provide increased activity in this urban area.

The San Jose International Airport is approximately 1 mile northwest of the site. Although the site is not currently located within any federal or locally-designated safety zone, development on the site is subject to height restrictions set forth by Federal Aviation Regulations, Part 77, administered by the Federal Aviation Administration (FAA) and incorporated into the Santa Clara County Airport Land Use Commission (ALUC) policy. These federal regulations define a set of imaginary surface restrictions which radiate out several miles from an airport's runways. Proposed development requiring notification to the FAA under Federal Aviation Regulations, Part 77, must receive a Determination of No Hazard prior to development permit approval in compliance with General Plan Aviation Policy #47. Developments that include structures exceeding the FAA's imaginary surface standards are required to include incorporation of any FAA requirements specified in a Determination of No Hazard (to be obtained prior to development approval) as well as dedication of aviation easements to the City of San Jose in compliance with General Plan Aviation Policy #49. The proposed project includes rezoning of the site allowing buildings up to 175 feet in height; which would exceed the FAA's 145-foot¹ imaginary surface standards for the site. As such, the proposed project would require a Determination of No Hazard from the FAA prior to any specific development approval and would require dedication of an aviation easement over the project site.

- East of the project site, across North 7th Street and the railroad tracks, land uses consist of townhomes and other medium density residential uses. The proposed project would connect residential uses east of the site to the Japantown business district. The proposed ground-floor commercial uses and high density residential development would not conflict with land uses existing east of the site.

Proposed residential uses on the site could present a land use conflict due to the proximity of the adjacent railroad tracks. However, safety controls already in place at surrounding intersections would ensure that the proximity of residential and park/plaza uses on the site would not pose a safety hazard due to the passing of trains. Potential conflicts related to increased noise levels associated with the adjacent railroad tracks are discussed in greater detail in Section V.E, Noise. In terms of land use impacts, *per se*, the development of residential uses near the railroad tracks

¹ Greene, Cary, 2007. Airport Planner, City of San Jose Airport Department. Memorandum to Ron Eddow, City of San Jose Planning Department. September 19.

would result in a less-than-significant impact and is consistent with other recent development along the railroad tracks to the north, east, and south.

- South of the site, across Jackson Street land uses are mixed, including a four-story condominium complex with ground-floor retail and to the southwest, the center of the Japantown business district. Although project buildings would be considerably taller than uses existing to the south, the proposed project would compliment these uses, and provide increased activity within the Japantown neighborhood.
- West of the Corporation Yard site, across North 6th Street, and adjacent to the surface parking lot site, land uses are primarily commercial in nature, with a six-story apartment complex located at the corner of Taylor Street and North 6th Street. Commercial uses are generally reflective of the context and character associated with the Japantown neighborhood. The internal roadway and public park/plaza on the project site would serve to better connect these establishments to the surrounding neighborhood to the east. Although project buildings would be considerably taller than uses existing to the west, the proposed project would compliment these uses, and provide increased activity within the Japantown neighborhood. In addition, the six-story senior complex on the surface parking lot site would be compatible with existing uses surrounding the site, specifically the six-story apartment complex located north of, and immediately adjacent to this site.

(4) Conflict with Applicable Land Use Plans. The proposed project would generally conform to all applicable land use plans, as proposed to be amended. An in-depth discussion of the proposed project's relationship with applicable plans can be found in Chapter IV, Planning Policy.

c. Significant Land Use Impacts. Development of the proposed project would not result in any significant land use impacts.

B. POPULATION, EMPLOYMENT AND HOUSING

This section describes existing and projected population, employment and housing statistics in San Jose and Santa Clara County and evaluates potential environmental impacts that could result from implementation of the proposed project.

1. Setting

The following sections utilize data from the U.S. Census Bureau, the Association of Bay Area Governments (ABAG),¹ and the City of San Jose 2020 General Plan.

a. Population. The City of San Jose is located in Santa Clara County, in the southern region of the San Francisco Bay area. Founded in 1777, San Jose, or Pueblo de San Jose, was the first civilian settlement in California.² By early-1850, the City had formally incorporated with a population of approximately 4,000 persons, and served as the State capital for the first two sessions of the California legislature.³

It wasn't until after World War II that San Jose experienced the population surge that restored its regional and national influence. As shown in Table V.B-1, every decade after 1950 saw the City's population increase by at least 100,000, making it one of the largest municipalities in California. By 2000, the City's incorporated area population of 894,943 persons comprised approximately 53 percent of the total Santa Clara County population of 1,682,585.⁴ Also in 2000, the City's population for the first time exceeded that of the City of Oakland and the City of San Francisco, making San Jose the most populous municipality in the Bay Area.

Table V.B-1: San Jose and Santa Clara County Population Growth

Year	San Jose		Santa Clara County	
	Population	10-year Percent Increase	Population	10-Year Percent Increase
1950	95,280	--	290,547	--
1960	204,196	114.3%	642,315	121.1%
1970	459,913	125.2%	1,065,313	65.9%
1980	629,531	36.9%	1,295,071	21.6%
1990	782,248	24.3%	1,497,577	15.6%
2000	894,943	14.4%	1,682,585	12.4%
2010*	1,005,300	12.3%	1,867,500	11.0%
2020*	1,150,900	14.5%	2,085,300	11.7%
2030*	1,282,700	11.5%	2,279,100	9.3%

Source: U.S. Census, 2000.

*Note: 2010-2030 are projections. Source: ABAG, 2006. *Projections 2007*.

ABAG estimates that San Jose's population had increased to 943,300 by 2005, which represents a 5.4 percent increase over 2000. The 2010 population is projected to reach 1,005,300, representing a 6.6 percent increase over the five year period.⁵ The City is projected to grow steadily over the next three decades, to 1,282,700 in 2030 and 1,356,600 in 2035, when it is anticipated to comprise approximately 57 percent of Santa Clara County's projected population of 2,380,400 residents. The City's

¹ Some ABAG data is for the City's "subregional study area," or its sphere of influence, and not its corporate boundaries. Subregional data is only used when no City level data is available. When subregional data is used, it is explicitly noted.

² City of San Jose, 2007. Websites: www.sanjoseca.gov; www.usacitiesonline.com; www.leginfo.ca.gov. July 30.

³ Ibid.

⁴ Association of Bay Area Governments (ABAG), 2006. *Projections 2007, Forecasts for the San Francisco Bay Area to the Year 2035*. December.

⁵ Ibid.

average 5-year growth rate from 2000 to 2035 is projected to be 7.4 percent, which is slightly more than the County's projected 5-year growth rate during this same period of 5.9 percent.⁶

b. Employment. San Jose is the primary employment center in Santa Clara County, and has more employed residents than any other city in the Bay Area. Two types of employment data are described below: 1) total jobs – which indicate the number of all jobs within the community; and 2) employed residents – which indicate the number of residents of working age who actively participate in the civilian labor force. A comparison of these data can provide an indication of commute patterns in a community (i.e., if significant out-commuting or in-commuting occurs).

The civilian labor force includes: those who are employed (excepting those in the armed forces); and those who are unemployed but actively seeking employment. Those residents who have never held a job, who have stopped looking for work, or who have been unemployed for a long period are not considered to be part of the labor force.

(1) Total Jobs. In 2000, San Jose had 417,500 total jobs which comprised approximately 40 percent of all jobs provided in Santa Clara County. ABAG estimates that the total number of jobs in San Jose decreased 13 percent to 375,750 total jobs over the five year period between 2000 and 2005. By 2035, ABAG projects that the total number of San Jose jobs will have increased 45.5 percent, reaching approximately 607,360 total jobs and providing 44.4 percent of all Santa Clara County jobs.

(2) Employed Residents. ABAG defined employed residents as employed people who “live in the community or county but do not necessarily work there.”⁷ In 2000, San Jose had 470,027 employed residents, comprising 54.4 percent of the 863,432 employed residents in Santa Clara County. ABAG estimates that the total number of employed residents decreased 14 percent to 402,290 persons over the five-year period between 2000 and 2005. By 2035, ABAG projects that the number of employed residents in San Jose will have increased over the 2000 number of employed residents by 64.7 percent to 774,320 persons, comprising 58.4 percent of Santa Clara County's projected workforce of 1,326,600.

c. Housing. The following section describes the housing characteristics of San Jose and Santa Clara County.

(1) Households. ABAG defines a household as an occupied dwelling unit. In 2000, San Jose had 276,598 households, comprising approximately 48.9 percent of the 565,863 households in Santa Clara County. In 2005, the City was estimated to have 293,930 households, comprising approximately 49.3 percent of the 595,700 households in the County. By 2035, ABAG projects that the number of San Jose households will increase by 54.5 percent to 427,230.

The California Department of Finance estimates that the average household size for San Jose was 3.18 in 2005, which was significantly higher than the Santa Clara County average of 2.92.⁸ Average household size has remained relatively steady in San Jose and Santa Clara over the last several

⁶ Ibid.

⁷ ABAG, 2006, op. cit.

⁸ State of California, Department of Finance, 2007. *E-5 Population and Housing Estimates for Cities, Counties and the State, 2001-2007, with 2000 Benchmark*. May.

decades. ABAG projects that this will remain constant through 2035, when San Jose and Santa Clara County are projected to have rates of 3.18 and 2.95, respectively.

(2) Existing Housing Stock. The housing stock in the City of San Jose is characterized primarily by single-family homes, a smaller percentage of multi-family units, and relatively low vacancy rates. In 2000, the U.S. Census reported that San Jose had 281,706 housing units, 98 percent of which were occupied (276,417). Of these, the US Census reported that 67 percent were single-family attached or detached units, 29 percent were multi-family units, and 4 percent were mobile homes. According to the 2000 U.S. Census, 62 percent of all occupied housing units in San Jose were owner-occupied and the remaining 38 percent were renter-occupied.

(3) Regional Housing Needs. As required by State law, the Housing Element of the San Jose 2020 General Plan discusses the City's "fair share allocation" of regional housing need by income group as projected by ABAG. ABAG's determination of the local share of regional housing needs takes into consideration the following factors: market demand for housing; employment opportunities; availability of suitable sites and public facilities; commuting patterns; type and tenure of housing need; loss of units contained in assisted housing that changed to non-low-income use; and special needs housing requirements. The San Jose 2020 General Plan was first adopted on August 16, 1994.

The ABAG Regional Housing Needs Determination (RHND) for San Jose and its sphere of influence for the period of 1999 to 2006 was 26,114 units. The RHND is allocated by income category: very low, low, moderate, and above-moderate. According to the RHND for San Jose, of the units allocated for the period of 1999 to 2006, the following numbers of units should be constructed and made available to each income group: 5,337 for very low income; 2,364 for low income, 7,086 for moderate income; and 11,327 for above moderate income. These allocations would lead to an average yearly need (across all income categories) of 3,482 units.⁹ ABAG recently released a Draft Regional Housing Needs Allocation for the period of 2007-2014. The allocation, which will undergo public review until June 2008, calls for 34,717 new housing units during this period: 7,750 for very low income, 5,321 for low income, 6,197 for moderate income, and 15,449 for above moderate income.¹⁰ In addition, ABAG projects that San Jose will build a total of 150,632 new housing units (across all income categories) between 2000 and 2035.

d. Jobs-to-Housing Balance and Jobs-to-Employed Residents Balance. The jobs-to-housing concept is used to determine whether a community has an adequate number of jobs available to provide employment for all the residents within the community seeking employment. Understanding this concept can be useful in understanding the interconnections among housing affordability, traffic flows and congestion, and air quality within a community and its larger region. However, the jobs/housing ratio is best analyzed at the sub-regional or regional level due to tendency of people to commute to jobs.

⁹ Association of Bay Area Governments (ABAG), 2001. *Regional Housing Needs Determination for the San Francisco Bay Area 2001-2006 Housing Element Cycle*. June.

¹⁰ Association of Bay Area Governments (ABAG), 2007. *Draft Regional Housing Needs Allocations & Technical Document*. July.

(1) Methodology. Typically, the term “jobs-to-housing units balance” is used to refer to a relationship between jobs and housing units within a community. A jobs-to-housing units ratio of 1.5 is considered ideal, which takes into account residents who do not participate in the labor force (e.g. those who are retired, disabled, or students). The 1.5 jobs-to-housing units ratio indicates a community has an adequate number of jobs to meet the demand for employment by its residents, and therefore is in balance.

A more helpful indicator of balance, however, is the relationship between the number of jobs provided to the number of employed residents. An ideal jobs-to-employed residents ratio is 1.0, which indicates that every resident seeking a job can ostensibly find one within the community.

A jobs-to-employed residents ratio that is greater than 1.0 indicates that the community provides more jobs than it has residents seeking jobs. With this out-of-balance condition, the community is likely to experience traffic congestion associated with people coming to jobs from outside the area, as well as intensified pressure for additional residential development to house the labor force. Conversely, a jobs-to-employed residents ratio of less than 1.0 indicates that a community has fewer jobs than employed residents demanding employment. Under this converse, out-of-balance condition, many residents need to commute outside of the community (i.e. out-commute) for employment. The resulting commuting patterns can lead to traffic congestion and adverse effects on both local and regional air quality. San Jose’s current and projected jobs/housing ratio, as well as its jobs/employed residents ratio for 2000-2035, is shown in Table V.B-2. The City’s jobs-to-employed residents ratio is projected to remain significantly below 1.0, indicating a high rate of out-commuting.

Table V.B-2: Housing and Employment Data – San Jose and Santa Clara County

	2000		2005		2010		2020		2035		General Plan Buildout
	City	County	City	County	City	County	City	County	City	County	City
Total Jobs	432,480	1,044,130	363,380	872,860	405,170	938,330	493,340	1,098,290	644,980	1,365,810	652,200
Employed Residents	470,027	863,432	402,290	734,000	486,030	879,900	604,630	1,067,400	774,320	1,326,600	571,700
Housing Units	291,370	565,863	309,350	595,700	329,270	628,870	377,640	701,470	447,790	806,210	355,900
Jobs-to-Housing Unit Ratio (Ideal is 1.5)	1.48	1.85	1.17	1.47	1.23	1.49	1.31	1.57	1.44	1.69	1.83
Jobs-to-Employed Residents Ratio (Ideal is 1)	0.92	1.21	0.90	1.19	0.83	1.07	0.82	1.03	0.83	1.03	1.14

Note: Data shown for the San Jose Subregional Study Area, defined as its “City Sphere of Influence”

Source: ABAG, 2006. *Projections 2007*; City of San Jose; LSA Associates, Inc., 2007.

One of the shortcomings of this ratio is that it does not account for regional in- or out-commuting due to job/labor mismatches or housing affordability. Even if a community has a numerical balance between jobs and housing/employed residents, sizeable levels of in- and out-commuting are still possible, especially where employment opportunities do not match local skills and educational characteristics of the local labor force. In such instances, regional commuting tends to occur. For example, a numerically balanced community may have high housing costs and low-wage jobs, thus encouraging its residents to out-commute for their high wage jobs, and its workers to in-commute from places outside the community where housing costs are affordable in relation to their low wage incomes. This condition is often referred to as a jobs-to-housing units *mismatch*. A jobs-to-housing units match occurs when the types of jobs provided in a community “match” the income needs of the

employed workers within the community. Thus jobs/housing evaluations are more useful in examining the potential for “self-containment”: the ability of an area’s population to live and work in the same place. Because of the tendency of people to commute, potential for self-containment is best understood at the sub-regional level.

(2) Jobs-to-Employed Residents. As shown in Table V.B-2 San Jose has both a lower jobs-to-housing ratio and a lower jobs-to-employed residents ratio than Santa Clara County, and this imbalanced relationship between City and County is projected to continue through 2035. These ratios indicate that while the whole of Santa Clara County has been relatively well-balanced, though slightly “job rich,” San Jose has a job deficit and will continue to house a disproportionate percentage of the regional work force, unless economic development in the City dramatically alters its projected course. This regional jobs and housing imbalance has existed since the 1970s, when population growth and demand for services in San Jose swelled, despite the large number of jobs the City captured.¹¹ But by 2035, while the County is expected to have a “jobs rich” jobs-to-housing ratio of 1.69 and a jobs-to-employed residents ratio of 1.03, the City is projected to achieve a relatively balanced jobs-to-housing ratio of 1.44, despite an anticipated low jobs-to-employed residents ratio of 0.83. These ratios suggest that high level of in-commuting into Santa Clara County from surrounding areas will occur, as well as an equally high level of out-commuting from San Jose into job centers within the County, and beyond into other regional job markets.

According to the City’s General Plan Buildout projections, San Jose will have a jobs-to-housing units ratio of 1.83, which is significantly higher than ABAG’s projection for the City to have a ratio of 1.44 in 2035. In addition, the General Plan Buildout projections show a City jobs-to-employed residents ratio of 1.14, which is also significantly higher than ABAG’s 2035 projection for the City to have a ratio of 0.83 in 2035. A jobs-to-employed residents ratio of 1.14 suggests a slight occurrence of in-commuting, while a ratio of 0.83 indicates a substantial level of out-commuting.

e. San Jose 2020 General Plan. Applicable population, employment and housing goals from the San Jose General Plan are presented below.

City Concept

- *Balanced Community Goal 4:* Develop a balanced and complete community in terms of land use distribution and densities, housing types and styles, economic development and job opportunities, and opportunities for social and cultural expression.
 - *Balanced Community Policy 1:* The City should foster development patterns which will achieve a whole and complete community in San Jose, particularly with respect to improving the balance between jobs and economic development on the one hand, and housing resources and resident work force on the other. A perfect balance between jobs and housing may not be achievable but the City should attempt to improve this balance to the greatest extent feasible.
 - *Balanced Community Policy 4:* Business and industry should be encouraged to provide job opportunities for all members of the community’s work force.

Community Development

- *Residential Land Use Policy 7:* Housing developments designed for senior citizens should be located in neighborhoods that are within reasonable walking distance of health and community facilities and services or accessible by public transportation.

¹¹ San Jose, City of, Department of Planning, Building & Code Enforcement, 2007. *Demographic Trends Census Brief: Housing Characteristics*. July.

- *Economic Development Goal 1:* Create more job opportunities for existing residents, particularly those who suffer from chronic unemployment, to improve the balance between jobs and resident workers.
- *Economic Development Goal 2:* Create a stronger municipal tax base by obtaining a greater share of the total industrial and commercial development in the County, and by nurturing and encouraging expansion of the existing industrial and commercial development in the City.
 - *Economic Development Policy 1:* The City should reduce the present imbalance between housing and employment by seeking to obtain and maintain an improved balance between jobs and workers residing in San Jose. A perfect balance between the number of jobs and employed residents may not be achievable but the City should strive to achieve a minimum ratio of 0.80 jobs/employed residents to attain greater fiscal stability.
 - *Economic Development Policy 2:* To enhance its economic development and employment opportunities, the City should: Seek to attract businesses and industries which are particularly suited to the area; encourage businesses and industries to provide jobs suitable for the City's unemployed and underemployed labor force.

Housing

- *Goal 2:* Provide decent housing in a livable environment for all persons, including the homeless, regardless of such factors as age, race, sex, marital status, ethnic background, or income.
 - *Distribution Policy 1:* The City encourages a variety and mix in housing types to provide adequate choices for housing to persons of all income levels in San Jose. Where appropriate, implementation of this policy in large-scale development projects should be considered.
 - *Distribution Policy 2:* To avoid undue concentrations of low-income households in any neighborhood, publicly-assisted housing should generally not be located in those areas of the community which have been identified as "impacted" (City Council Districts 3 and 5 and those census tracts where over 50 percent of the housing units are occupied by low and very low income households). However, mixed income housing and, in certain special circumstances, low-income housing may be allowed in selected sections of impacted areas where such housing would maintain or improve neighborhood stability.¹²
 - *Distribution Policy 3:* To facilitate the integration of the socioeconomic strata and the diversification of the housing stock, the City encourages the dispersal of affordable housing to those Council Districts and areas that are not presently impacted with housing units occupied by very low and low income residents. Impacted areas and Council Districts are defined in Distribution Policy 2. The City should regularly review its progress in achieving the goal of a more equitable distribution of affordable housing through the Housing Advisory Commission and the Council's review of the Comprehensive Housing Affordability Strategy (CHAS).
 - *Distribution Policy 4:* The City should promote a distribution of middle and upper-income housing in all the community's planning areas.
 - *Distribution Policy 5:* In furtherance of the balanced community and economic development goals of this Plan, the City encourages the production of higher income housing.
 - *Low/Moderate Income Housing Policy 14:* The City should foster the production of housing to serve the "starter" housing market through mortgage revenue bonds, Mortgage Credit Certificates and other low and moderate-income housing programs.

2. Impacts and Mitigation Measures

This section includes an analysis of impacts related to population, employment and housing that could result from implementation of the proposed project. The section begins with the criteria of significance, which establish the thresholds to determine whether an impact is significant. The latter part of this section presents the impacts associated with the proposed project and identifies mitigation measures, as appropriate.

¹² The proposed Project is located in Council District 3.

a. Criteria of Significance. The proposed redevelopment project would have a significant impact on population, employment, and housing if it would:

- Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere;
- Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure); or
- Create a substantial jobs-to-housing imbalance.

b. Less-than-Significant Population, Employment and Housing Impacts. The following discussion examines potential less-than-significant impacts of the proposed project.

(1) Displacement of Housing or People. There are no existing housing units on the project site. Development of the proposed project would not result in the displacement of housing or people, and therefore would not necessitate the construction of replacement housing elsewhere.

(2) Induce Substantial Population Growth. The proposed project would directly generate housing-related population growth by adding 685 new residential units. Based on San Jose's average household size of 3.18¹³ persons per household, the population of the Corporation Yard site would be approximately 1,908 ($600 \times 3.18 = 1,908$). Based on up to two residents per each one-bedroom senior unit, the population of the City parking lot site would be approximately 170 ($85 \times 2 = 170$). As a variation on the proposed project, up to 15,000 square feet of retail space may be replaced with up to 24 live/work units. These live/work units would increase the Corporation Yard site's population by 76 ($24 \times 3.18 = 76$). Therefore, the proposed project would increase the City's population by between 2,078 and 2,154 persons. This increase in population would represent less than one percent of the City's 2005 and 2010 population, respectively. The proposed project would not result in substantial population growth beyond that planned for the City. In addition, new housing associated with the proposed project would contribute to the City's regional and affordable housing supply for seniors, as described below.

ABAG projects that the City of San Jose will build 18,630 new housing units between 2005 and 2010 and 150,632 new housing units between 2000 and 2035. The proposed project would fulfill 3.7 percent of the units between 2005 and 2010 and less than one percent of the units between 2000 and 2035. In addition, ABAG's Draft Regional Housing Needs Allocation for San Jose for the period of 2007-2014 estimates the need for 34,717 new housing units during this period for households in specific income categories: 7,750 for very low income, 5,321 for low income, 6,197 for moderate income, and 15,449 for above moderate income. The proposed project includes 85 affordable units (approximately 12 percent) which would be designated exclusively for senior citizens.

Population growth can also be induced by development of land uses which would generate new employment opportunities, thus increasing the demand for housing within the community. However, as discussed below in (3) "Jobs-to-Housing Imbalance," the proposed project is anticipated to produce approximately 93 new jobs. This employment growth is relatively small in the context of overall economic development in the City. As such, the proposed project would not indirectly result in substantial population growth beyond that planned for the City.

¹³ State of California, Department of Finance, 2007. op. cit.

(3) Jobs-to-Housing Imbalance. As noted in III. Project Description, uses and employment in the Corporation Yard have been relocated to the City's Central Service Yard on Senter Road. For the purposes of this EIR, the project site is assumed to be vacant. As described above, the project proposes to include up to 30,000 square feet of retail space, 10,000 square feet of community amenity space, and 685 residential units.

Employment generation for the proposed project was developed using empirical data collected as part of a comprehensive study prepared for the Southern California Association of Governments, which estimates employment densities for various land uses.¹⁴

The *Employment Density Study*'s land use category of "Other Retail/Services" applies to proposed retail on the site. The average square footage per employee, as projected in the study, is 344 square feet for other retail/services. As such, the proposed 30,000 square feet of retail is expected to generate 87 jobs. The proposed 10,000 square feet of community amenity space is expected to generate 6 full-time jobs.¹⁵ As indicated above in Table V.B-2, the City of San Jose is currently "job poor" and is projected to remain as such through 2035. The proposed project would increase the City's estimated 2005 housing supply within its subregional study area to 310,035, and its projected 2010 supply to 329,955. It would also increase San Jose's estimated number of jobs in 2005 within its sphere of influence to 363,473 and its projected 2010 number of jobs to 405,263. The 93 new jobs would represent approximately one hundredth of a percent of the overall job growth projected for the City and County for the period of 2005-2035, and the proposed new households would represent less than one percent of the projected housing growth for the same period. Therefore, the proposed project would not substantially change either the City's or the County's projected jobs-to-housing balance.

Based on market conditions, as a variation on the proposed project, up to 15,000 square feet of retail space may be replaced with up to 24 live/work units. This would increase the total amount of proposed housing on the project site from 685 units to 704 units. Using San Jose's 2005 average household size of 3.18, the live/work units would add approximately 76 residents to the 2,078 persons anticipated to inhabit the proposed 685 units for a total population of up to 2,154. The San Jose Municipal Code indicates that work areas in live/work units must be compatible with residential uses.¹⁶ Typical work activities in live/work units include the arts and light manufacturing, both with minimal noise generation and low levels of allowed hazardous materials.¹⁷ The proposed 24 live/work units would generate 24 jobs.¹⁸ However, the replacement of some of the proposed retail use with

¹⁴ The Natelson Company, Inc., 2001. *Employment Density Study*. October 31. Although employee-per-square-foot ratios are very common inputs for regional planning and economic analyses, relatively little formal research has been done to compile such statistics. This study is intended for use in estimating employment impacts from certain types of development projects and for projecting the demand for new office and industrial space. The study derives "building area per employee" factors for ten major land use categories. Although the land use categories used in the study do not directly correspond to the land uses described in this EIR, the study is a useful tool in developing assumptions for employee generation that would occur with implementation of the proposed project.

¹⁵ Based on employment at existing *taiko* facility in San Jose plus the additional square feet of community space.

¹⁶ Please consult *Chapter 20.70.120 Live/work units* in the *San Jose Municipal Code* for a list of restrictions for live/work units.

¹⁷ The Live/Work Institute, 2007. Website: www.live-work.com. August 29.

¹⁸ This calculation is based upon an assumed employment generation rate of one job per live/work unit. In addition, the applicant has indicated that 30 percent of each live/work unit would be designated as work space which would be consistent with a square foot per employee calculation. A 1,200 square foot live/work unit would provide 360 square feet of work space and R&D/Flex Space has an average of 344 square feet per employee.

live/work use would not substantially change either the City's or the County's projected jobs-to-housing balance. As such, this modification to the proposed project would result in a less-than-significant impact on the City and County's jobs-to-housing balance.

c. Significant Population, Employment and Housing Impacts. Implementation of the proposed project would not result in any significant population, employment, or housing impacts.

C. TRANSPORTATION, CIRCULATION AND PARKING

This section describes the existing transportation, circulation, and parking conditions around the project site based on a technical background report prepared by Hexagon Transportation Consultants, Inc.¹ This section also addresses the potential impacts of the proposed project, in terms of intersection level of service, trip generation, traffic distribution, traffic assignment, and intersection and roadway improvements to mitigate expected future deficiencies. The project's potential effects on transit services, pedestrian, bicycle facilities, and parking in the project area are also evaluated. Measures that would mitigate these impacts to a less-than-significant level are recommended where appropriate. The complete technical report is included in Appendix B.

1. Setting

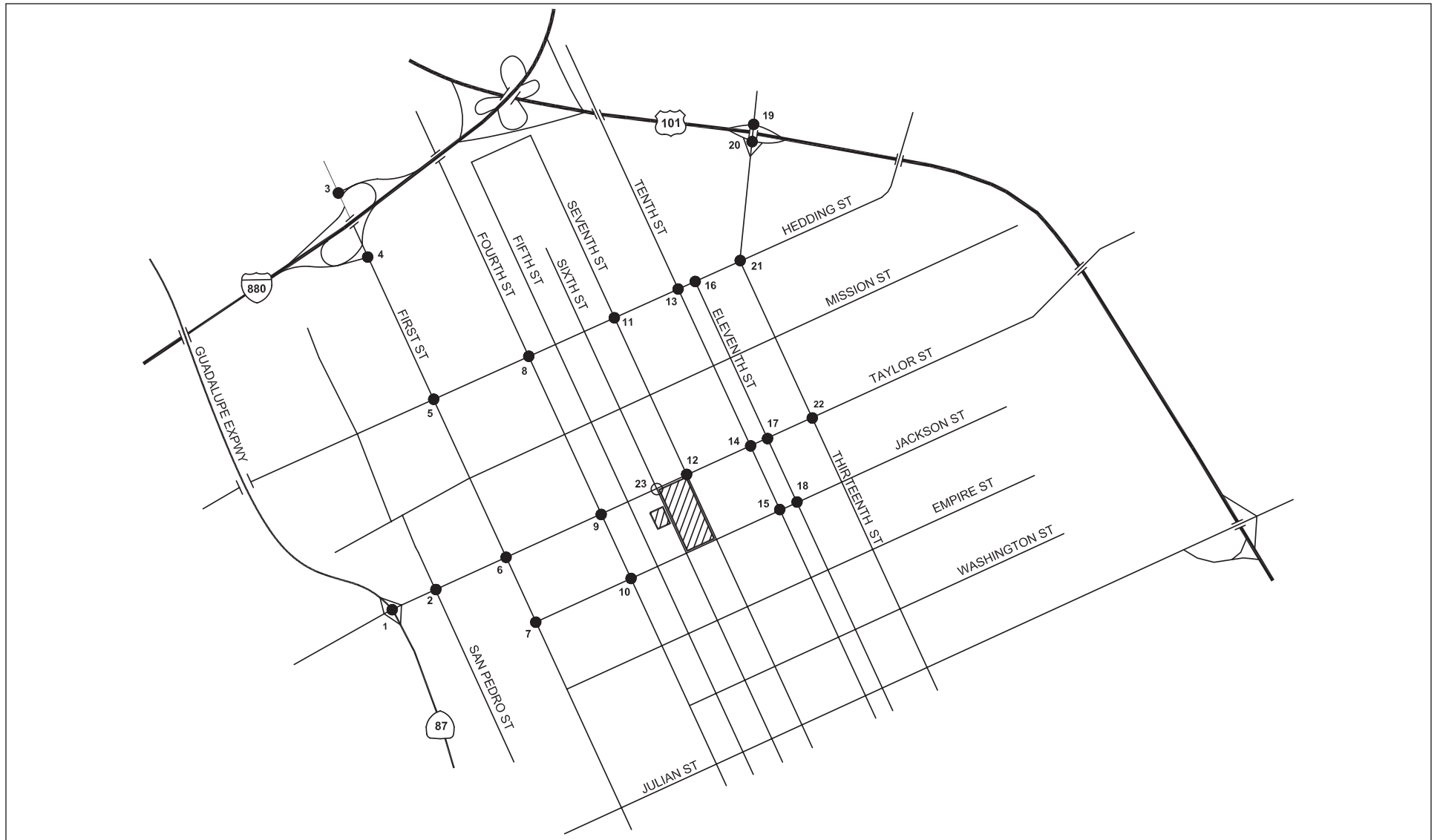
The scope of the analysis documented in this section and the setting for the transportation and circulation issues are described below.

a. Scope of Study. This traffic analysis is based on AM and PM peak hour levels of service for 23 intersections, and also evaluates vehicle queuing for selected locations. The study intersections are listed below, with County Congestion Management Program (CMP) intersections denoted with an asterisk. Figure V.C-1 shows the location of the proposed project, the adjacent street network, and the study intersections.

The City of San Jose Level of Service (LOS) policy specifies that Protected Intersections consist of locations that have been built to their planned maximum capacity and where expansion of the intersection would have an adverse effect upon other transportation facilities (such as pedestrian, bicycle and transit systems). These intersections that are located in the project study area are indicated with a (P).

1. SR 87 and Taylor Street *	13. North 10th Street and Hedding Street (P)
2. San Pedro Street and Taylor Street	14. 10th Street and Taylor Street
3. North 1st Street and I-880 Southbound Ramps *	15. 10th Street and Jackson Street
4. North 1st Street and I-880 Northbound Ramps *	16. 11th Street and Hedding Street
5. North 1st Street and Hedding Street	17. 11th Street and Taylor Street
6. North 1st Street and Taylor Street (P)	18. 11th Street and Jackson Street
7. North 1st Street and Jackson Street	19. Old Oakland Road and US 101 Northbound Ramps *
8. North 4th Street and Hedding Street (P)	20. Old Oakland Road and US 101 Southbound Ramps *
9. 4th Street and Taylor Street	21. 13th Street and Hedding Street
10. 4th Street and Jackson Street (P)	22. 13th Street and Taylor Street
11. North 7th Street and Hedding Street	23. 6th Street and Taylor Street (unsignalized)
12. North 7th Street and Taylor Street	

¹Hexagon Transportation Consultants, Inc. 2007. *Draft Transportation Impact Analysis for the Japantown Corporation Yard Residential Mixed-Use Development*. September.



LSA

FIGURE V.C-1



LEGEND



Project Site



Signalized Study Intersection



Unsignalized Study Intersection

NOT TO SCALE

*Japantown Corporation Yard
Redevelopment Project EIR*
Site Location and Study Intersections

In addition to intersections, the following freeway segments and freeway interchanges/ramps near the project site were analyzed for potential traffic impacts:

- SR 87, from I-280 to Julian Street
- SR 87, from Julian Street to Coleman Avenue
- SR 87, from Coleman Avenue to Taylor Street
- SR 87, from Taylor Street to Skyport Drive
- SR 87, from Skyport Drive to US 101
- US 101, from Santa Clara Street to McKee Road
- US 101, from McKee Road to Oakland Road
- US 101, from Oakland Road to I-880
- US 101, from I-880 to Old Bayshore Highway
- US 101, from Old Bayshore Highway to North 1st Street
- US 101, from North 1st Street to SR 87
- I-880, from Coleman Avenue to SR 87
- I-880, from SR 87 to North 1st Street
- I-880, from North 1st Street to US 101
- I-880, from US 101 to Brokaw Road

b. Analysis Scenarios. Traffic conditions were evaluated for the following four scenarios:

Scenario 1: Existing Conditions. Existing volumes were obtained from counts, representing peak one-hour conditions during the morning and evening commute peak traffic periods. Available existing peak hour traffic counts were obtained from the City of San Jose.

Scenario 2: Background Conditions. Background peak hour traffic volumes were estimated by adding to selected intersection turning movement volumes the volumes from approved but not yet completed developments in the area.

Scenario 3: Project Conditions. Future traffic volumes with the project (hereafter called *project traffic volumes*) were estimated by adding to background traffic volumes the additional traffic generated by the project. Project conditions were evaluated relative to background conditions in order to determine potential project impacts.

Scenario 4: Cumulative Conditions. The Cumulative Scenario was analyzed using the City's General Plan Amendment (GPA) analysis protocol which uses the City's travel demand forecasting model and produces output including roadway segment traffic projections and calculations of vehicle miles of travel and vehicle hours of travel. The Cumulative Scenario model output includes all proposed GPA changes in the City and addresses the impacts caused by the collective changes proposed.

c. **Methodology.** This section presents the methods used to evaluate the traffic conditions for each scenario described above. It includes descriptions of the data requirements, analysis methodologies, and applicable level of service standards.

(1) **Data Requirements.** The data required for the analysis were obtained from new traffic counts, previous traffic studies, field observations, the City of San Jose, and the Santa Clara Valley Transportation Authority (VTA). The following data were collected from these sources:

- existing intersection and freeway volumes
- lane configurations
- signal timing and phasing (for signalized intersections only)
- average speeds (for freeway segments only)
- a list of approved projects (referred to in San Jose as the Approved Trips Inventory (ATI))

(2) **Analysis Methodologies and Level of Service Standards.** Traffic conditions at the study intersections are described using a concept known as level of service. Level of service is a qualitative description of operating conditions ranging from level of service (LOS) A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various analytical methods are described below.

Signalized Intersections. All of the signalized study intersections are located in the City of San Jose and, therefore, are subject to the City of San Jose Level of Service standards. The City of San Jose level of service methodology is based on the *Highway Capacity Manual* (HCM) 2000 method for signalized intersections. The traffic analysis software program, TRAFFIX evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. Since the HCM method is also the CMP-designated intersection level of service methodology, the City of San Jose methodology employs the CMP default values for the analysis parameters. The City's level of service standard for signalized intersections is LOS D or better. The correlation between average delay and level of service is shown in Table V.C-1.

Five of the study intersections are CMP intersections and, therefore, also are analyzed according to the CMP requirements. The CMP level of service methodology is the same as that used by the City of San Jose, except that the CMP level of service standard for signalized intersections is LOS E or better.

Unsignalized Intersections. Only one of the 23 study intersections is currently unsignalized (Sixth and Taylor Streets). The need for signalization of unsignalized intersections is assessed based on the Peak Hour Volume Warrant (Warrant 3) described in the *Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)*, Part 4, Highway Traffic Signals, 2003. This method does not evaluate intersection level of service, but simply provides an indication of whether vehicular peak hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal.

Table V.C-1: Intersection Level of Service Based on Average Delay

Level of Service	Description	Average Control Delay Per Vehicle (seconds)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low delay.	Less than 10.0
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop, and individual cycle failures occur frequently.	35.1 to 55.0
E	This is considered to be the limit of acceptable by most delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	Greater than 80.0

Source: Transportation Research Board, *Highway Capacity Manual*, 2000.

Freeway Segments. As prescribed in the CMP technical guidelines, the level of service for freeway segments is estimated based on vehicle density. Density is calculated by the following formula:

$$D = V / (N \cdot S)$$

where:

D = density, in vehicles per mile per lane (vpmpl)

V = peak hour volume, in vehicles per hour (vph)

N = number of travel lanes

S = average travel speed, in miles per hour (mph)

The vehicle density on a segment is correlated to level of service as shown in Table V.C-2. The CMP specifies that a capacity of 2,300 vphpl be used for mixed-flow lane segments that are three lanes or wider in one direction, and a capacity of 2,200 vphpl be used for mixed-flow lane segments that are two lanes wide in one direction. A capacity of 1,800 vphpl was used for high occupancy vehicle (HOV) lanes. The CMP defines an acceptable level of service for freeway segments as LOS E or better.

Table V.C-2: Freeway Level of Service Definitions Based on Density

Level of Service	Description	Density (vehicles/mile/lane)
A	Average operating speeds at the free-flow speed generally prevail. Vehicles are almost completely unimpeded in their ability to maneuver with the traffic stream.	Less than 11.0
B	Speeds at the free-flow speed are generally maintained. The ability of maneuver with the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.	11.1 to 18.0
C	Speeds at or near the free-flow speed of the freeway prevail. Freedom to maneuver within the traffic stream noticeably restricted, and lane changes require more vigilance on the part of the driver.	18.1 to 26.0
D	Speeds begin to decline slightly with increased flows at this level. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels.	26.1 to 46.0
E	At this level, the freeway operates at or near capacity. Operations in this level are volatile, because there are virtually no usable gaps in the traffic stream, leaving little room to maneuver with the traffic stream.	46.1 to 58.0
F	Vehicular flow breakdowns occur. Large queues form behind breakdown points.	Greater than 58.0

Source: Transportation Research Board, *Highway Capacity Manual* (2000), Washington, D.C.; and *Traffic Level of Service Analysis Guidelines* (June 2003), Santa Clara Valley Transportation Authority.

Intersection Operations. The operations analysis is based on vehicle queuing for high-demand turning movements at intersections. The basis of the analysis is as follows: (1) the TRAFFIX intersection analysis software is used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future storage requirements at intersections.

d. Existing Traffic and Circulation Setting. This section describes the transportation system in the project study area, including key facilities of the roadway, transit, pedestrian, and bicycle networks.

(1) Existing Roadway Network. A description of the major transportation facilities that serve the project study area is provided below including the roadway network, transit service and bicycle and pedestrian facilities.

I-880 is a six-lane freeway in the vicinity of the site. It extends northeast to Oakland and south to I-280 in San Jose, at which point it makes a transition into State Route 17 (SR 17) to Santa Cruz. Access to the project study area is provided via its interchanges with Old Bayshore Highway, North 1st Street, and US 101.

US 101 is an eight-lane freeway (three mixed-flow lanes and one HOV lane in each direction) near the project site. US 101 extends northward through San Francisco and southward through Gilroy. Access to the project study area is provided via interchanges at Julian Street/McKee Road, Oakland Road, Old Bayshore Highway and SR 87.

SR 87 is a north-south freeway that begins at its interchange with SR 85 and extends northward to US 101. SR 87 is six lanes wide (four mixed-flow and two HOV lanes) between SR 85 and I-280 and between Taylor Street and US 101. The four-lane segment of SR 87 between I-280 and Taylor Street currently is being widened to six lanes. Access to and from the project site is provided via a full interchange at Taylor Street.

Hedding Street is a four-lane, east-west arterial that begins at Winchester Boulevard as a transition from Pruneridge Avenue. Hedding extends eastward to US 101, where it changes designation to Berryessa Road. Hedding Street provides access to the project site via 6th and 7th Streets.

Taylor Street is a two-lane, east/west arterial that begins at The Alameda as a transition from Naglee Avenue and extends eastward into east San Jose. Taylor Street changes designation to Mabury Road at the US 101 overcrossing. Taylor Street provides full access to SR 87 and provides access to the project site via 6th and 7th Streets.

Jackson Street is an east-west, two-lane street that extends eastward from North 1st Street, ultimately terminating at Watson Park. Jackson Street provides access to the project site via 6th and 7th Streets.

Julian Street is primarily a one-way westbound two-lane arterial within the downtown area. West and east of the downtown core at SR 87 and at 19th Street, respectively, Julian Street is generally a two-way, two-lane facility. Julian Street provides full access to US 101 and provides access to the project site via 6th and 7th Streets.

James Street is exclusively a one-way eastbound two-lane arterial within the downtown area that extends from SR 87 to 19th Street. James Street provides access to the site via 6th and 7th Streets.

North 1st Street is a two- to four-lane divided arterial with a raised center median, upon which the Guadalupe Corridor Light Rail Transit line operates. North 1st Street begins at Reed Avenue as a transition from Monterey Street, and extends northward into north San Jose where it terminates at Gold Street north of SR 237. North 1st Street provides full access to I-880 and provides access to the project site via Hedding and Taylor Streets.

4th Street is a north-south, four-lane divided arterial north of Jackson Street. South of Jackson, 4th Street is a one-way arterial with three-lanes. 4th Street begins at Old Bayshore Highway and extends southward, terminating at I-280. 4th Street provides access to the site via Taylor and Jackson Streets.

7th Street is a north-south, two-lane street within the project area. 7th Street begins at Tully Road and extends northward to Commercial Street, although no connection exists between San Salvador and San Fernando Streets (at the San Jose State University campus). 7th Street provides direct access to the project site.

10th Street is a one-way, three-lane southbound street between Hedding Street and Keyes Street. North of Hedding Street, 10th Street becomes a two-way four-lane arterial up to its termination

point at I-880. Similarly, south of Keyes Street the roadway becomes a two-way four-lane roadway to its termination point at Tully Road. 10th Street provides access to the project site via Taylor and Jackson Streets.

11th Street is a north-south three-lane street that runs from Keyes Street to Hedding Street. 11th Street is one-way in the northbound direction. 11th Street provides access to the project site via Taylor and Jackson Streets.

13th Street is generally a north-south two-lane collector that extends from Margaret Street in downtown San Jose to Hedding Street, where it changes designation to Oakland Road.

Oakland Road is a north-south arterial that begins at Hedding Street in the south as a transition from North 13th Street, and continues to Montague Expressway where it becomes South Main Street in the north. North of US 101, Oakland Road is primarily a two lane roadway with a two-way center left-turn lane. South of US 101, Oakland Road is a four lane arterial until its intersection with Hedding Street, where it becomes a two lane roadway. Oakland Road has a full interchange with US 101.

(2) Existing Transit Services. Existing transit service to the study area is provided by the VTA.

VTA Transit Service. Seven local bus lines serve the project area: lines 12, 23, 36, 62, 66, 82 and 85. The 12 line provides limited weekend service between the Eastridge Transit Center and the San Jose Civic Center. The 23 line provides service between downtown San Jose and the San Antonio Shopping Center, with 15-minute headways during commute hours. The 36 line provides service between Valley Fair/Vallco Park and the Penitencia Creek Transit Center, with 30-minute headways during commute hours. Line 62 provides service between Good Samaritan Hospital and the Penitencia Creek transit center, with 20-minute headways during commute hours. Line 62 has bus stops located on both sides of Taylor Street at 7th Street. Line 66 provides service between Santa Teresa Hospital and Milpitas/Dixon Road, with 15-minute headways during commute hours. The 82 line provides service between Westgate Mall and the 21st Street/Mission Street intersection, with 40-minute headways during the morning commute hours and 30-minute headways during the evening commute hours. The 85 line provides service between the Lawrence/Moorpark and 10th/Hedding intersections, with 30-minute headways during commute hours. Line 85 has a bus stop located on the west side of 10th Street just south of Taylor Street.

The 180 express line also serves the project area and provides service between the San Jose Diridon Station and the Fremont BART station, with 15- to 20-minute headways during commute hours. Bus lines 12, 36, 62 and 66 all stop at the Civic Center LRT station, located on North 1st Street less than one-half mile from the project site.

VTA Light Rail Transit (LRT) Service. The project site is located less than one-half mile from both the Japantown/Ayer and Civic Center LRT stations. The VTA currently operates the light rail line system extending from south San Jose through downtown to the northern areas of San Jose, Santa Clara, Mountain View, and Sunnyvale, as well as to Campbell. The service operates nearly 24-hours a day with 15-minute headways during much of the day.

(3) Existing Pedestrian and Bicycle Facilities. Within the project study area, Class II bicycle facilities (striped bike lanes) are only provided along 10th Street north of Taylor Street, and along 4th Street south of Jackson Street. Some roadways that do not provide designated bike lanes are identified bike routes. In the vicinity of the project site, 13th Street, Hedding Street, 4th Street, and 11th Street are identified bike routes.

Pedestrian facilities in the project area consist primarily of sidewalks along the streets. Sidewalks are found along virtually all previously described roadways in the study area. Although the network of sidewalks in the study area is extensive, sidewalks do not exist on the east side of 7th Street between Taylor Street and Jackson Street.

The Guadalupe River Park multi-use trail runs along the banks of the Guadalupe River from I-280 to I-880. The trail system offers a continuous paved Class I Bikeway that is shared with pedestrians and is separated from motor vehicle traffic. West of SR 87, Taylor Street provides an access point to the trail.

(4) Existing Lane Configurations. The existing lane configurations at the study intersections were provided by City staff and confirmed by observations in the field. The existing intersection lane configurations are shown on Figure V.C-2.

(5) Existing Traffic Estimates. Existing peak hour traffic volumes were obtained from the City of San Jose and supplemented with manual turning-movement counts at intersections where counts were either unavailable or outdated (collected prior to 2005). The existing peak hour intersection volumes are shown on Figure V.C-3. Traffic count data are provided in Appendix B.

(6) Existing Intersection Level of Service Conditions. Existing intersection levels of service are described below.

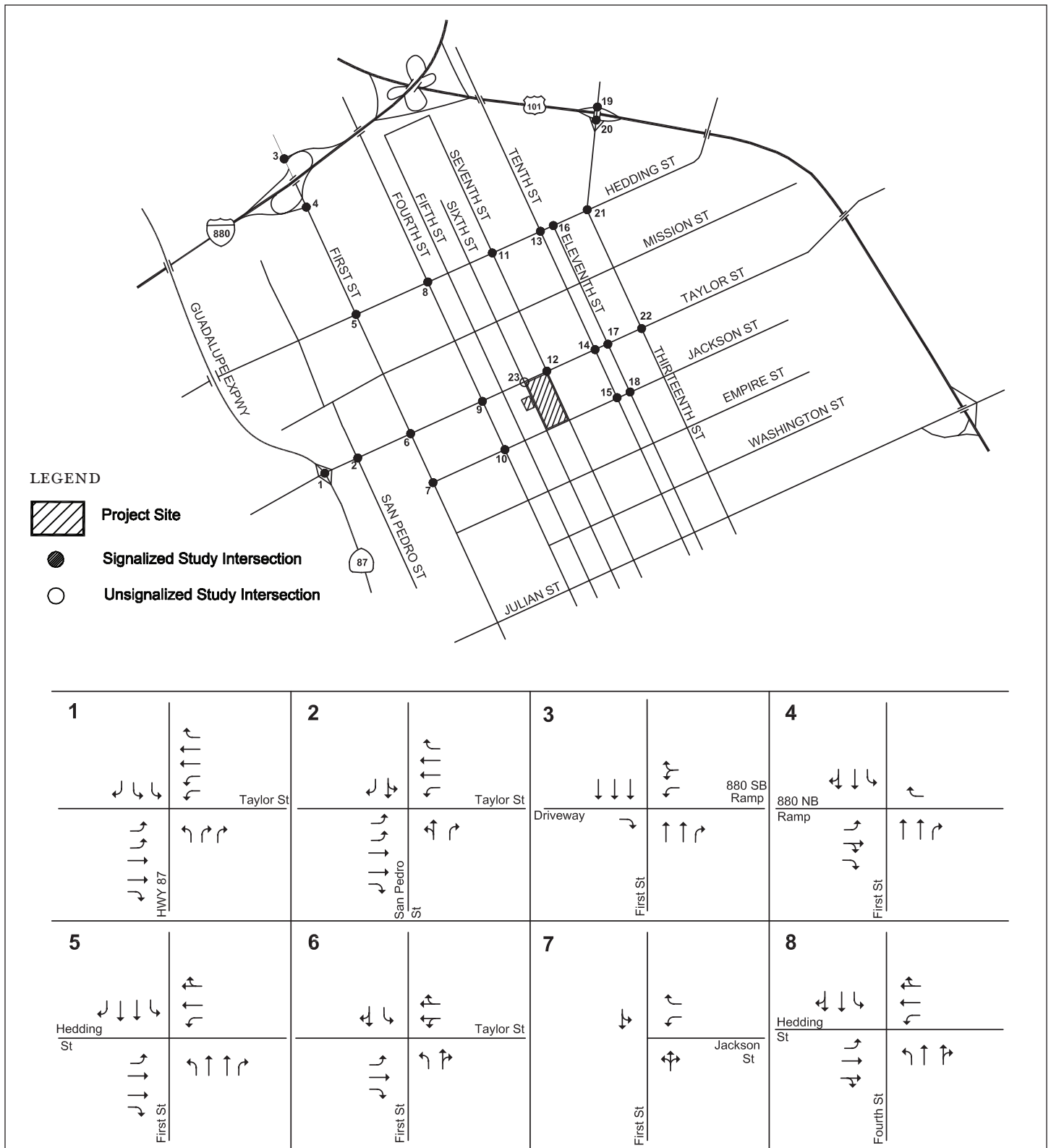
City of San Jose Analysis. The results of the level of service analysis under existing conditions are summarized in Table V.C-3. Measured against the City of San Jose level of service standards, two signalized study intersections currently operate at an unacceptable LOS E during either the AM or PM peak hour as indicated below:

- North 1st Street and Taylor Street (PM peak hour)
- Oakland Road and US 101 North Ramps (AM peak hour)

The remaining signalized study intersections currently operate at acceptable levels of service (LOS D or better) during both the AM and PM peak hours, according to City of San Jose standards.

CMP Analysis. The level of service results for the CMP intersections under existing conditions are summarized in Table V.C-3. Measured against the CMP level of service standards, all of the CMP study intersections currently operate at an acceptable LOS E or better.

The level of service calculation sheets are included in Appendix B.



LSA

FIGURE V.C-2a

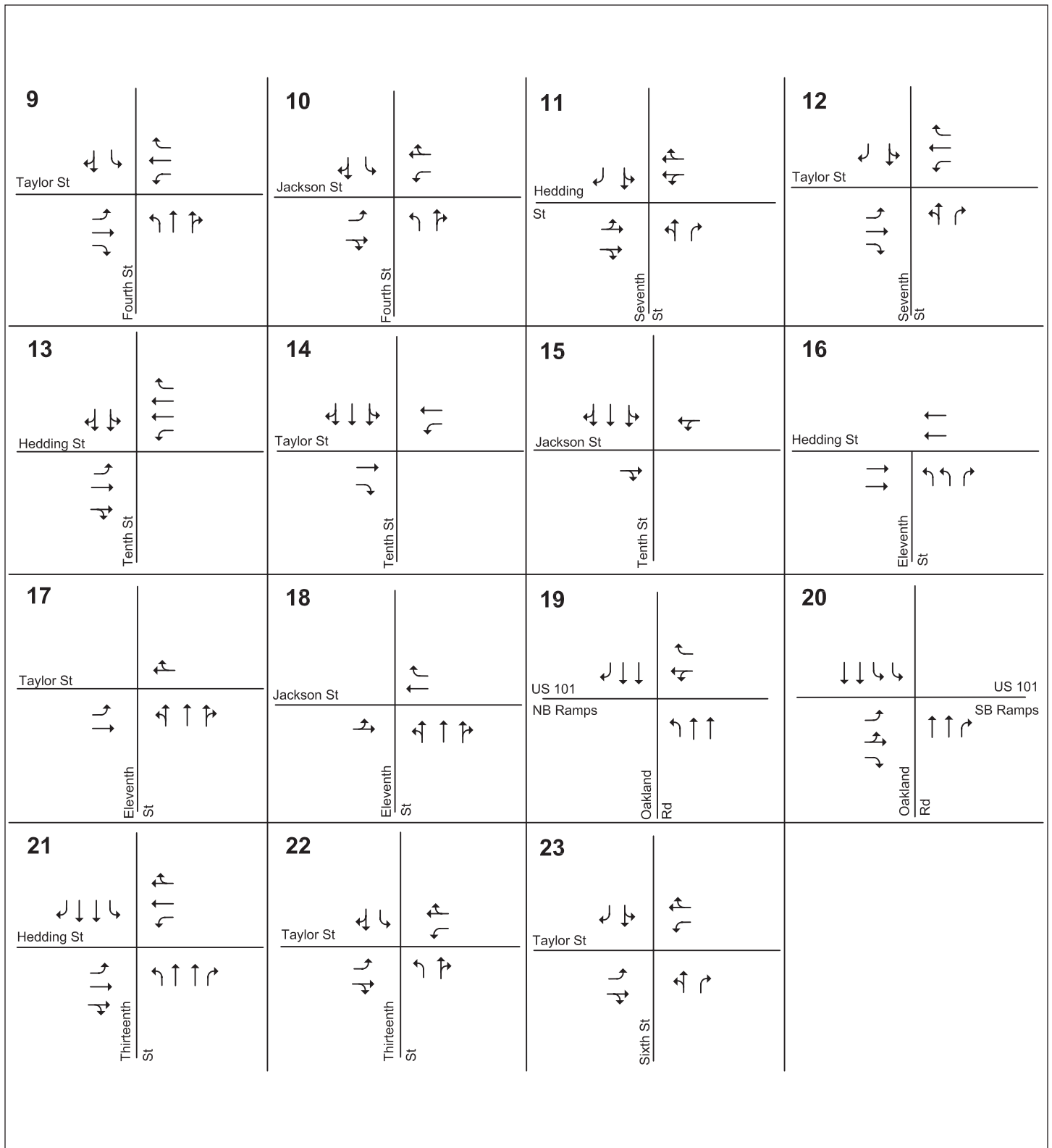


NOT TO SCALE

Japantown Corporation Yard
Redevelopment Project EIR
Existing Lane Configurations

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

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LSA

FIGURE V.C-2b

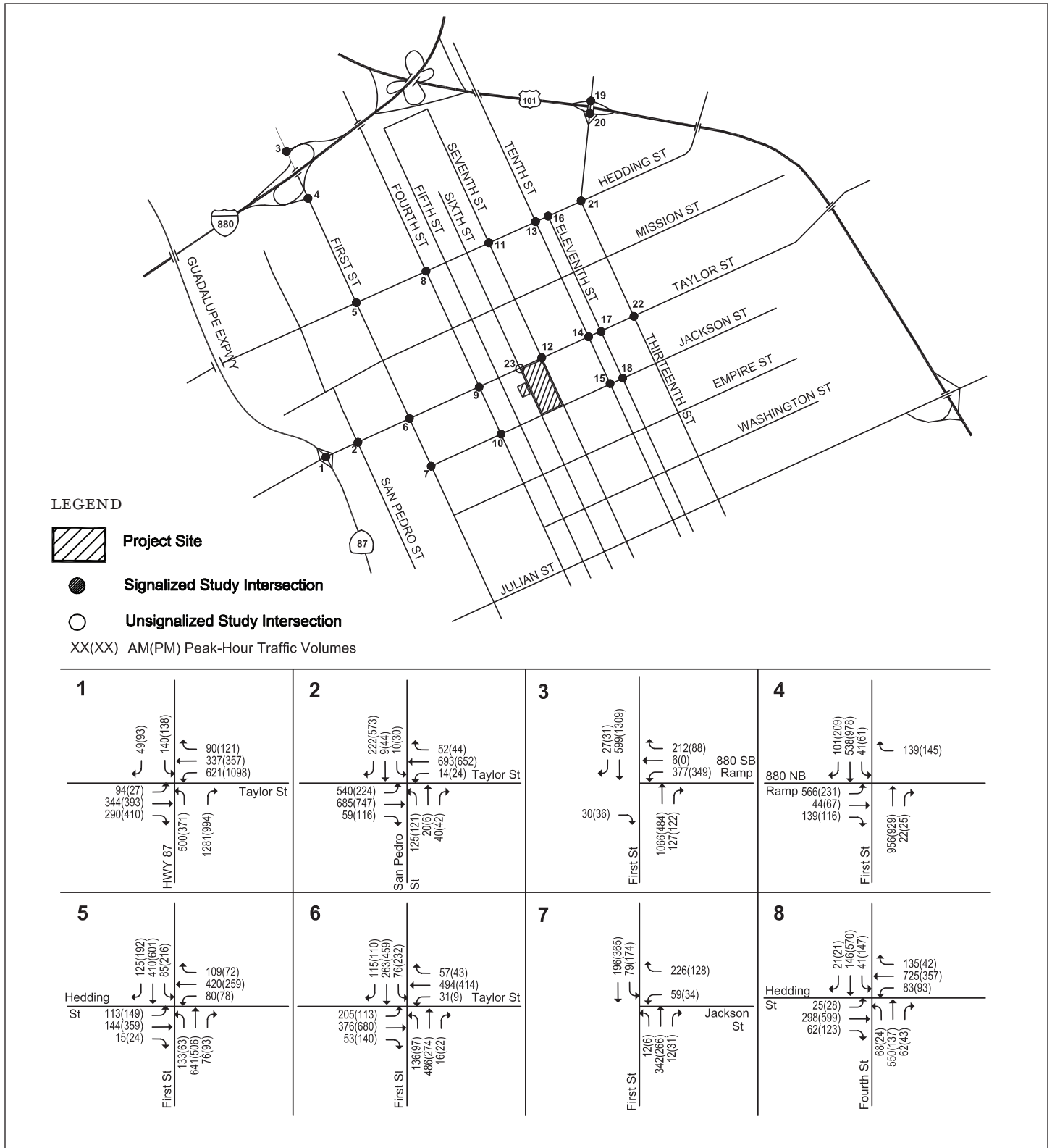


NOT TO SCALE

*Japantown Corporation Yard
Redevelopment Project EIR*
Existing Lane Configurations

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

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LSA

FIGURE V.C-3a

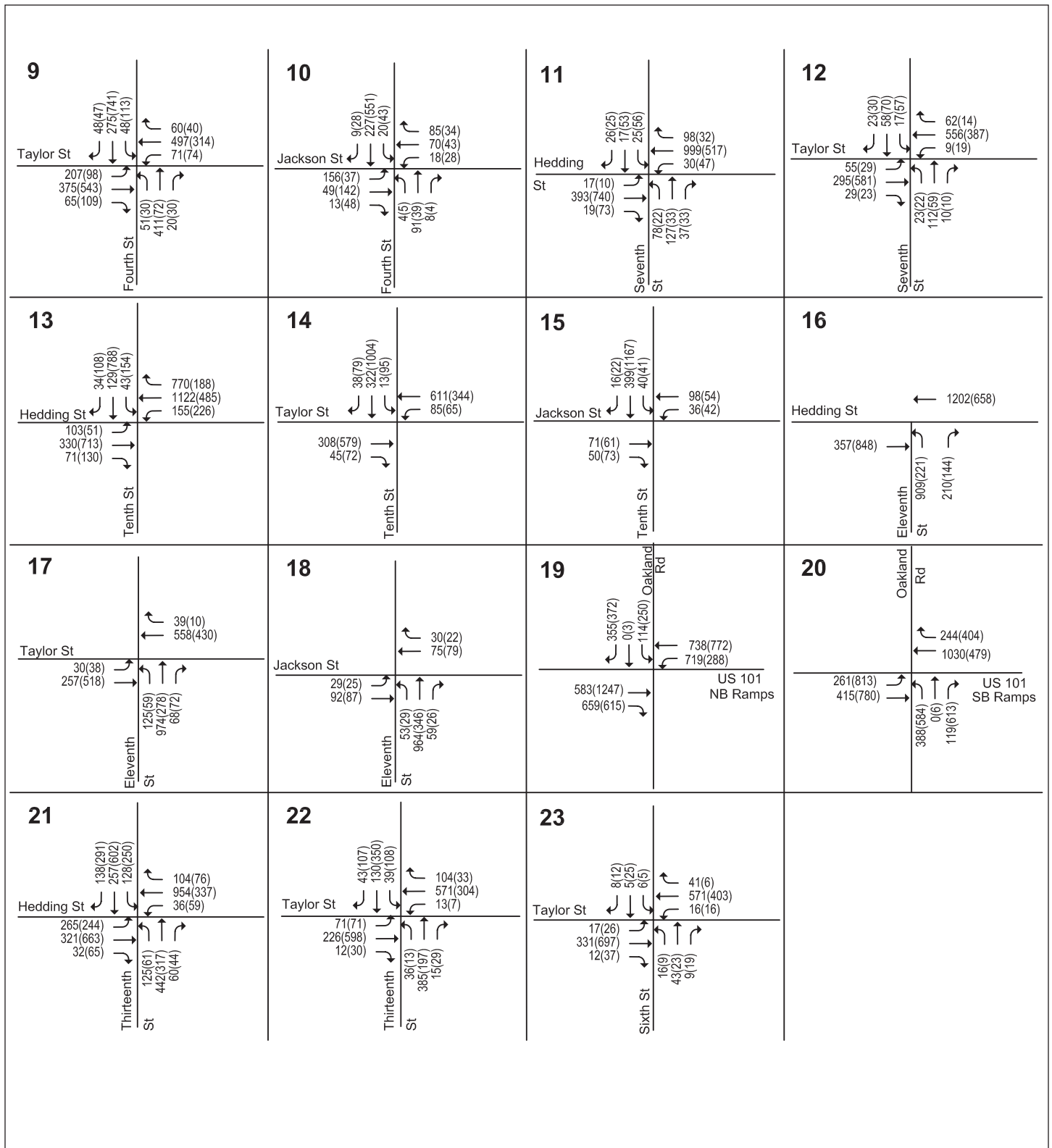


NOT TO SCALE

Japantown Corporation Yard
Redevelopment Project EIR
Existing Traffic Volumes

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

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LSA

FIGURE V.C-3b



LEGEND

XX(X) = AM(PM) Peak-Hour Traffic Volumes

NOT TO SCALE

Japantown Corporation Yard
Redevelopment Project EIR
Existing Traffic Volumes

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

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Table V.C-3: Existing Intersection Level of Service Conditions

Study Number	Intersection	Peak Hour	Count Date	Avg. Delay	LOS
1	SR 87 and Taylor Street ^a	AM	11/7/2006	24.2	C
		PM	10/25/2006	27.1	C
2	San Pedro Street and Taylor Street	AM	10/25/2006	31.7	C
		PM	10/25/2006	34.9	C
3	North 1st Street and I-880 Southbound Ramps ^a	AM	10/25/2006	19.5	B
		PM	10/25/2006	16.8	B
4	North 1st Street and I-880 Northbound Ramps ^a	AM	10/25/2005	19.6	B
		PM	10/25/2005	14.6	B
5	North 1st Street and Hedding Street	AM	10/31/2006	34.9	C
		PM	10/31/2006	35.5	D
6	North 1st Street and Taylor Street (P)	AM	10/24/2006	48.5	D
		PM	10/24/2006	62.0	E
7	North 1st Street and Jackson Street	AM	10/24/2006	23.8	C
		PM	10/24/2006	23.6	C
8	North 4th Street and Hedding Street (P)	AM	10/26/2006	32.7	C
		PM	10/26/2006	37.9	D
9	4th Street and Taylor Street	AM	11/9/2006	32.2	C
		PM	11/9/2006	32.2	C
10	4th Street and Jackson Street (P)	AM	11/17/2005	32.2	C
		PM	11/17/2005	24.1	C
11	North 7th Street and Hedding Street	AM	11/17/2005	11.7	B
		PM	11/17/2005	8.9	A
12	North 7th Street and Taylor Street	AM	10/6/2005	8.0	A
		PM	11/9/2005	7.1	A
13	North 10th Street and Hedding Street (P)	AM	11/16/2005	13.8	B
		PM	11/16/2005	28.3	C
14	10th Street and Taylor Street (P)	AM	11/17/2005	7.5	A
		PM	11/17/2005	13.3	B
15	10th Street and Jackson Street	AM	11/17/2005	10.3	B
		PM	11/17/2005	7.0	A
16	11th Street and Hedding Street	AM	10/24/2006	21.4	C
		PM	10/24/2006	10.9	B
17	11th Street and Taylor Street (P)	AM	9/29/2005	14.6	B
		PM	9/29/2005	8.0	A
18	11th Street and Jackson Street	AM	11/16/2005	7.1	A
		PM	11/16/2005	10.0	B
19	Oakland Road and US 101 North Ramps ^a	AM	11/16/2005	61.8	E
		PM	11/16/2005	22.9	C
20	Oakland Road and US 101 South Ramps ^a	AM	11/16/2005	22.4	C
		PM	11/16/2005	33.6	C
21	13th Street and Hedding Street	AM	11/16/2005	46.9	D
		PM	11/16/2005	43.3	D
22	13th Street and Taylor Street	AM	11/16/2005	13.4	B
		PM	11/16/2005	13.8	B

^a Denotes a CMP intersection.

(P) Denotes a City of San Jose Protected Intersection.

Shaded Conditions = Unacceptable LOS

Source: Hexagon Transportation Consultants, 2007.

(7) **Analysis of New Traffic Signal Needs under Existing Conditions.** A peak hour signal warrant check (*MUTCD 2003 Edition*, Part 4, Warrant 3) was performed for the unsignalized study intersection of 6th Street and Taylor Street to determine whether signalization would be justified on the basis of existing peak hour traffic volumes. The analysis revealed that the peak hour volume warrant currently is not satisfied at this intersection based on existing AM or PM peak hour volumes. The signal warrant worksheet is included in Appendix B.

(8) **Existing Freeway Segment Level of Service Conditions.** Traffic volumes for the study freeway segments were obtained from the 2005 CMP Annual Monitoring Report.² The results of the analysis are summarized in Table V.C-4 and show that the following freeway segments currently operate at LOS F in at least one direction during at least one of the peak hours:

- SR 87, northbound between I-280 and Julian Street – AM peak hour
- SR 87, southbound between Taylor Street and Coleman Avenue – PM peak hour
- SR 87, southbound between Coleman Avenue and Julian Street – PM peak hour
- SR 87, southbound between Julian Street and I-280 – PM peak hour
- US 101, northbound between Santa Clara Street and McKee Road – AM peak hour
- US 101, northbound between McKee Road and Oakland Road – AM peak hour
- US 101, northbound between Oakland Road and I-880 – AM peak hour
- US 101, northbound between I-880 and Old Bayshore Highway – AM peak hour
- US 101, northbound between Old Bayshore Highway and North 1st Street – AM peak hour
- US 101, northbound between North 1st Street and Guadalupe Parkway – AM peak hour
- US 101, southbound between Guadalupe Parkway and North 1st Street – PM peak hour
- US 101, southbound between North 1st Street and Old Bayshore Highway – PM peak hour
- US 101, southbound between Old Bayshore Highway and I-880 – PM peak hour
- US 101, southbound between I-880 and Oakland Road – PM peak hour
- US 101, southbound between Oakland Road and McKee Road – PM peak hour
- US 101, southbound between McKee Road and Santa Clara Street – PM peak hour
- I-880, southbound between East Brokaw Road and US 101 – PM peak hour
- I-880, southbound between US 101 and North 1st Street – PM peak hour
- I-880, southbound between North 1st Street and SR 87 – PM peak hour
- I-880, southbound between SR 87 and Coleman Avenue – PM peak hour

² Santa Clara Valley Transportation Agency, 2005. *CMP Annual Monitoring Report*, 2006.

Table V.C-4: Existing Freeway Level of Service Calculations

Freeway	Segment	Direction	Peak Hour	Mixed-Flow Lanes					HOV Lanes				
				Avg. Speed	# of Lanes	Volume	Density	LOS	Avg. Speed	# of Lanes	Volume	Density	LOS
SR 87	I-280 to Julian Street	NB	AM	28	2	3,750	67.0	F	--	--	--	--	--
			PM	67	2	2,010	15.0	B	--	--	--	--	--
SR 87	Julian Street to Coleman Ave	NB	AM	65	2	3,900	30.0	D	--	--	--	--	--
			PM	66	2	2,510	19.0	C	--	--	--	--	--
SR 87	Coleman Street to Taylor Street	NB	AM	57	2	4,450	39.0	D	67	1	940	14.0	B
			PM	67	2	1,740	13.0	B	67	1	270	4.0	A
SR 87	Taylor Street to Skyport Dr	NB	AM	66	2	3,300	25.0	C	67	1	670	10.0	A
			PM	67	2	1,610	12.0	B	67	1	70	1.0	A
SR 87	Skyport Dr to US 101	NB	AM	66	2	3,300	25.0	C	66	1	1,320	20.0	C
			PM	67	2	2,140	16.0	B	67	1	70	1.0	A
SR 87	US 101 to Skyport Dr	SB	AM	66	2	2,640	20.0	C	--	--	--	--	--
			PM	64	2	4,220	33.0	D	--	--	--	--	--
SR 87	Skyport Dr to Taylor Street	SB	AM	67	2	1,470	11.0	A	--	--	--	--	--
			PM	62	2	4,340	35.0	D	--	--	--	--	--
SR 87	Taylor Street to Coleman Street	SB	AM	67	2	1,740	13.0	B	--	--	--	--	--
			PM	27	2	3,670	68.0	F	--	--	--	--	--
SR 87	Coleman Ave to Julian Street	SB	AM	66	2	3,300	25.0	C	--	--	--	--	--
			PM	28	2	3,750	67.0	F	--	--	--	--	--
SR 87	Julian Street to I-280	SB	AM	67	2	1,340	10.0	A	--	--	--	--	--
			PM	19	2	3,270	86.1	F	--	--	--	--	--
US 101	Santa Clara Street to McKee Road	NB	AM	14	3	4,200	100.0	F	27	1	1,860	68.9	F
			PM	66	3	4,160	21.0	C	66	1	1,650	25.0	C
US 101	McKee Road to Oakland Road	NB	AM	20	3	4,980	83.0	F	33	1	1,980	60.0	F
			PM	66	3	5,540	28.0	D	67	1	870	13.0	B
US 101	Oakland Road to I-880	NB	AM	13	3	4,060	104.1	F	36	1	2,020	56.1	E
			PM	66	3	4,160	21.0	C	67	1	540	8.1	A
US 101	I-880 to Old Bayshore	NB	AM	12	3	3,890	108.1	F	19	1	1,630	85.8	F
			PM	67	3	3,420	17.0	B	67	1	540	8.1	A
US 101	Old Bayshore to N. 1st Street	NB	AM	13	3	4,020	103.1	F	11	1	1,230	111.8	F
			PM	66	3	4,550	23.0	C	66	1	1,450	22.0	C
US 101	N. 1st Street to Guadalupe Pkwy	NB	AM	22	3	5,210	78.9	F	17	1	1,530	90.0	F
			PM	66	3	5,150	26.0	D	67	1	470	7.0	A
US 101	Guadalupe Pkwy to N. 1st Street	SB	AM	67	3	3,620	18.0	C	67	1	470	7.0	A
			PM	16	3	4,420	92.1	F	51	1	2,190	42.9	D
US 101	N. 1st Street to Old Bayshore	SB	AM	67	3	3,220	16.0	B	67	1	940	14.0	B
			PM	12	3	3,920	108.9	F	42	1	2,100	50.0	E
US 101	Old Bayshore to I-880	SB	AM	67	3	3,220	16.0	B	67	1	400	6.0	A
			PM	13	3	4,100	105.1	F	32	1	1,980	61.9	F
US 101	I-880 to Oakland Road	SB	AM	66	3	4,550	23.0	C	67	1	540	8.1	A
			PM	13	3	4,060	104.1	F	43	1	2,110	49.1	E
US 101	Oakland Road to McKee Road	SB	AM	66	3	4,160	21.0	C	67	1	400	6.0	A
			PM	28	3	5,630	67.0	F	65	1	2,020	31.1	D
US 101	McKee Road to Santa Clara Street	SB	AM	66	3	4,550	23.0	C	67	1	470	7.0	A
			PM	32	3	5,860	61.0	F	64	1	2,110	33.0	D
I-880	Coleman Ave to SR 87	NB	AM	37	3	6,110	55.0	E	--	--	--	--	--
			PM	59	3	6,550	37.0	D	--	--	--	--	--

Table V.C-4 *Continued*

Freeway	Segment	Direction	Peak Hour	Mixed-Flow Lanes					HOV Lanes				
				Avg. Speed	# of Lanes	Volume	Density	LOS	Avg. Speed	# of Lanes	Volume	Density	LOS
I-880	SR 87 to N. 1st Street	NB	AM	61	3	6,590	36.0	D	--	--	--	--	--
			PM	59	3	6,550	37.0	D	--	--	--	--	--
I-880	N. 1st Street to US 101	NB	AM	50	3	6,600	44.0	D	--	--	--	--	--
			PM	61	3	6,590	36.0	D	--	--	--	--	--
I-880	US 101 to E. Brokaw Road	NB	AM	35	3	6,090	58.0	E	--	--	--	--	--
			PM	66	3	5,150	26.0	D	--	--	--	--	--
I-880	E. Brokaw Road to US 101	SB	AM	66	3	4,950	25.0	C	--	--	--	--	--
			PM	26	3	5,540	71.0	F	--	--	--	--	--
I-880	US 101 to N. 1st Street	SB	AM	58	3	6,610	38.0	D	--	--	--	--	--
			PM	8	3	3,070	127.9	F	--	--	--	--	--
I-880	N. 1st Street to SR 87	SB	AM	55	3	6,600	40.0	D	--	--	--	--	--
			PM	19	3	4,850	85.1	F	--	--	--	--	--
I-880	SR 87 to Coleman Ave	SB	AM	58	3	6,610	38.0	D	--	--	--	--	--
			PM	26	3	5,540	71.0	F	--	--	--	--	--

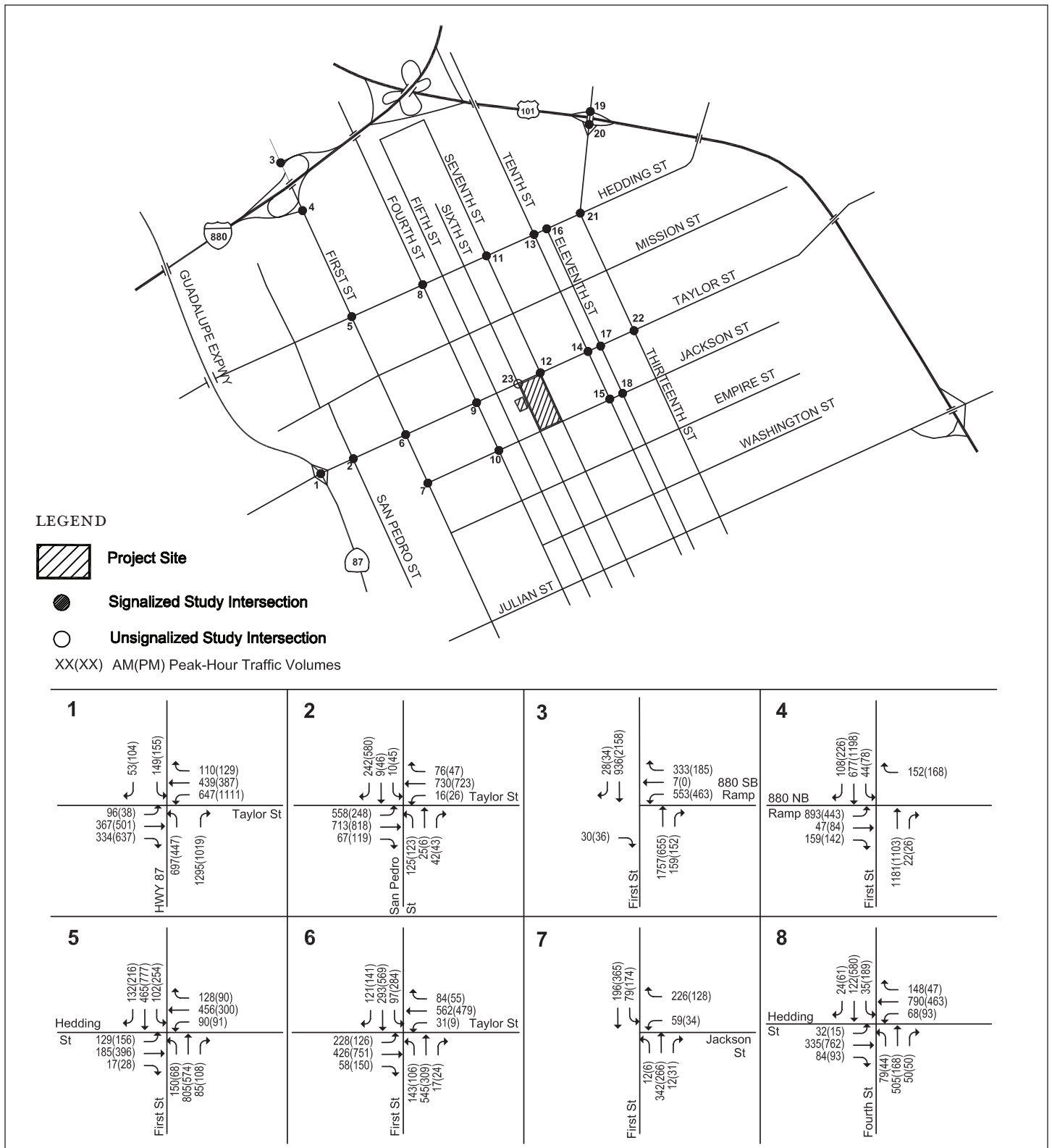
Shaded Conditions = Unacceptable LOS

Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2005; Hexagon Transportation Consultants, 2007.

e. Background Conditions. This section describes background traffic conditions. Background conditions are defined as conditions just prior to completion of the proposed development. Background conditions form the basis against which impacts of the proposed project are identified. Traffic volumes for background conditions include existing traffic plus traffic generated by other approved developments in the vicinity of the site. This section describes the procedure used to determine background traffic and the resulting traffic conditions.

(1) Background Traffic Estimates. Background peak hour traffic volumes were estimated by adding to existing traffic volumes, the volumes from approved but not yet completed developments in the vicinity of the project site. For intersections in and around the North San Jose area, the City has applied a growth factor to the existing traffic volumes to account for current vacancy rates of work-based land uses in the North San Jose area. The small increases in traffic attributable to the growth factors represent “potential trips” that generally would exist under more robust economic conditions and which need to be planned for. The added traffic from approved developments was provided by the City of San Jose in the form of the ATI. It should be noted that the trips generated by the corporation yard also are included in the background peak hour traffic volumes, since these trips are already included in the existing peak hour counts.

Background peak hour traffic volumes are shown on Figure V.C-4. The ATI sheets and traffic volumes for all components of traffic are tabulated and included in Appendix B.



LSA

FIGURE V.C-4a

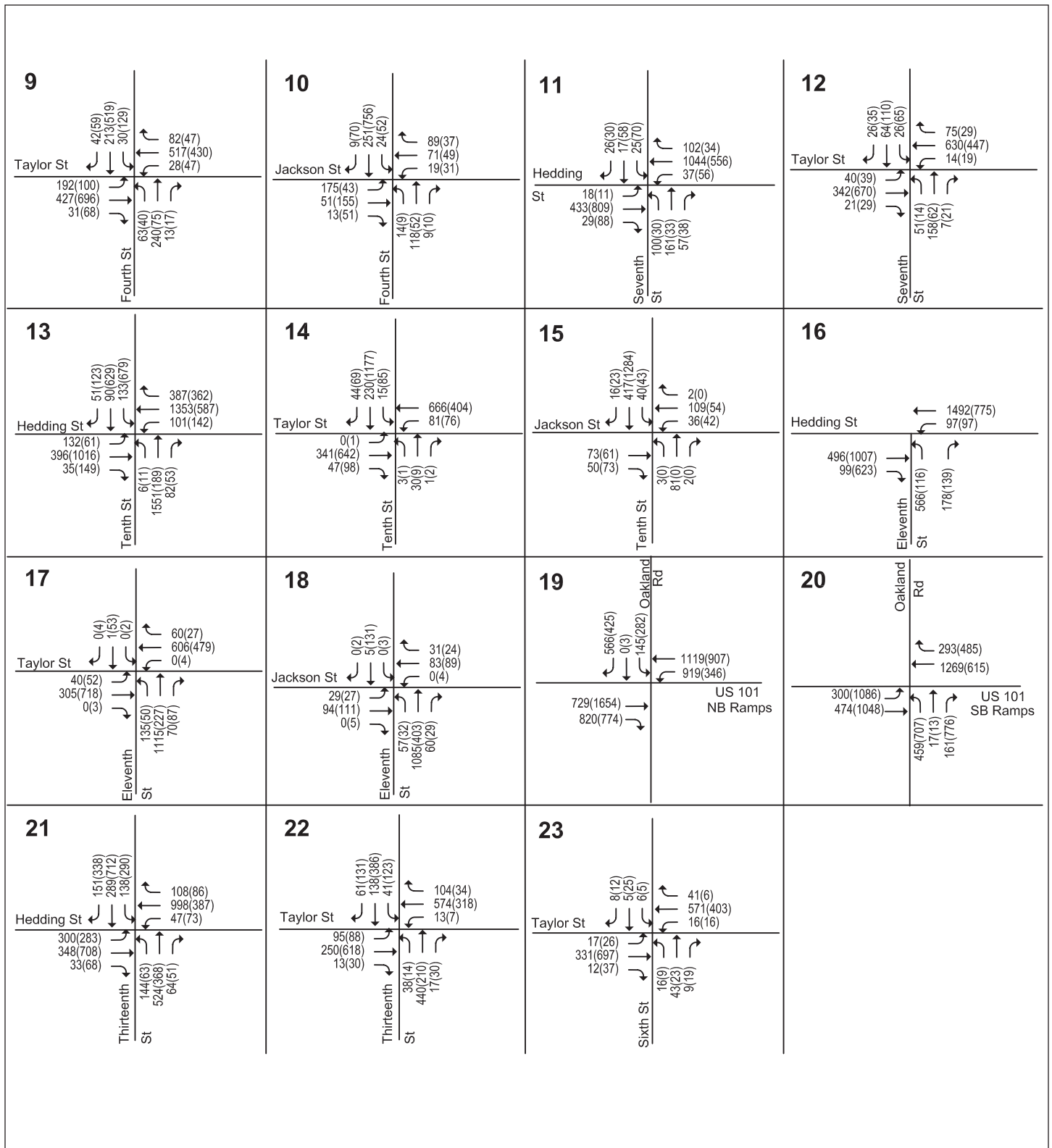


NOT TO SCALE

Japantown Corporation Yard
Redevelopment Project EIR
Background Traffic Volumes

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

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LSA

FIGURE V.C-4b



LEGEND

XX(X) = AM(PM) Peak-Hour Traffic Volumes

NOT TO SCALE

Japantown Corporation Yard
Redevelopment Project EIR
Background Traffic Volumes

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

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(2) Background Roadway Improvements. It is assumed in this analysis that the transportation network under background conditions would be the same as the existing transportation network with the exception of the following funded improvements and/or roadway adjustments:

Oakland Road/13th Street and Hedding Street. Addition of second eastbound and westbound left-turn lanes. (Funding: North San Jose Traffic Impact Fee – NSJDP Phase 1)

10th and 11th Streets Couplet Conversions. Conversion of 10th and 11th Streets from one-way streets to two-way streets. The conversion will require lane geometrics to be adjusted at the intersections of 10th and 11th Streets with Taylor and Hedding Streets. The conversion will result in a reduction of capacity of the roadways. (Funding: City of San Jose CIP Project)

(3) Background Intersection Level of Service Conditions. The results of the San Jose intersection level of service analysis under background conditions (with existing conditions shown for comparison) are summarized in Table V.C-5. Measured against the City of San Jose level of service standards, five of the signalized study intersections would operate at unacceptable levels under background conditions:

- North 1st Street and Taylor Street (PM peak hour – LOS F)
- North 10th Street and Hedding Street (AM peak hour – LOS E)
- 10th Street and Taylor Street (PM peak hour – LOS E)
- Oakland Road and US 101 Northbound Ramps (AM peak hour – LOS F)
- Oakland Road and US 101 Southbound Ramps (PM peak hour – LOS E)

The remaining signalized intersections would continue to operate at acceptable levels of service (LOS D or better) during both the AM and PM peak hours of traffic, according to City of San Jose standards.

The level of service results for the CMP intersections under background conditions show that, measured against the CMP level of service standards, one of the CMP study intersections would operate at an unacceptable LOS F:

- Oakland Road and US 101 Northbound Ramps (AM peak hour)

The remaining CMP intersections would continue to operate at acceptable levels of service (LOS E or better) during both the AM and PM peak hours under background conditions. The level of service calculation sheets are included in Appendix B.

(4) Signal Warrant Analysis. A peak hour signal warrant check (*MUTCD 2003 Edition*, Part 4, Warrant 3) was performed for the unsignalized study intersection of 6th Street and Taylor Street to determine whether signalization would be justified on the basis of background AM and PM peak hour traffic volumes. The analysis revealed that the peak hour volume warrant would not be satisfied at this intersection based on background AM or PM peak hour volumes. The signal warrant worksheet is included in Appendix B.

Table V.C-5: Background Intersection Level of Service Conditions

Study Number	Intersection	Peak Hour	Existing		Background	
			Avg. Delay	LOS	Avg. Delay	LOS
1	SR 87 and Taylor Street ^a	AM	24.2	C	27.7	C
		PM	27.1	C	33.5	C
2	San Pedro Street and Taylor Street	AM	31.7	C	31.8	C
		PM	34.9	C	35.2	D
3	North 1st Street and I-880 Southbound Ramps ^a	AM	19.5	B	27.4	C
		PM	16.8	B	19.3	B
4	North 1st Street and I-880 Northbound Ramps ^a	AM	19.6	B	23.2	C
		PM	14.6	B	17.4	B
5	North 1st Street and Hedding Street	AM	34.9	C	35.4	D
		PM	35.5	D	35.3	D
6	North 1st Street and Taylor Street (P)	AM	48.5	D	51.9	D
		PM	62.0	E	82.2	F
7	North 1st Street and Jackson Street	AM	23.8	C	23.8	C
		PM	23.6	C	21.7	C
8	North 4th Street and Hedding Street (P)	AM	32.7	C	34.7	C
		PM	37.9	D	39.5	D
9	4th Street and Taylor Street	AM	32.2	C	32.3	C
		PM	32.2	C	33.8	C
10	4th Street and Jackson Street (P)	AM	32.2	C	25.4	C
		PM	24.1	C	31.0	C
11	North 7th Street and Hedding Street	AM	11.7	B	13.4	B
		PM	8.9	A	9.5	A
12	North 7th Street and Taylor Street	AM	8.0	A	8.5	A
		PM	7.1	A	7.7	A
13	North 10th Street and Hedding Street (P)	AM	13.8	B	60.3	E
		PM	28.3	C	39.9	D
14	10th Street and Taylor Street (P)	AM	7.5	A	13.9	B
		PM	13.3	B	57.9	E
15	10th Street and Jackson Street	AM	10.3	B	10.1	B
		PM	7.0	A	37.0	D
16	11th Street and Hedding Street	AM	21.4	C	25.8	C
		PM	10.9	B	10.8	B
17	11th Street and Taylor Street (P)	AM	14.6	B	29.0	C
		PM	8.0	A	15.3	B
18	11th Street and Jackson Street	AM	7.1	A	17.6	B
		PM	10.0	B	9.6	A
19	Oakland Road and US 101 North Ramps ^a	AM	61.8	E	139.0	F
		PM	22.9	C	41.9	D
20	Oakland Road and US 101 South Ramps ^a	AM	22.4	C	23.8	C
		PM	33.6	C	76.4	E
21	13th Street and Hedding Street	AM	46.9	D	45.3	D
		PM	43.3	D	42.1	D
22	13th Street and Taylor Street	AM	13.4	B	14.2	B
		PM	13.8	B	14.7	B

^a Denotes a CMP intersection.

(P) Denotes a City of San Jose Protected Intersection.

Shaded Conditions = Unacceptable LOS

Source: Hexagon Transportation Consultants, 2007.

2. Project Conditions, Impacts and Mitigation Measures

This section identifies the criteria of significance, project impacts and mitigation measures where feasible. The significance criteria are presented below followed by a presentation and discussion of the project's less-than-significant and significant traffic and circulation impacts.

a. Criteria of Significance. Significance criteria are used to establish what constitutes an impact. For purposes of this EIR, the criteria are based on City of San Jose and CHP Level of Service standards as detailed below.

(1) City of San Jose Definition of Significant Intersection Impacts. The project would create a significant adverse impact on traffic conditions at a study intersection in the City of San Jose if for either peak-hour:

- The level of service at the intersection degrades from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under project conditions; or
- The level of service at the intersection is an unacceptable LOS E or F under background conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by four (4) or more seconds and the volume-to-capacity (V/C) ratio to increase by one percent (0.01) or more, or
- The level of service at a designated Protected Intersection is an unacceptable LOS E or F under background conditions and the addition of project trips causes the volume-to-capacity (V/C) ratio to increase by one-half percent (0.005) or more.

An exception to this rule would apply when the addition of project traffic reduces the amount of average delay for critical movements (i.e., the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by 0.01 or more.

- Cumulative impacts will be considered significant if any one of the following occurs during either the AM or PM peak hour:
 - o The total vehicle miles traveled (VMT) and vehicle hours traveled (VHT) both increase by 0.10 percent for all roadways in the Santa Clara County; or
 - o The peak direction volumes across any one of the special subarea cordon lines increase by the following percentages for Special Policy Subareas: 0.15 percent for North San Jose, 0.05 percent for Evergreen, or 0.15 percent for South San Jose.
 - o The aggregated E/F link V/C ratios of nearby regional screenlines increase in the peak direction by at least 0.005, and total volumes on the same E/F links increase in the peak direction by at least 2.5 percent of the average link capacity.

A significant impact by City of San Jose standards would be satisfactorily mitigated if mitigation measures would restore intersection level of service to background conditions or better.

Additional City of San Jose significance criteria follow:

- o Substantially increase hazards due to a design feature or incompatible uses;

- o Conflict with adopted policies, plans or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks, pedestrian paths or trails);
- o Result in inadequate parking capacity leading to a physical change in the environment which causes the deterioration of existing structures;
- o Result in inadequate emergency access.

A transportation impact is considered significant if during the AM or PM peak hour the General Plan amendment would cause:

- The overall vehicle miles traveled (VMT) within the proximity area of the proposed amendment to increase by at least one percent (1 percent) and 200 vehicle-miles; or
- The congested VMT within the proximity area of the proposed amendment to increase by at least one-half (1/2) the amount of the measured increases in overall proximity VMT and 100 vehicle-miles; or
- The aggregated volume to capacity (V/C) ratios of nearby regional screenlines to increase in the peak direction by at least 0.01 and total volumes on the same links to increase in the peak direction by at least five percent (5 percent) of average link capacity; or
- The aggregated level of service E or F (E/F) link V/C ratios of nearby regional screenlines to increase in the peak direction by at least 0.005, and total volumes on the same E/F links increase in the peak direction by at least two and one-half percent (2.5 percent) of average congested link capacity.

(2) CMP Definition of Conformance. A CMP intersection would be out of conformance with the acceptable LOS standard if the level of service were to fall below LOS E. That is, if project traffic were to cause LOS to deteriorate from an acceptable LOS E or better under background conditions to an unacceptable LOS F under project conditions or the level of service at the intersection were an unacceptable F under background conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by four or more seconds and the volume-to-capacity ratio (V/C) to increase by 0.01 or more. The CMP standard would be met if mitigation measures would restore intersection conditions to LOS E or better.

(3) CMP Definition of Significant Freeway Segment Impacts. According to the CMP, a project would create a significant adverse impact on traffic conditions on a CMP freeway segment if for either peak-hour:

- The level of service on the freeway segment degrades from an acceptable LOS E or better under existing conditions to an unacceptable LOS F under project conditions, or
- The level of service on the freeway segment is an unacceptable LOS F under project conditions, and the number of project trips on that segment constitutes at least 1 percent of capacity on that segment.

A significant freeway impact by CMP standards would be satisfactorily mitigated if mitigation measures would restore freeway conditions to LOS E or better.

b. Project Trip Estimates. The magnitude of traffic produced by a new development and the locations where that traffic would occur are estimated using a three-step process: (1) trip *generation*;

(2) *trip distribution*; and (3) *trip assignment*. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the two peak periods. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described further in the following sections.

(1) Project Trip Generation. Empirical data have been collected for most common land uses their propensity for produce traffic. For the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic that would result from a new development. The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development. The trip rates used in this study were taken from the City of San Jose Department of Public Works, *Interim Guidelines for Traffic Impact Analysis of Land Developments*, June 1994.

Since the proposed residential mixed-use development would replace the existing corporation yard, the trips generated by the existing use were subtracted at each study intersection prior to adding the estimated project traffic to the roadway network. The existing corporation yard has a different trip distribution pattern associated with its current use than the proposed mixed-use development would have. Thus, the trips generated by the corporation yard were subtracted from the roadway network based on the site's current light industrial trip distribution pattern. The peak hour trips generated by the existing corporation yard were obtained from driveway counts conducted in May of 2006 when the corporation yard was in full operation.

A retail pass-by trip reduction of 25 percent (standard for the City of San Jose) was applied to the PM peak hour trip generation estimates since the project proposes a retail component. Trip generation for retail uses typically are adjusted to account for pass-by-trips during the PM peak period of traffic. Pass-by-trips are those trips that would already be on the adjacent roadways (and are therefore already counted in the background traffic) but would turn into the site while passing by. Justification for applying the pass-by-trip reduction is founded on the observation that such retail traffic is not actually generated by the retail development, but is already part of the ambient traffic levels. Pass-by-trips are therefore excluded from the PM peak hour traffic projections. A mixed-use trip reduction also was applied to account for internalization of trips due to the interaction between the residential and retail components of the project.

After applying the appropriate trip reductions and existing trip credits, the trip generation calculations were completed. The project would generate 5,010 net new daily trips, with 434 net new trips occurring during the AM peak hour and 509 net new trips occurring during the PM peak hour. Using the inbound/outbound splits recommended by the City of San Jose, the project would produce 150 additional inbound and 284 additional outbound trips during the AM peak hour, and 306 additional inbound and 198 additional outbound trips during the PM peak hour than the current use on the site. The project trip generation estimates are presented in Table V.C-6.

(2) Project Trip Distribution. The directional distribution of site-generated traffic to and from the main gateways to the project area is based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. Separate trip distribution patterns were applied to the three land uses of the site: 1) residential, 2) retail and community amenity space,

and 3) commercial/industrial – applied to the existing corporation yard trips and the commercial component of the live/work units. Figure V.C-5 shows the trip distribution patterns that were used.

(3) Project Trip Assignment. The peak hour trips generated by the existing and proposed uses were assigned to the roadway system in accordance with the distribution patterns discussed above. Based on the project site's close proximity to existing freeway access points, specifically SR 87, I-880 and US 101, 60 percent of the estimated residential project trips were assigned to and from the freeways. The remaining 40 percent of residential trips were distributed relatively evenly among the surrounding arterials and collectors. It is assumed that the proposed retail uses and community amenity space primarily would serve residents of Japantown and the surrounding neighborhoods only. Thus, no retail or community amenity space project trips were assigned to and from the freeways. As previously discussed, the trips generated by the corporation yard were subtracted from the roadway network according to the site's current travel patterns. The net project trips are shown in Figure V.C-6.

Vehicular travel time surveys were conducted in May of 2007 during the AM and PM peak commute periods to determine the quickest route between the project site and US 101 to and from the north. The results of the survey were used to assign new project trips to and from US 101 north. The results show that the fastest driving route is to use the SR 87/Taylor Street interchange to access US 101 as opposed to using the alternate US 101/Oakland Road interchange. The difference is about two minutes during both the AM and PM peak commute periods. Thus, all project traffic that was assigned to US 101 to and from the north was assigned via the SR87/Taylor Street interchange.

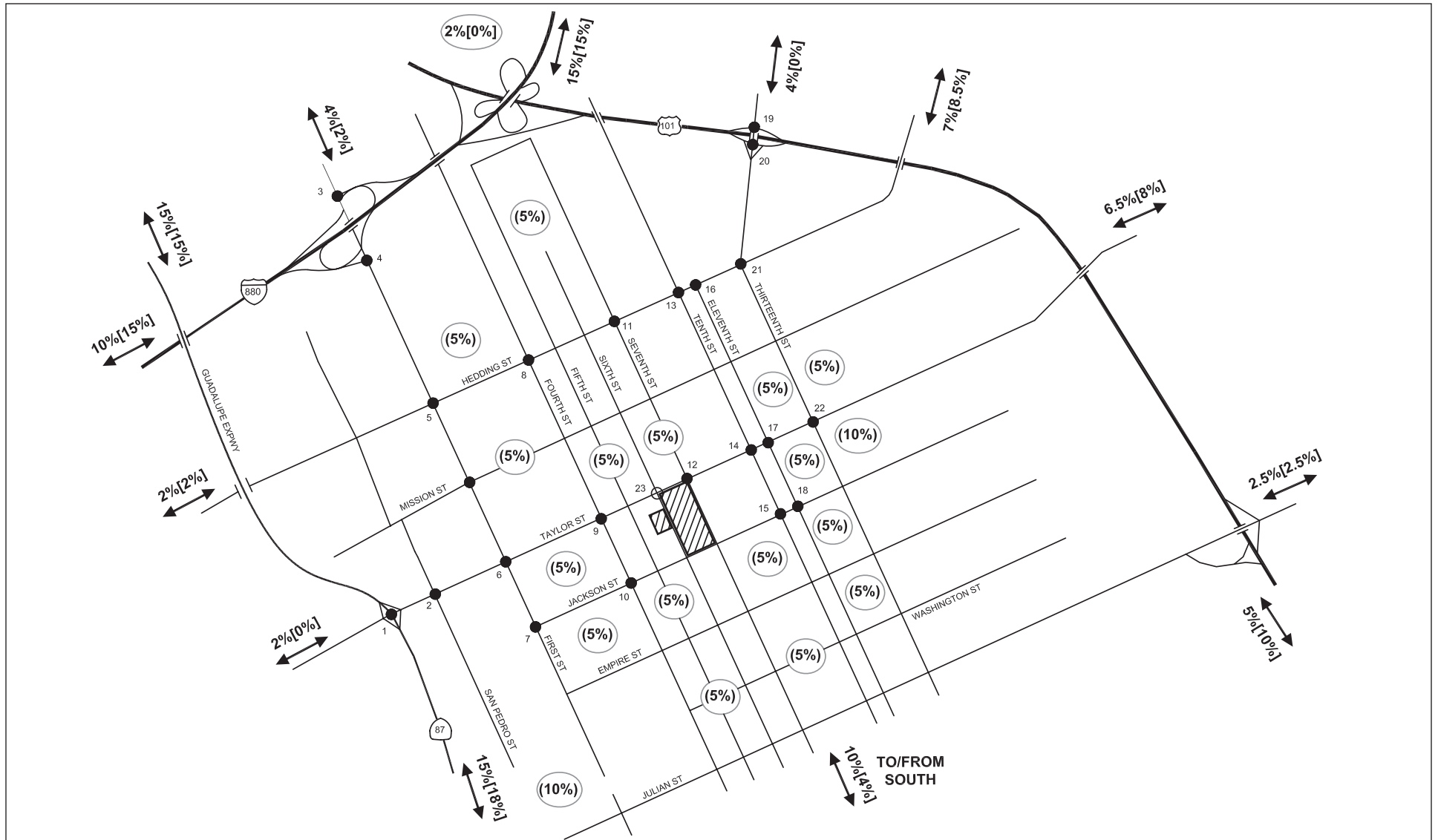
c. Project Traffic Volumes. Project trips, as represented in the above project trip assignments, were added to future background traffic volumes to obtain background plus project traffic volumes. Background traffic volumes plus project trips are typically referred to simply as *project traffic volumes*; this is contrasted with the term *project trips*, which is used to signify the traffic that is produced specifically by the project.

The peak hour project traffic volumes are shown graphically on Figure V.C-7a and V.C-7b. Traffic volumes for all components of traffic are shown in Appendix B.

d. Project Intersection Level of Service Analysis. The intersection level of service results under background and project scenarios are presented in Table V.C-7. The level of service calculation sheets are included in Appendix B.

(1) City of San Jose Level of Service Analysis. The results of the level of service analysis show that the same five signalized study intersections projected to operate at unacceptable levels under background conditions would remain so under project conditions.

Impact TRANS-1: When measured against the City of San Jose level of service impact criteria, three protected study intersections out of the five would be significantly impacted by the project: North 1st Street and Taylor Street (PM peak hour), North 10th Street and Hedding Street (AM peak hour) and 10th Street and Taylor Street (PM peak hour). (S)



LSA



NOT TO SCALE

LEGEND



Project Site



Signalized Study Intersection



Unsignalized Study Intersection

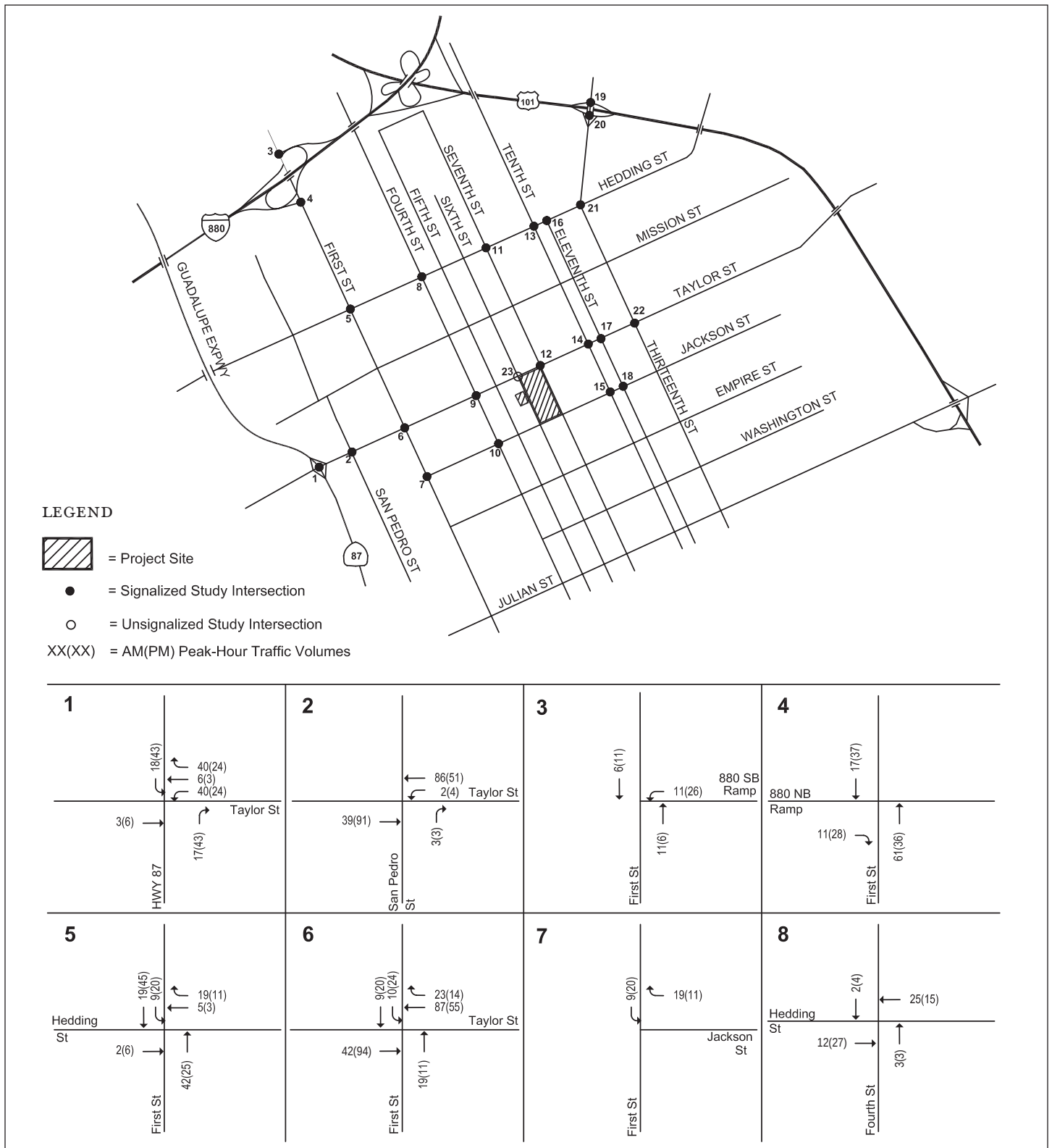
XX(XX)[XX]

Residential(Retail/Community Amenity Space)

[Light Industrial/Commercial Component of Live/Work Units]

FIGURE V.C-5

*Japantown Corporation Yard
Redevelopment Project EIR
Project Trip Distribution Patterns*



LSA

FIGURE V.C-6a

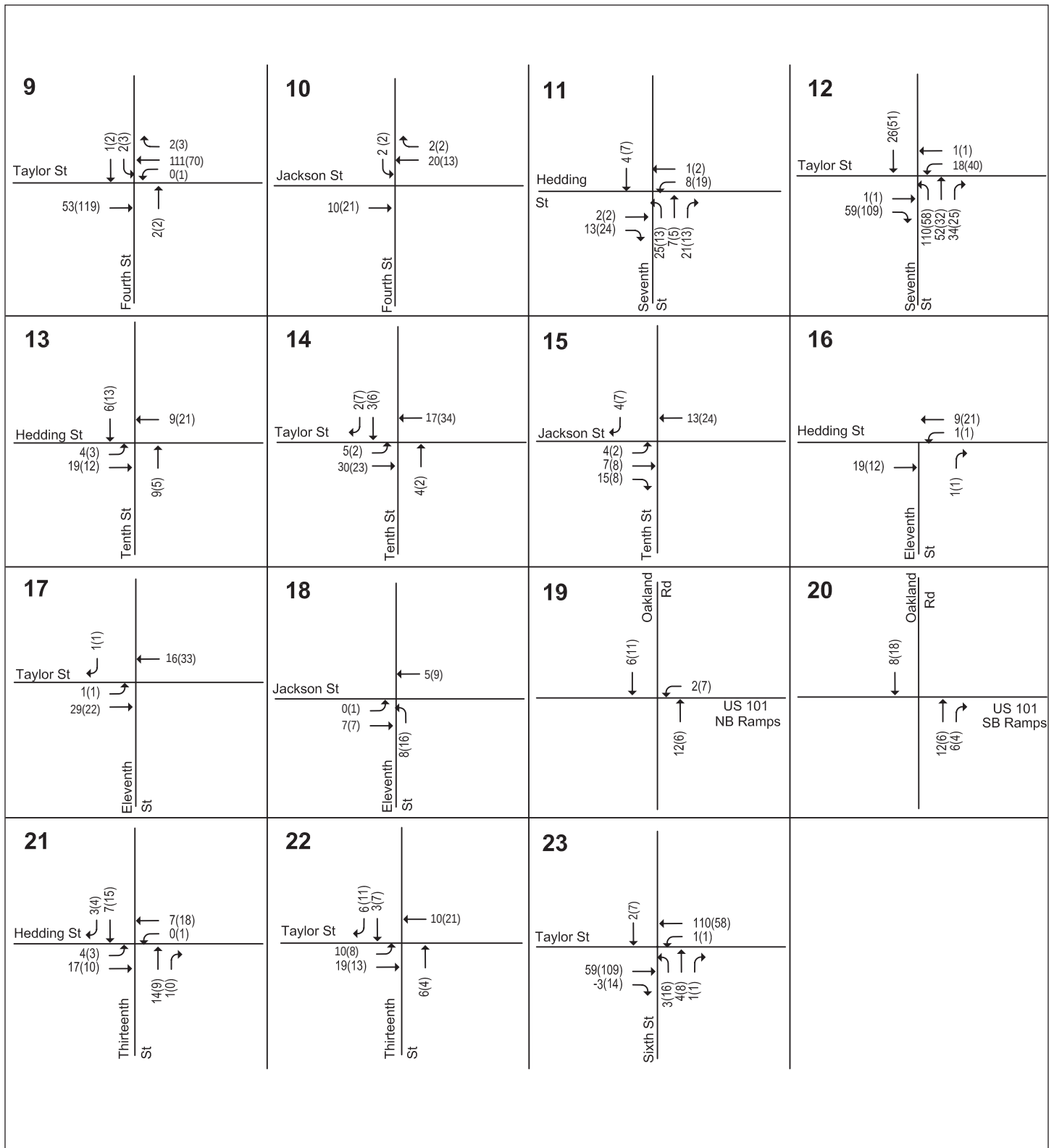


NOT TO SCALE

Japantown Corporation Yard
Redevelopment Project EIR
Project Trip Assignment

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

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LSA

FIGURE V.C-6b



LEGEND

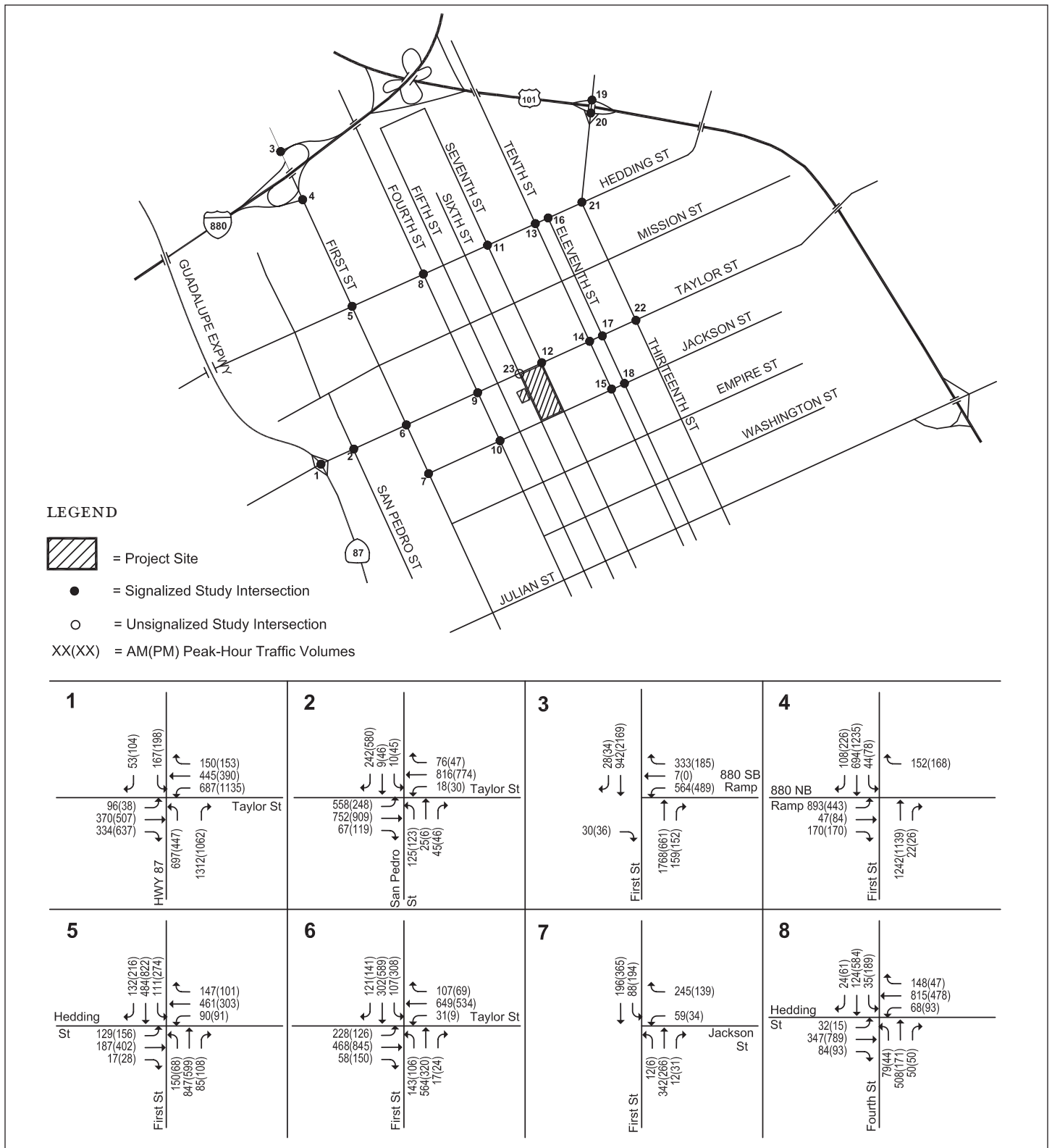
XX(X) = AM(PM) Peak-Hour Traffic Volumes

NOT TO SCALE

*Japantown Corporation Yard
Redevelopment Project EIR
Project Trip Assignment*

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

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LSA

FIGURE V.C-7a

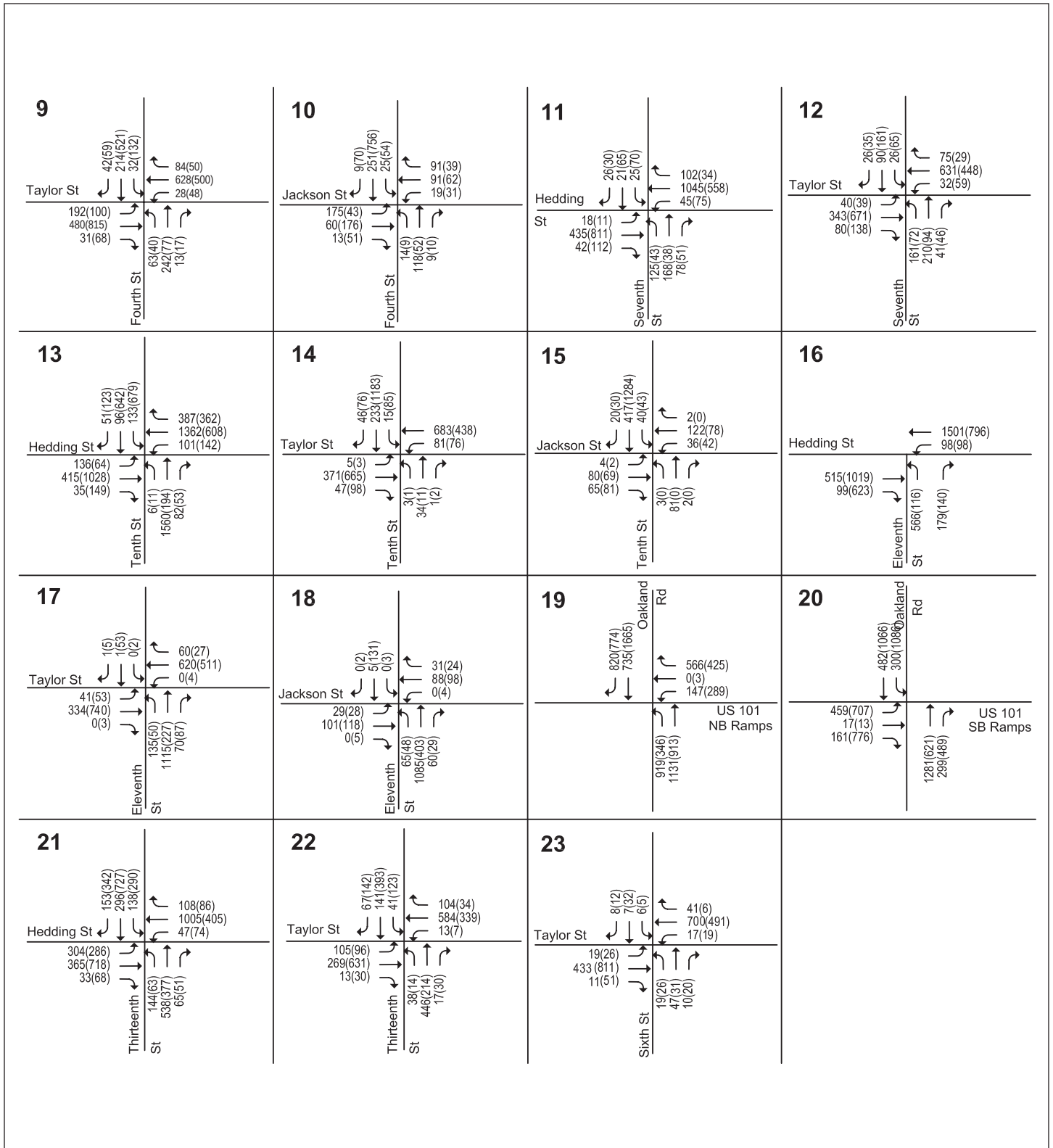


NOT TO SCALE

Japantown Corporation Yard
Redevelopment Project EIR
Project Traffic Volumes

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

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LSA

FIGURE V.C-7b



LEGEND

XX(X) = AM(PM) Peak-Hour Traffic Volumes

NOT TO SCALE

Japantown Corporation Yard
Redevelopment Project EIR
Project Traffic Volumes

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

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Table V.C-6: Project Trip Generation

Land Use	Size	Daily Rate ^a	Daily Trips	AM Peak Hour				PM Peak Hour			
				Pk-Hr Rate ^a	In	Out	Total	Pk-Hr Rate ^a	In	Out	Total
Proposed Uses											
Condominium/Townhouse ^b	600 units	7.50	4,500	0.75	157	293	450	0.75	293	157	450
Affordable Senior Housing ^b	85 units	3.60	306	0.43	15	22	37	0.43	22	15	37
Community Amenity Space ^c	20,000 s.f.	22.88	458	1.62	20	12	32	1.64	10	23	33
Live/Work Units ^d											
Residential Component (Apartments 50% Red.)	24 units	3.00	72	0.30	3	4	7	0.30	4	3	7
Commercial Component (General Office - 50% Red.)	14,400 s.f.	10.00	144	1.40	18	2	20	1.40	4	16	20
Live/Work Sub Total:			216		21	6	27		8	19	27
Specialty Retail ^b	15,000 s.f.	40.00	600	0.80	8	4	12	3.60	27	27	54
Retail Pass-by Reduction ^e									-7	-7	-14
Mixed-Use Internalized Reduction ^f			-156		-2	-1	-3		-7	-7	-14
Transit Reduction (residential only) ^g			-439		-16	-29	-45		-29	-16	-45
Proposed Uses Total:			5,485		203	307	510		317	211	528
Existing Uses (to be replaced)											
Japantown Corporation Yard (observed) ^h	252,650 s.f.		475		53	23	76		6	13	19
Net Project Trips:			5,010		150	284	434		311	198	509

^a Rate per unit for residential use; per 1,000 s.f. for retail, community center, and existing light industrial uses.

^b Rates for proposed residential and retail uses based on City of San Jose Interim Guidelines for Traffic Impact Analysis for Land Developments, "Common Vehicular Trip Generation Rates for the San Jose Area," March 1994.

^c Rates for the proposed community amenity space based on the Institute of Transportation Engineers (ITE) manual entitled Trip Generation, seventh edition, 2003.

^d The trip generation estimates for the live/work units are based on City of San Jose rates for Apartments and General Office with a 50 percent reduction applied to both uses. It was estimated that the commercial (office) component of each live/work unit would total 600 square feet.

^e A standard pass-by reduction of 25% was applied to the retail use during the PM peak hour.

^f Based on the *Congestion Management Program TIA Guidelines*, a mixed-use trip reduction can be applied since the project is a mixed-use development with housing and retail components. A 13% reduction was first applied to the smaller of the two generators (retail component). The trips generated by the larger generator (residential component) were then reduced by the same number of trips as were reduced for the smaller trip generator.

^g Based on the *Congestion Management Program TIA Guidelines*, a transit reduction of 9% was applied to the residential component of the project since the project site would be located within approximately 2,000 feet of an LRT station.

^h The peak hour trip generation rates for the existing corporation yard are based on driveway counts conducted in May of 2006.

Source: Hexagon Transportation Consultants, 2007.

Table V.C-7: Project Intersection Levels of Service

Study Number	Intersection	Peak Hour	Background		Project	
			Avg. Delay	LOS	Avg. Delay	LOS
1	SR 87 and Taylor Street ^a	AM	27.7	C	28.3	C
		PM	33.5	C	34.3	C
2	San Pedro Street and Taylor Street	AM	31.8	C	31.8	C
		PM	35.2	D	35.0	C
3	North 1st Street and I-880 Southbound Ramps ^a	AM	27.4	C	27.9	C
		PM	19.3	B	19.8	B
4	North 1st Street and I-880 Northbound Ramps ^a	AM	23.2	C	23.4	C
		PM	17.4	B	17.4	B
5	North 1st Street and Hedding Street	AM	35.4	D	35.6	D
		PM	35.3	D	35.4	D
6	North 1st Street and Taylor Street (P)	AM	51.9	D	54.0	D
		PM	82.2	F	100.7	F
7	North 1st Street and Jackson Street	AM	23.8	C	23.8	C
		PM	21.7	C	21.7	C
8	North 4th Street and Hedding Street (P)	AM	34.7	C	34.5	C
		PM	39.5	D	39.4	D
9	4th Street and Taylor Street	AM	32.3	C	31.8	C
		PM	33.8	C	34.1	C
10	4th Street and Jackson Street (P)	AM	25.4	C	25.9	C
		PM	31.0	C	33.0	C
11	North 7th Street and Hedding Street	AM	13.4	B	14.6	B
		PM	9.5	A	10.1	B
12	North 7th Street and Taylor Street	AM	8.5	A	11.4	B
		PM	7.7	A	9.2	A
13	North 10th Street and Hedding Street (P)	AM	60.3	E	61.9	E
		PM	39.9	D	40.3	D
14	10th Street and Taylor Street (P)	AM	13.9	B	14.2	B
		PM	57.9	E	62.2	E
15	10th Street and Jackson Street	AM	10.1	B	10.7	B
		PM	37.0	D	38.2	D
16	11th Street and Hedding Street	AM	25.8	C	25.8	C
		PM	10.8	B	10.8	B
17	11th Street and Taylor Street (P)	AM	29.0	C	31.1	C
		PM	15.3	B	15.3	B
18	11th Street and Jackson Street	AM	17.6	B	18.2	B
		PM	9.6	A	9.8	A
19	Oakland Road and US 101 North Ramps ^a	AM	139.0	F	138.5	F
		PM	41.9	D	42.2	D
20	Oakland Road and US 101 South Ramps ^a	AM	23.8	C	23.7	C
		PM	76.4	E	76.7	E
21	13th Street and Hedding Street	AM	45.3	D	45.4	D
		PM	42.1	D	42.2	D
22	13th Street and Taylor Street	AM	14.2	B	14.3	B
		PM	14.7	B	15.1	B

^a Denotes a CMP intersection.

(P) Denotes a City of San Jose Protected Intersection.

Bold indicates a significant project impact.**Shaded** Conditions = Unacceptable LOS

Source: Hexagon Transportation Consultants, 2007.

Protected Intersection Impacts. The intersection of North 1st Street and Taylor Street would have an unacceptable LOS F during the PM peak hour under background conditions, and the added trips as a result of the project would cause the V/C ratio to increase by 0.066 (more than one-half percent significance threshold). Based on the City of San Jose level of service impact criteria for protected intersections, this constitutes a significant project impact.

The level of service at the intersection of North 10th Street and Hedding Street would be an unacceptable LOS E during the AM peak hour under background conditions, and the added trips as a result of the project would cause the V/C ratio to increase by 0.008 (more than the one-half percent significance threshold). Based on the City of San Jose level of service impact criteria for protected intersections, this constitutes a significant project impact.

The level of service at the intersection of 10th Street and Taylor Street would be an unacceptable LOS E during the PM peak hour under background conditions, and the added trips as a result of the project would cause the V/C ratio to increase by 0.017 (more than the one-half percent significance threshold). Based on the City of San Jose level of service impact criteria for protected intersections, this constitutes a significant project impact.

Mitigation Measure TRANS-1: Feasible mitigation measures are not available to reduce this impact to a less than significant level. (SU)

Protected Intersection Requirements. The LOS Policy specifies that Protected Intersections consist of locations that have been built to their planned maximum capacity and where expansion of the intersection would have an adverse effect upon other transportation facilities (such as pedestrian, bicycle, and transit systems). Protected Intersections are therefore not required to maintain a Level of Service D, which is the City of San Jose standard.

If a development project has significant traffic impacts at a designated Protected Intersection, the project may be approved if offsetting Transportation System Improvements are provided. These improvements are not considered “mitigation” as defined by CEQA. Instead, they are overriding considerations for a significant unavoidable traffic impact. The offsetting improvements are intended to provide other transportation benefits for the community adjacent to the traffic impact. The improvements may include enhancements to pedestrian, bicycle, and transit facilities, as well as neighborhood traffic calming measures and roadway improvements.

The specific improvements proposed can be identified prior to project approval. Priority is given to improvements identified in previously adopted plans such as area-wide specific or master plans, redevelopment plans, or plans prepared through the Strong Neighborhoods Initiative. Community outreach should occur in conjunction with the project review and approval process. Specific improvements can be finalized during the subsequent planning permit stages.

The LOS Policy has established a fee equal to \$2,000 per net peak hour project trip for one intersection impact and \$3,000 per net peak hour project trip for multiple intersection impacts to fund alternative transportation improvements. For the purpose of determining the Protected Intersection LOS impact fee, net peak hour project trips are defined as the total number of peak hour trips generated by the project during the highest peak hour period after all appropriate trip credits have been applied. The values of the improvements will be equal to the established fees. In the case of the proposed project, the estimated project cost would be: \$1,527,000 (\$3,000 x 509 PM peak hour trips).

The protected intersection fee is \$3,000 per trip for multiple intersection impacts plus a 3.5 percent escalation adjustment added annually. In order to finalize the offsetting improvements to be constructed by this project a community meeting should be held to determine the selection of improvements agreed upon by the community. The developer will then submit improvement plans to the City of San Jose, Department of Public Works for review and approval.

(2) CMP Level of Service Analysis. The level of service results for the CMP intersections under project conditions are summarized in Table V.C-8. The results show that, measured against the CMP level of service standards, the same CMP study intersection projected to operate at an unacceptable LOS F under background conditions would remain unacceptable under project conditions. When measured against the CMP level of service standards, however, the CMP study intersection would not be significantly impacted by the project. The level of service calculation sheets are included in Appendix B.

(3) Freeway Segment Level of Service Analysis. The results of the CMP freeway level of service analysis are summarized in Table V.C-8. Traffic volumes on the study freeway segments under project conditions were estimated by adding project trips to the existing volumes obtained from the 2005 CMP Annual Monitoring Report. Initial results indicate the project would only impact one freeway segment (I-880 North 1st Street to US 101) in the project area, however, the monitoring report does not take into account the City's planned HOV lane project on I-880 that includes this study segment. The I-880 HOV lane project, which extends from Old Bayshore Highway in San Jose to Route 237 in Milpitas, will add 4.3 miles of HOV lanes in both the northbound and southbound directions. The improvement from a 6-lane to an 8-lane facility will mainly consist of outside widening and includes modifications of various existing on and off-ramps within the project limits.

This improvement project is considered fully funded and, therefore, should be considered a background condition when determining capacity of this freeway segment. The freeway data obtained from the 2005 Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study did not include the improvements associated with the I-880 HOV lane project. With the planned improvements in place, the level of service of this freeway segment would improve and the project would not result in a significant freeway impact.

f. Other Transportation Issues. This section describes an analysis of other transportation issues associated with the proposed project including: emergency access, queuing analysis, parking, bicycle and pedestrian impacts and the US 101/Oakland/Mabury Transportation Development Policy (TDP).

(1) Emergency Response and Evacuation. Plan review and approval by the City Building Division will be required for project development of the Corporation Yard and City parking lot sites. Proposed access and any internal roadways at the both sites would be required to meet State and City standards and policies regarding road width, turning radius, and emergency vehicle access, which would prevent potential restrictions to emergency access. This is a less-than-significant impact.

Table V.C-8: Project Freeway Segment Level of Service Calculations

Freeway	Segment	Direction	Peak Hour	Existing Plus Project Trips												Project Trips					Impact?
				Mixed-Flow Lanes						HOV Lanes						Total Volume	Mixed-Flow Lanes		HOV Lanes		
				Avg Speed	# of Lanes	Capacity (vph)	Volume	Density	LOS	Avg Speed	# of Lanes	Capacity (vph)	Volume	Density	LOS		Volume	% Capacity	Volume	% Capacity	
SR 87	I-280 to Julian Street	NB	AM	28	2	4,400	3,764	67.2	F	--	--	--	--	--	--	17	14	0.3%	3	--	NO
			PM	67	2	4,400	2,046	15.3	B	--	--	--	--	--	--	43	36	0.8%	7	--	NO
SR 87	Julian Street to Coleman Ave	NB	AM	65	2	4,400	3,914	30.1	D	--	--	--	--	--	--	17	14	0.3%	3	--	NO
			PM	66	2	4,400	2,546	19.3	C	--	--	--	--	--	--	43	36	0.8%	7	--	NO
SR 87	Coleman Street to Taylor Street	NB	AM	57	2	4,400	4,464	39.2	D	67	1	1,800	943	14.1	B	17	14	0.3%	3	0.2%	NO
			PM	67	2	4,400	1,776	13.3	B	67	1	1,800	277	4.1	A	43	36	0.8%	7	0.4%	NO
SR 87	Taylor Street to Skyport Dr	NB	AM	66	2	4,400	3,333	25.3	C	67	1	1,800	677	10.1	A	40	33	0.8%	7	0.4%	NO
			PM	67	2	4,400	1,630	12.2	B	67	1	1,800	74	1.1	A	24	20	0.5%	4	0.2%	NO
SR 87	Skyport Dr to US 101	NB	AM	66	2	4,400	3,333	25.3	C	66	1	1,800	1,327	20.1	C	40	33	0.8%	7	0.4%	NO
			PM	67	2	4,400	2,160	16.1	B	67	1	1,800	74	1.1	A	24	20	0.5%	4	0.2%	NO
SR 87	US 101 to Skyport Dr	SB	AM	66	2	4,400	2,655	20.1	C	--	--	--	--	--	--	18	15	0.3%	3	--	NO
			PM	64	2	4,400	4,256	33.2	D	--	--	--	--	--	--	43	36	0.8%	7	--	NO
SR 87	Skyport Dr to Taylor Street	SB	AM	67	2	4,400	1,485	11.1	B	--	--	--	--	--	--	18	15	0.3%	3	--	NO
			PM	62	2	4,400	4,376	35.3	D	--	--	--	--	--	--	43	36	0.8%	7	--	NO
SR 87	Taylor Street to Coleman Street	SB	AM	67	2	4,400	1,773	13.2	B	--	--	--	--	--	--	40	33	0.8%	7	--	NO
			PM	27	2	4,400	3,690	68.3	F	--	--	--	--	--	--	24	20	0.5%	4	--	NO
SR 87	Coleman Ave to Julian Street	SB	AM	66	2	4,400	3,333	25.3	C	--	--	--	--	--	--	40	33	0.8%	7	--	NO
			PM	28	2	4,400	3,770	67.3	F	--	--	--	--	--	--	24	20	0.5%	4	--	NO
SR 87	Julian Street to I-280	SB	AM	67	2	4,400	1,373	10.2	A	--	--	--	--	--	--	40	33	0.8%	7	--	NO
			PM	19	2	4,400	3,290	86.6	F	--	--	--	--	--	--	24	20	0.5%	4	--	NO
US 101	Santa Clara Street to McKee Road	NB	AM	14	3	6,900	4,203	100.1	F	27	1	1,800	1,861	68.9	F	4	3	0.0%	1	0.0%	NO
			PM	66	3	6,900	4,172	21.1	C	66	1	1,800	1,652	25.0	C	14	12	0.2%	2	0.1%	NO
US 101	McKee Road to Oakland Road	NB	AM	20	3	6,900	4,982	83.0	F	33	1	1,800	1,980	60.0	F	2	2	0.0%	0	0.0%	NO
			PM	66	3	6,900	5,546	28.0	D	67	1	1,800	871	13.0	B	7	6	0.1%	1	0.1%	NO
US 101	Oakland Road to I-880	NB	AM	13	3	6,900	4,060	104.1	F	36	1	1,800	2,020	56.1	E	0	0	0.0%	0	0.0%	NO
			PM	66	3	6,900	4,160	21.0	C	67	1	1,800	540	8.1	A	0	0	0.0%	0	0.0%	NO
US 101	I-880 to Old Bayshore	NB	AM	12	3	6,900	3,890	108.1	F	19	1	1,800	1,630	85.8	F	0	0	0.0%	0	0.0%	NO
			PM	67	3	6,900	3,420	17.0	B	67	1	1,800	540	8.1	A	0	0	0.0%	0	0.0%	NO

Table V.C-8 *Continued*

Freeway	Segment	Direction	Peak Hour	Existing Plus Project Trips												Project Trips					Impact?
				Mixed-Flow Lanes						HOV Lanes						Total Volume	Mixed-Flow Lanes		HOV Lanes		
				Avg Speed	# of Lanes	Capacity (vph)	Volume	Density	LOS	Avg Speed	# of Lanes	Capacity (vph)	Volume	Density	LOS		Volume	% Capacity	Volume	% Capacity	
US 101	Old Bayshore to N. 1st Street	NB	AM	13	3	6,900	4,020	103.1	F	11	1	1,800	1,230	111.8	F	0	0	0.0%	0	0.0%	NO
			PM	66	3	6,900	4,550	23.0	C	66	1	1,800	1,450	22.0	C	0	0	0.0%	0	0.0%	NO
US 101	N. 1st Street to Guadalupe Pkwy	NB	AM	22	3	6,900	5,210	78.9	F	17	1	1,800	1,530	90.0	F	0	0	0.0%	0	0.0%	NO
			PM	66	3	6,900	5,150	26.0	D	67	1	1,800	470	7.0	A	0	0	0.0%	0	0.0%	NO
US 101	Guadalupe Pkwy to N. 1st Street	SB	AM	67	3	6,900	3,620	18.0	C	67	1	1,800	470	7.0	A	0	0	0.0%	0	0.0%	NO
			PM	16	3	6,900	4,420	92.1	F	51	1	1,800	2,190	42.9	D	0	0	0.0%	0	0.0%	NO
US 101	N. 1st Street to Old Bayshore	SB	AM	67	3	6,900	3,220	16.0	B	67	1	1,800	940	14.0	B	0	0	0.0%	0	0.0%	NO
			PM	12	3	6,900	3,920	108.9	F	42	1	1,800	2,100	50.0	E	0	0	0.0%	0	0.0%	NO
US 101	Old Bayshore to I-880	SB	AM	67	3	6,900	3,220	16.0	B	67	1	1,800	400	6.0	A	0	0	0.0%	0	0.0%	NO
			PM	13	3	6,900	4,100	105.1	F	32	1	1,800	1,980	61.9	F	0	0	0.0%	0	0.0%	NO
US 101	I-880 to Oakland Road	SB	AM	66	3	6,900	4,550	23.0	C	67	1	1,800	540	8.1	A	0	0	0.0%	0	0.0%	NO
			PM	13	3	6,900	4,060	104.1	F	43	1	1,800	2,110	49.1	E	0	0	0.0%	0	0.0%	NO
US 101	Oakland Road to McKee Road	SB	AM	66	3	6,900	4,165	21.0	C	67	1	1,800	401	6.0	A	6	5	0.1%	1	0.1%	NO
			PM	28	3	6,900	5,633	67.1	F	65	1	1,800	2,021	31.1	D	4	3	0.0%	1	0.0%	NO
US 101	McKee Road to Santa Clara Street	SB	AM	66	3	6,900	4,560	23.0	C	67	1	1,800	472	7.0	A	12	10	0.1%	2	0.1%	NO
			PM	32	3	6,900	5,867	61.1	F	64	1	1,800	2,111	33.0	D	8	7	0.1%	1	0.1%	NO
I-880	Coleman Ave to SR 87	NB	AM	37	3	6,900	6,119	55.1	E	--	--	--	--	--	--	11	9	0.1%	2	--	NO
			PM	59	3	6,900	6,573	37.1	D	--	--	--	--	--	--	28	23	0.3%	5	--	NO
I-880	SR 87 to N. 1st Street	NB	AM	61	3	6,900	6,599	36.1	D	--	--	--	--	--	--	11	9	0.1%	2	--	NO
			PM	59	3	6,900	6,573	37.1	D	--	--	--	--	--	--	28	23	0.3%	5	--	NO
I-880	N. 1st Street to US 101	NB	AM	50	3	6,900	6,620	44.1	D	--	--	--	--	--	--	24	20	0.3%	4	--	NO
			PM	61	3	6,900	6,602	36.1	D	--	--	--	--	--	--	14	12	0.2%	2	--	NO
I-880	US 101 to E. Brokaw Road	NB	AM	35	3	6,900	6,123	58.3	F	--	--	--	--	--	--	40	33	0.5%	7	--	YES
			PM	66	3	6,900	5,170	26.1	D	--	--	--	--	--	--	24	20	0.3%	4	--	NO
I-880	E. Brokaw Road to US 101	SB	AM	66	3	6,900	4,965	25.1	C	--	--	--	--	--	--	18	15	0.2%	3	--	NO
			PM	26	3	6,900	5,576	71.5	F	--	--	--	--	--	--	43	36	0.5%	7	--	NO
I-880	US 101 to N. 1st Street	SB	AM	58	3	6,900	6,619	38.0	D	--	--	--	--	--	--	11	9	0.1%	2	--	NO
			PM	8	3	6,900	3,092	128.8	F	--	--	--	--	--	--	26	22	0.3%	4	--	NO
I-880	N. 1st Street	SB	AM	55	3	6,900	6,622	40.1	D	--	--	--	--	--	--	26	22	0.3%	4	--	NO

Table V.C-8 *Continued*

Freeway	Segment to SR 87	Direction	Peak Hour	Existing Plus Project Trips												Project Trips					Impact?
				Mixed-Flow Lanes						HOV Lanes						Total Volume	Mixed-Flow Lanes		HOV Lanes		
				Avg Speed	# of Lanes	Capacity (vph)	Volume	Density	LOS	Avg Speed	# of Lanes	Capacity (vph)	Volume	Density	LOS		Volume	% Capacity	Volume	% Capacity	
I-880	SR 87 to Coleman Ave	SB	PM	19	3	6,900	4,863	85.3	F	--	--	--	--	--	--	16	13	0.2%	3	--	NO
			AM	58	3	6,900	6,632	38.1	D	--	--	--	--	--	--	26	22	0.3%	4	--	NO
			PM	26	3	6,900	5,553	71.2	F	--	--	--	--	--	--	16	13	0.2%	3	--	NO

Bold indicates a significant project impact.

Shaded Conditions = Unacceptable LOS

Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2005; Hexagon Transportation Consultants, 2007.

(2) Vehicle Queuing and Delay at the US 101 and SR 87 Off-Ramps. Vehicle queuing on the US 101 northbound off-ramp to Oakland Road and the SR 87 northbound and southbound off-ramps to Taylor Street were analyzed for project conditions using the Poisson probability distribution. Results of the analysis indicate that the existing vehicle storage on the US 101 and SR 87 freeway off-ramps would be adequate to serve the estimated maximum vehicle queues that would occur during the AM and PM peak hours under project conditions.

US 101 Off-Ramp to Oakland Road. According to the intersection level of service calculations, the project would add 0.1 seconds of delay per vehicle during the AM peak hour to the westbound left-turn movement on the US 101 northbound off-ramp when compared to background conditions. During the PM peak hour, the project would add 0.7 seconds of delay per vehicle to this movement. Therefore, the project would have very little effect on the operation of the US 101 northbound off-ramp to Oakland Road.

SR 87 Off-Ramp to Taylor Street. Based on the intersection level of service calculations, the project would add 0.1 seconds of delay per vehicle during the AM peak hour to the northbound right-turn movement on the SR 87 northbound off-ramp when compared to background conditions. During the PM peak hour, the project would add 1.2 seconds of delay per vehicle to this movement. The project would add 0.3 seconds of delay per vehicle during the AM peak hour to the southbound left-turn movement on the SR 87 southbound off-ramp when compared to background conditions. During the PM peak hour, the project would add 0.6 seconds of delay per vehicle to this movement. Therefore, the project would have very little effect on the operation of the SR 87 and Taylor Street interchange off-ramps.

Additional details on the queuing analysis can be found in Appendix B.

(3) Parking Supply Analysis. The project proposes to provide up to 934 parking spaces on the Corporation Yard redevelopment site to serve 600 market-rate residential units, 30,000 square feet of retail space. Parking for residents of the mixed-use development would be located in underground garages and would be assigned parking for residents only. The project also proposes to provide up to 40 parking spaces to serve the 85-unit affordable senior housing development on 6th Street.

Corporation Yard Redevelopment Site Parking Supply. Based on applying the City of San Jose parking ratios to the total number of residential units and amount of retail space proposed for the Corporation Yard redevelopment site, the project parking requirements would be as follows:

- One bedroom units at 1.5 spaces per unit: 420 one bedroom units x 1.5 = 630 spaces required
- Two bedroom units at 1.8 spaces per unit: 120 two bedroom units x 1.8 = 216 spaces required
- Three bedroom units at 2.0 spaces per unit: 60 three bedroom units x 2.0 = 120 spaces required
- 1 parking space per 400 square feet of net retail area (for retail uses within the Neighborhood Business District where net retail area is 85 percent of the total retail square footage): 30,000 s.f. x 0.85 / 400 s.f. = 64 spaces required

A reduction in required off-street parking spaces of up to 10 percent may be authorized with a Development Permit for structures or uses located within 2,000 feet of a proposed or an existing rail

station, and areas designated as Neighborhood Business Districts in the City's General Plan. The 10 percent reduction does not apply to retail uses because a reduction is already applied for retail uses within the Neighborhood Business District. Based on the City of San Jose standard parking rates and applicable parking reductions, the project should provide a total of 934 parking spaces for the Corporation Yard redevelopment site, 869 of which should be provided for residents in the underground parking garages (assigned parking). Since a total of 934 parking spaces are being proposed, the Corporation Yard project would satisfy the City of San Jose parking code requirements for residential and retail, by 123 spaces.

The required parking supply for the community amenity space depends upon the mix of uses identified for the space (e.g., office, parctic, taiko practice). Thirty-five stalls have been set aside and additional stalls would be provided as required when the program is selected. When the community amenity space is programmed the City of San Jose Department of Planning Building and Code Enforcement would determine the parking requirement for the space and that amount of parking would be provided on-site.

The project proposes parking in accordance with Zoning Code standards for the Corporation Yard site's market-rate residential and retail uses, and intends to provide adequate parking for the community amenity space, to be determined when the space is programmed. Nonetheless, the City of San Jose does not consider parking at less than Code standards to be a CEQA impact as the Planned Development zoning process allows the City to establish alternative parking requirements, at rates less than the typical Zoning Code standards, based on a project's unique parking demand and location. The site's parking supply is adequate, given its location relative to the Japantown NBD and multiple transit options including LRT, and therefore it is not likely that double-parking in traveled lanes would occur to result in delays to emergency vehicles. Thus, the parking supply on the Corporation Yard site would not result in any impact under CEQA.

Affordable Senior Housing Site Parking Requirements. The proposed development standards for the City parking lot site include a minimum of 0.5 parking spaces per senior unit. Based on applying the City of San Jose parking ratios, the project parking requirement for the affordable senior housing development would be as follows:

- 1.0 space per senior unit: 85 units x 1.0 = 85 spaces required

After applying a 10 percent parking reduction, the project should provide a total of 77 parking spaces for the affordable senior housing development. Since a total of 40 parking spaces are being proposed, the project would fall short of the City of San Jose typical parking code requirements by 37 spaces.

Based on the average ITE rate during the peak parking period for a senior housing development, the project parking recommendation is as follows:

- Senior Adult Attached Housing (Land Use 252) at 0.5 spaces per unit: 85 units x 0.5 = 43 spaces recommended.

Thus, the project would fall short of the ITE recommended peak parking demand rate for a senior housing development by only 3 spaces.

In light of the fact that the affordable senior housing site's parking supply would be only 3 spaces less than the ITE recommended peak parking demand rate, and the fact that the site is located within walking distance of regional transit services and the Japantown NBD, the site's parking supply is adequate and not likely to result in delays to emergency vehicles caused by double-parking in traveled lanes. Thus, the parking supply on the affordable senior housing site would not result in any impact under CEQA.

Bicycle Parking. The City of San Jose requires that a Multi-Dwelling residential development such as this provide a minimum of one bicycle parking space per every four units, as described in the City's Zoning Ordinance (San Jose Municipal Code 20.90.310). Bicycle parking spaces are defined as bicycle racks, lockers and like facilities. Thus, based on 600 proposed market-rate residential units, the Corporation Yard project should provide 150 bicycle parking spaces.

Although most of the residents of the 85-unit affordable senior housing development likely would not ride bicycles, a small number of bicycle parking spaces should be provided for those senior residents or employees that would ride bicycles. Based on the City of San Jose Zoning Ordinance requirements, a Group Living residential development such as this would provide a minimum of one bicycle parking space per every 20 residents.

(4) Transit Service. Local bus lines 62 and 85 operate along Taylor Street and 10th Street, respectively, and are within walking distance of the project site. The Japantown/Ayer and Civic Center LRT stations on North 1st Street also are within walking distance of the project site. The Civic Center LRT station is served directly by Local bus lines 36 and 66 and Express line 180. Due to the convenient locations of the bus stops and LRT stations (shown on Figure 4 in Chapter 2), it is assumed that some new residents would utilize the existing transit service for commuting purposes. Applying a 9 percent transit mode share, which is probably the highest that could be expected, equates to approximately 45 new transit riders during the AM and PM peak commute periods. Assuming the existing peak hour transit service (current headways) would remain unchanged with five bus lines and light rail providing service within walking distance of the project site, the number of new transit riders during the peak commute periods would equate to about 2 to 3 riders per bus/LRT train. These new riders could be accommodated by the current available ridership capacity of the existing bus and LRT service in the study area, and no improvements to the existing transit service would be necessary with the project.

(5) Pedestrian Facilities. Pedestrian traffic primarily would be generated by residents walking to and from local schools, public parks, bus stops, and nearby retail centers. The majority of roadways in the immediate vicinity of the project site currently have sidewalks on both sides of the street, with crosswalks at most intersections and pedestrian signal heads at the signalized intersections. Although Seventh Street has no sidewalks along the east side of the street between Taylor and Jackson Streets, the project would provide sidewalks along the project frontage on the west side of Seventh Street. Overall the sidewalks within the study area have good connectivity. The extensive network of sidewalks within the study area would provide residents with a safe connection between the project site and the other surrounding land uses in the area. The need for the sidewalk and curb to be improved along the north side of Jackson Street at its intersection with North 7th Street adjacent to the rail crossing will be evaluated at the PD Permit stage.

Schools. There are two schools located within a one-half mile radius of the project site: 1) Grant Elementary School, located on North 10th Street, is approximately one-quarter of a mile east of the project site; and 2) Peter Burnett Middle School, located on North Second Street, is about one-half of a mile northwest of the project site. Children could safely walk or bike to and from these schools using the existing facilities.

Safe Routes to Schools Program. Since there are schools located near the project site, the project should work with the local school district to implement a Safe Routes to Schools program for its residents. Safe Routes to Schools is designed to decrease traffic and pollution and increase the health of children and the community as a whole. The program promotes walking and biking to school through education and incentives. The program also addresses the safety concerns of parents by encouraging greater enforcement of traffic laws, educating the public, and exploring ways to create safer streets.

A comprehensive Safe Routes to School program should identify a focused area surrounding the schools, provide a map with the routes that children should take to school, and recommend alternative routes if necessary. Working with local government staff, a Safe Routes to Schools program should address such safety issues as speeding cars, dangerous intersections, and missing or ineffective crosswalks, sidewalks, and bike lanes.

Parks. Three public parks are located within approximately three-quarters of a mile of the project site. One of these parks is the Guadalupe River Park, which offers a continuous paved trail for pedestrians and bicyclists that is separated from motor vehicle traffic. Access to the park is provided via Taylor Street approximately three-quarters of a mile west of the project site. Another nearby park is Backesto Park, located approximately one-half mile east of the project site. The third public park is Bernal Park, located about one-quarter of a mile north of the project site. Residents of the proposed residential development could potentially utilize these parks for recreational purposes. Existing facilities would be adequate for residents to walk or bike to and from these parks.

(6) Bicycle Facilities. Class II bicycle lanes do not exist adjacent to the project site. Bike lanes are limited to 10th Street north of Taylor Street and 4th Street south of Jackson Street in the immediate vicinity of the site. As previously stated, the Guadalupe River Park multi-use trail (Class I Bikeway) is located about three-quarters of a mile west of the project site and provides a off-street bicycle route. However, to access the trail from the project site bicyclists would need to use Taylor Street which does not contain bike lanes.

Although many of the roadways in the project area contain moderate to the heavy traffic volumes that they experience, presence of on-street parking, and narrow bicycle travel area, bicyclists may nonetheless choose to use these roads for commuting since they often provide the shortest route for this purpose. A reasonable assumption for bicycle commute trip generation would be a one percent mode share. This calculates to approximately 5 bicycle trips during the AM and PM peak hours. Thus, the project is expected to add very little bicycle traffic to the roadways in the study area.

In summary, the project would not have an adverse effect on the existing transit, pedestrian or bicycle facilities in the study area or conflict with adopted policies, plans or programs supporting alternative transportation.

(7) Japantown Area Activities. The Japantown area is the center of Japanese and Japanese-American culture in the City of San Jose, as is often expressed in festivals and parades such as Nikkei Matsuri in May, Obon/Bazaar in July, Aki Matsuri in September, and the Spirit of Japantown Festival in October. The Japantown area also is host to a certified farmers market, art galleries and other street venues throughout the year. The proposed project would not prohibit the recurring Japantown events from taking place and would have no effect on street closures associated with festivals and parades.

(8) US 101/Oakland/Mabury Transportation Development Policy (TDP). The City of San Jose has identified operational problems along the Oakland Road corridor at the US 101 interchange. The operational deficiencies are primarily due to the capacity constraints of the interchange. The interchange's current configuration is inadequate to serve the vehicular demand due to it serving as the main gateway into the Oakland Road area and as the only route across US 101. As a result, the City has identified two key capital improvement projects: 1) modification of the US 101/Oakland Road interchange, including improvements to the Oakland Road/Commercial Street intersection, and 2) construction of a new US 101/Mabury Road interchange. Both interchange projects will create additional capacity for accessing and crossing US 101, which will be crucial to accommodate future growth in the vicinity, including the future BART station at the San Jose Flea Market site. To fund these necessary interchange improvements, the City has developed the US 101/Oakland/Mabury Transportation Development Policy (TDP).

The purpose of the US 101/Oakland/Mabury TDP is to provide additional needed freeway access capacity at the US 101/Oakland Road interchange in order to accommodate new mixed-use, commercial and residential development, and to provide incentives for new industrial development in the areas of San Jose generally surrounding the interchange that otherwise would not be possible due to existing capacity constraints. The effect of the City Council's approval of the proposed US 101/Oakland/Mabury TDP would be to allow one or more projects to develop and generate traffic congestion in excess of the City's Level of Service Policy standard for a temporary period of time prior to construction of the required transportation improvements. This new Policy would adopt a fee to fund the planned interchange improvements. Any project that would add traffic to the US 101/Oakland Road interchange would be required to participate in the Traffic Impact Fee (TIF) program. The new TDP includes a fee schedule requiring all new developments to pay a "fair share" contribution for using a portion of the interchange capacity that would be created with buildout of the US 101/Oakland Road interchange and construction of a new US 101/Mabury Road interchange. Unlike most Area Development Policies that base their fees on the number of residential units or square footages built, the fee for the US 101/Oakland/Mabury TDP would be based on the number of PM peak hour vehicular trips added to the US 101/Oakland Road interchange.

The US 101/Oakland/Mabury TDP was reviewed and adopted by the City Council on December 18 2007. Since the proposed Japantown Corporation Yard mixed-use residential development project would send some PM peak hour trips through the US 101/Oakland Road interchange, the project shall be required to pay a fair share contribution toward the interchange improvements. The proposed fee is \$30,000 per each new PM peak hour vehicle trip that would be added to the US 101/Oakland Road interchange. Thus, should the Japantown project be approved subsequent to adoption of the TDP, the estimated fee contribution for the Japantown project would be \$840,000 (\$30,000 x 28 PM peak hour trips). The project would be required to pay the traffic impact fee prior to Public Works clearance.

g. Long-Range Conditions Traffic Analysis. This section describes traffic conditions under long-range General Amendment conditions. The Scenario was analyzed using the City's General Plan Amendment (GPA) analysis protocol which uses the City's travel demand forecasting model and produces output including roadway segment traffic projections and calculations of vehicle miles in the proximity of the project.

(1) Proximity Analysis. All proposed amendments (land use and network amendments) that are not exempted from preparing a CUBE analysis, whether they are located within or outside of a special policy subarea, require preparation of a proximity analysis. The proximity area is the geographic area near the project site within which approximately 20,000 vehicle miles of travel (VMT) occur under the adopted General Plan base condition. Generally the radius of the proximity area will vary from 0.5 to 1.5 miles, depending on the density of the roadway network and travel activity near the GPA site, and is the same for both the AM and PM peak hour analyses. The proximity analysis provides specific information on the anticipated traffic operations within the area surrounding a proposed General Plan amendment site. Specific quantitative differences in VMT on congested roadways are identified that would occur under the project condition compared to the existing General Plan base case.

Proximity analysis is a supplement to, not a substitute for, more regional analyses, and is done for all (non-exempt) amendments regardless of project location. Proximity analysis provides information on local traffic changes at a macro level; it is also not a substitute for near-term operational analysis done for development-level entitlements.

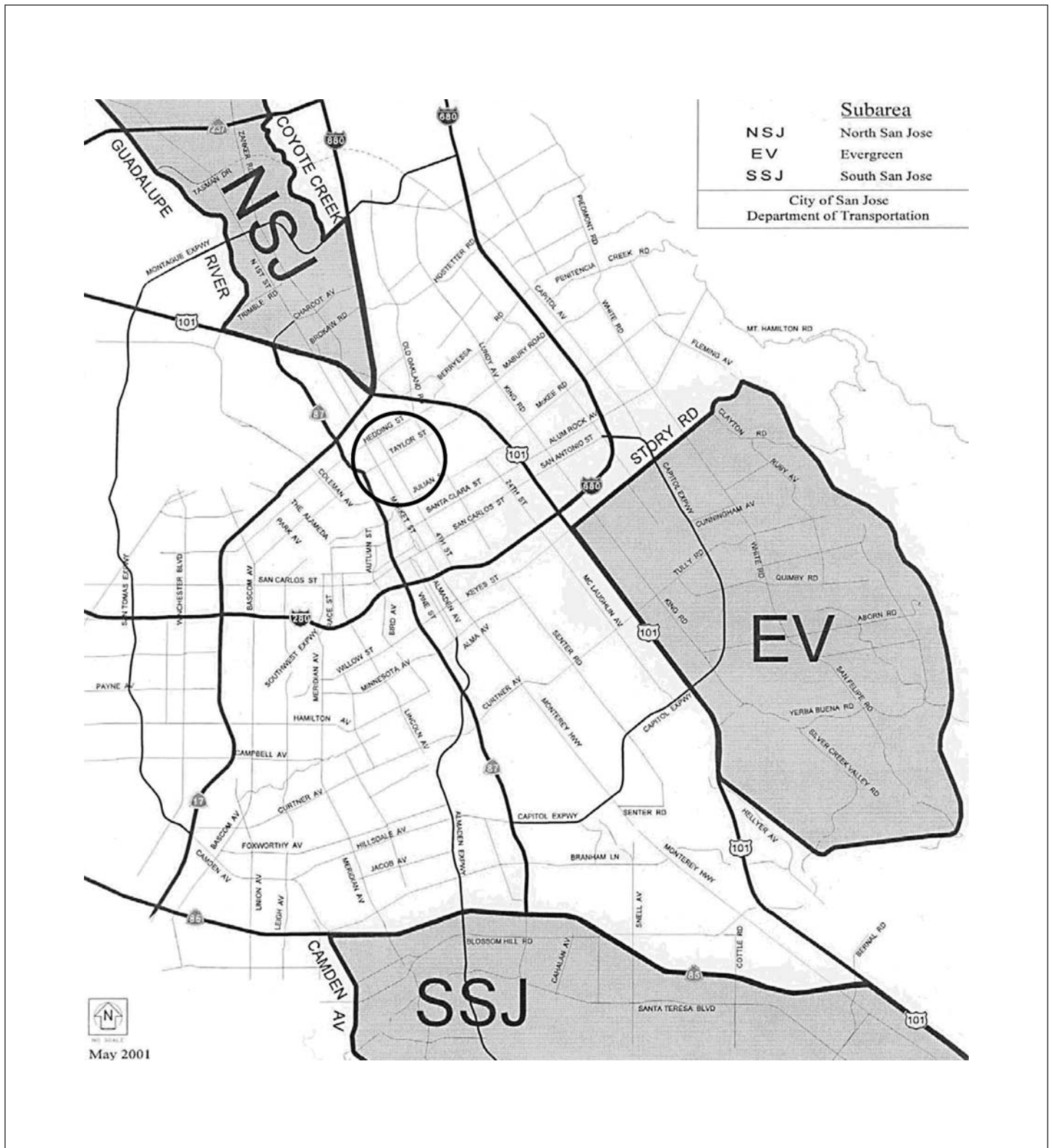
A proposed land use amendment that would intensify land use would generally be expected to result in higher congested VMT within the proximity area for the proposed amendment. These increases are then compared to the thresholds of significance.

The proximity analysis consists of the determination of differences in peak hour trip generation, vehicle-miles-traveled (VMT), and traffic added to congested links between project conditions with the proposed land use change and the existing General Plan base case. A proximity radius of 0.6 miles was determined for this GPA, since this radius corresponds to a magnitude of approximately 20,000 VMT as calculated under the General Plan base condition (see Figure V.C-8).

The results of the proximity analysis show that the proposed GPA would cause the VMT on the congested links in the project area to increase by 0.83 percent, with a corresponding increase of 72 vehicle-miles on the congested links during the AM peak hour. During the PM peak hour, the GPA would cause the VMT on the congested links in the project area to increase by 1.78 percent, with a corresponding increase of 220 vehicle-miles on the congested links.

Impact TRANS-2: Based on the impact criteria for the proximity analysis, the significant increases in PM peak hour traffic volumes on the congested roadways in close proximity to the proposed GPA site constitute a significant adverse traffic impact. (S)

The results of the proximity analysis for the proposed GPA are shown in Table V-C-9. Graphics showing the congested link locations are included with the CUBE model run results in Appendix B.



LSA

FIGURE V.C-8



NOT TO SCALE

*Japantown Corporation Yard
Redevelopment Project EIR
Long Range GPA Proximity Area Map*

SOURCE: CITY OF SAN JOSE, DEPARTMENT OF TRANSPORTATION, 2001 AND HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

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Table V-C-9: Long-Range GPA Proximity Analysis

	GP Base Case		Project GPA		Growth		Growth %		Impact?	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
VMT Congested Links	8,727.85	12,385.99	8,800.14	12,605.92	72.29	219.93	0.83%	1.78%	No	Yes

Notes:

Proximity Radius = 0.6 miles (proximity radius of 0.6 miles corresponds to a magnitude of approximately 20,000 VMT).

Significance Criteria for congested (LOS E/F) links: ½ the increase in VMT of all links (100 for AM and 100 for PM) and 100 vehicle miles.

Source: City of San Jose GP07-03-04 Proximity Analysis, November 26, 2007.

The congested (LOS E/F) links located within the 0.6-mile proximity radius of the GPA site that would experience significant increases in VMT during the PM peak hour include the southbound SR 87 on-ramp from Taylor Street, northbound and southbound North First Street, southbound North Fourth Street, southbound North Seventh Street, southbound North Eleventh Street, eastbound Mission Street, Eastbound and Westbound Taylor Street, eastbound Empire Street, and eastbound Washington Street.

Mitigation Measure TRANS-2: Mitigation for proximity impacts would involve roadway widening. Widening of these roadways would not be feasible as: they are currently, or are planned to be, constructed to the maximum width; further widening would result in impacts on adjacent land uses; and, it is not financially feasible for an individual development project to bear responsibility for implementing such extensive transportation system improvements. (SU)

(2) Screenline Analysis. Proposed land use amendments that are not exempt and are located outside the three special policy subareas also require a screenline analysis that quantifies trips across regional screenlines near the project site. Regional screenlines are delineated along transportation barriers, manmade or natural, that have a substantial capacity-constraining effect on local and regional travel. Regional screenlines are a method for capturing travel characteristics at a macroscopic level. Aspects of travel behavior, such as the volume and capacity of multiple roadway links, can be evaluated as a group. Instead of evaluating individual link volume and capacity, links affected by an amendment are evaluated collectively at or near all of the screenlines within the proposed amendment's proximity area by summing up volume and capacity of all roadway links that cross each screenline. The methodology to evaluate grouped volume-to-capacity ratio is the aggregated V/C ratio. Aggregated V/C can be computed for: (1) all links, and (2) congested links only, on a screenline affected by an amendment. Aggregated volume-to-capacity ratios (Agg. V/C) and aggregated volume-to-capacity ratios for congested links (Agg. E/F V/C), are computed at the regional screenline that is impacted by a proposed amendment. The screenline analysis measures area-wide traffic tendencies and impacts. Because regional screenlines are typically contiguous lines stretching for miles, aggregated V/C is computed for screenlines that are within 2.5 miles of a project site.

Roadway links are grouped by level of congestion. Roadway links with a volume-to-capacity ratio (V/C ratio) greater than 0.9 are treated as congested links. Average roadway capacities are also computed and paired with aggregated V/C for evaluation of significant impacts. Average congested link capacity is calculated for congested links only, and is compared to the total increase in volumes on the congested links evaluated. The increases in aggregated V/C for congested (LOS E/F) links are compared to the thresholds of significance.

The determination of significance is based on the extent to which the proposed land use change contributes to existing peak hour congestion in the vicinity of the proposed General Plan Amendment site. As previously stated, the evaluation of the effects of the proposed land use change is based on a quantification of increased trips across regional screenlines near the project and a proximity analysis. These analyses provide specific information on the anticipated traffic operations within the area surrounding the GPA site.

Consistent with City policies and practice, the CUBE model used to evaluate traffic impacts for this proposed amendment includes all major transportation infrastructure identified in the General Plan *Land Use/Transportation Diagram*, including infrastructure that is not yet built and/or funded.

The following four sets of screenlines (link sets) were analyzed for the AM and PM peak hours (see Figure V.C-9):

- Link Set #1 includes the following parallel facilities located south of Naglee Avenue, Jackson Avenue and Mabury Road: SR 87, North First Street, North Second Street, North Fourth Street, North Seventh Street, North Tenth Street, and North Eleventh Street.
- Link Set #2 includes the following parallel facilities located south of SR 87 and I-880: SR 87, North First Street, North Fourth Street, and North Tenth Street.
- Link Set #3 includes the following parallel facilities located east of I-880, North Tenth Street and North Eleventh Street: St. James Street, Julian Street, Washington Street, Empire Street, Jackson Street, Taylor Street, Mission Street, Hedding Street, and US 101.
- Link Set #4 includes the following parallel facilities that cross the Guadalupe River: I-880, Hedding Street, Taylor Street, Coleman Avenue, and Julian Street.

Impact TRANS-3: Based on the results of the proposed GPA screenline analysis, the significant increases in V/C and the corresponding significant increases in traffic volumes on the congested (LOS E/F) roadways included in link set #2 during the PM peak hour constitutes a significant adverse traffic impact. (S)

Mitigation Measure TRANS-3: Mitigation for screenline impacts would involve roadway widening. Widening of these roadways would not be feasible as: they are currently, or are planned to be, constructed to the maximum width; further widening would result in impacts on adjacent land uses; and, it is not financially feasible for an individual development project to bear responsibility for implementing such extensive transportation system improvements. (SU)

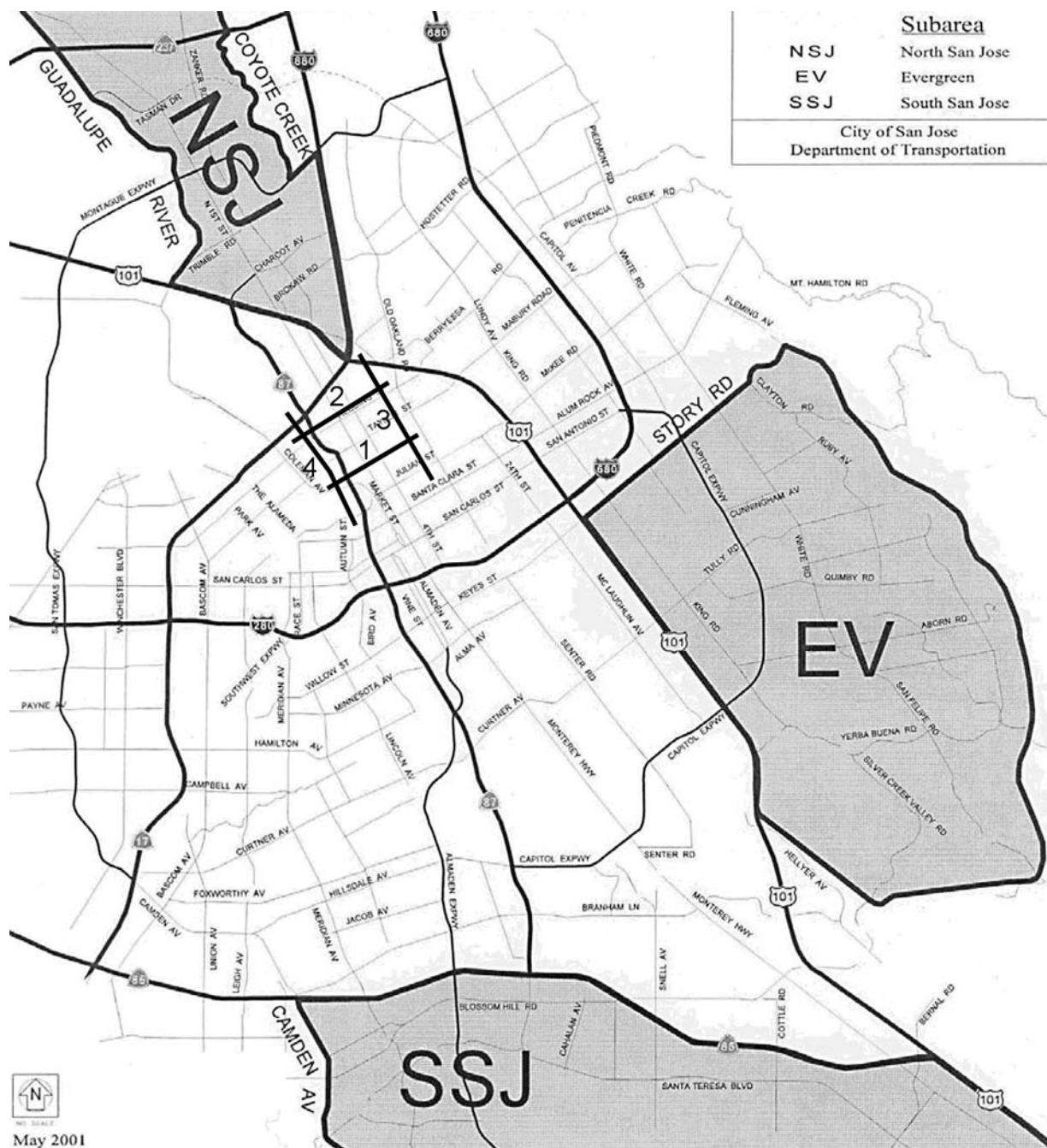


FIGURE V.C-9

LSA



NOT TO SCALE

*Japantown Corporation Yard
Redevelopment Project EIR*
Long Range GPA Screenline Locations

SOURCE: CITY OF SAN JOSE, DEPARTMENT OF TRANSPORTATION, 2001 AND HEXAGON TRANSPORTATION CONSULTANTS, INC., 2007

I:\WDD0701 japantown\figures\Fig_VC9.ai (1/23/08)

h. Cumulative Conditions Traffic Analysis. This section describes traffic conditions under cumulative conditions. The Cumulative Scenario was analyzed using the City's General Plan Amendment (GPA) analysis protocol which uses the City's travel demand forecasting model and produces output including roadway segment traffic projections and calculations of vehicle miles of travel and vehicle hours of travel.

(1) Cumulative General Plan Amendment Analysis. A General Plan Amendment (GPA) long-range analysis was conducted in order to evaluate the long-term traffic implications of the proposed change in General Plan land use designation for the entire project site. Currently, the General Plan land use designation for the northern portion of the Corporation Yard site is Jackson-Taylor PRC Mixed-Use #2. The Mixed-Use designation allows a mix of high density residential (including condominiums and apartments), retail (primarily neighborhood serving), office, and a limited amount of other commercial uses, and encourages vertical mixed-use. The Mixed-Use #2 designation specifically allows High Density Residential (25 to 50 dwelling units per acre) uses, 150 senior housing units, a 40-room inn, up to 80,000 square feet of office, and between 33,000 and 53,750 square feet of retail. The commercial square footage may also include a cultural center. Within the Mixed-Use #2 land use designation, the height limit is 65 feet and all parking should be below ground or internal to the building. The General Plan designation for the southern portion of the Corporation Yard site is Public Park/Open Space. The General Plan land use designation for the City surface parking lot site across North Sixth Street is Medium High Density Residential (12 to 25 dwelling units per acre).

The project would require a General Plan Amendment to designate the entire Corporation Yard site and the City surface parking lot site Jackson-Taylor PRC Mixed-Use #2A, which would constitute a new land use designation within the City's General Plan. With respect to the Corporation Yard site, Mixed-Use #2A would allow uses at a density of up to 105 dwelling units per gross acre over the entire site, up to 30,000 square feet of retail, and 10,000 to 20,000 square feet of community amenity space. This new land use designation also would establish a height limit of up to 175 feet and allow limited surface parking.

The cumulative analysis includes all proposed 2020 General Plan land use and transportation network amendments, including those individual amendments that were exempted from preparing individual City of San Jose CUBE model analyses. The context of the cumulative impacts analysis is the land uses and time frame assumed in the City's currently adopted General Plan. The cumulative analysis presents the long-term cumulatively significant traffic impacts on the citywide transportation system associated with all of the currently proposed General Plan Amendments in the City of San Jose. The City of San Jose's traffic forecasting model was developed to help the City analyze peak hour traffic impacts attributable to changes proposed to the City's General Plan. The model is implemented using the CUBE transportation planning software system and is consistent with the structures of the Metropolitan Transportation Commission's (MTC) BAYCAST regional model and VTA's VTP2030 model. The San Jose model includes the following four elements traditionally associated with models of this kind:

- Trip Generation,
- Trip Distribution,
- Mode Choice, and

- Traffic Assignment.

The detailed results and description of the long-range GPA and cumulative analyses are contained in Appendix B.

Impact TRANS-4: The proposed project would cumulatively cause the total VMT and VHT to exceed the significance criteria for all roadways in Santa Clara County during both the AM and PM traffic periods, significantly increase peak direction traffic volumes across all three special subarea cordon lines and significantly increase V/C across regional screenline links. (S)

The cumulative analysis indicates that the proposed land use changes would result in significant increases across many of the screenlines that were analyzed, resulting increases in VMT, VHT, and links (roadways) operating at LOS E/F. Consistent with City policies and practice, the CUBE model used to evaluate cumulative traffic impacts includes all major transportation infrastructure projects identified in the General Plan *Land Use/ Transportation Diagram*, including infrastructure that is not yet built and/or funded such as the US 101/Mabury and US 101/Zanker/4th Street interchanges. Therefore, mitigation measures that would require additions to the transportation system, either added roadway or transit capacity, are not feasible to mitigate any significant cumulative transportation impacts.

Mitigation Measure TRANS-4: Feasible mitigation measures are not available to reduce this impact to a less than significant level. (SU)

Two major General Plan transportation infrastructures in the proximity of the project, the US 101/Zanker/4th Street interchange and the US 101/Mabury interchange, are not constructed as of now. Though constructing the interchanges is not a mitigation measure, this project would make fair share contribution under the adopted US 101/Oakland/Mabury Transportation Development Policy toward the construction of the US 101/Mabury interchange to help alleviate the long range impacts. Additionally, the conformance with the following General Plan policies can reduce impacts from the proposed project:

- Transportation Policy # 1 (Thoroughfares): Inter-neighborhood movement of people and goods should occur on thoroughfares and is discouraged on neighborhood streets.
- Transportation Policy #3 (Thoroughfares): Public street right-of-way dedication and improvements should be required as development occurs. Ultimate thoroughfare right-of-way should be no less than the dimensions as shown on the Land Use/Transportation Diagram except when a lesser right-of-way will avoid significant social, neighborhood or environmental impacts and perform the same traffic movement function.
- Transportation Policy #8 (Thoroughfares): Vehicular, bicycle, and pedestrian safety should be an important factor in the design of streets and roadways.
- Transportation Policy #9 (Impacts on Local Neighborhoods): Neighborhood streets should be designed to discourage through traffic and unsafe speeds. If neighborhood streets are used for through traffic or if they are traveled at unsafe speeds, law enforcement and traffic operations techniques should be employed to mitigate these conditions.
- Transportation Policy #11 (Transit Facilities): The City should cooperate with transportation agencies to achieve the following objectives for the County's public transit system:
 - Provide all segments of the City's population, including the handicapped, elderly, youth and economically disadvantaged, with adequate access to public transit. Public transit should be designed to be an attractive, convenient, dependable and safe alternative to the automobile.

- Enhance transit service in major commute corridors, and provide convenient transfers between public transit systems and other modes of travel.
- Transportation Policy #16 (Pedestrian Facilities): Pedestrian travel should be encouraged as a viable mode of movement between high density residential and commercial areas throughout the City and in activity areas such as schools, parks, transit stations, and in urban areas, particularly the Downtown Core Area and neighborhood business districts by providing safe and convenient pedestrian facilities.
- Transportation Policy #41 (Bicycling): The City should develop a safe, direct, and well-maintained transportation bicycle network linking residences, employment centers, schools, parks and transit facilities and should promote bicycling as an alternative mode of transportation for commuting as well as for recreation.
- Transportation Policy #42 (Bicycling): Bike lanes are considered generally appropriate on arterial and major collector streets. Right-of-way requirements for bike lanes should be considered in conjunction with planning the major thoroughfares network and in implementing street improvement projects.
- Transportation Policy #43 (Bicycling): Priority improvements to the Transportation Bicycle Network should include:
 - Bike routes linking light rail stations to nearby neighborhoods.
 - Bike paths along designated trails and pathways corridors.
 - Bike paths linking residential areas to major employment centers.

D. AIR QUALITY

This section has been prepared using methodologies and assumptions recommended in the air quality impact assessment guidelines of the Bay Area Air Quality Management District (BAAQMD).¹ In keeping with these guidelines, this section describes existing air quality in San Jose and the Bay Area, impacts of future traffic on local carbon monoxide levels, impacts of land use related vehicular emissions that have regional effects, and other effects of the project related to air quality. Mitigation measures to reduce or eliminate potentially significant air quality impacts are identified, where appropriate.

1. Setting

The following discussion provides an overview of existing air quality conditions in the region and in San Jose. Ambient standards and the regulatory framework relating to air quality are summarized. Climate, air quality conditions, and typical air pollutant types and sources are also described.

a. Air Quality Standards, Regulatory Framework and Attainment Status. Air quality standards, the regulatory framework, and State and federal attainment status are discussed below.

(1) Air Quality Standards. Both the State and federal governments have established health-based Ambient Air Quality Standards for six air pollutants: carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), and suspended particulate matter (PM). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. These standards are designed to protect public health and welfare with a reasonable margin of safety.

In addition to primary and secondary Ambient Air Quality Standards, the State of California has established a set of episode criteria for O₃, CO, NO₂, SO₂, and PM. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health. Health effects are progressively more severe as pollutant levels increase from Stage One to Stage Three.

California Ambient Air Quality Standards and National Ambient Air Quality Standards for the criteria air pollutants are listed in Table V.D-1. Health effects of these criteria pollutants are described in Table V.D-2.

(2) Regulatory Framework. The BAAQMD is primarily responsible for regulating air pollution emissions from stationary sources (e.g., factories) and indirect sources (e.g., traffic associated with new development), as well as for monitoring ambient pollutant concentrations. The District's jurisdiction encompasses seven counties—Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara and Napa—and portions of Solano and Sonoma counties. The California Air Resources Board (ARB) and the U.S. Environmental Protection Agency (EPA) regulate direct emissions from motor vehicles.

¹ Bay Area Air Quality Management District, 1999. *BAAQMD CEQA Guidelines*.

Table V.D-1: Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ^a		Federal Standards ^b		
		Concentration ^c	Method ^d	Primary ^{c,e}	Secondary ^{c,f}	Method ^g
Ozone (O ₃)	1-Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	No federal standard	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m ³)		0.08 ppm (157 µg/m ³)		
Respirable Particulate Matter (PM ₁₀)	24-Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM _{2.5})	24-Hour	No Separate State Standard		35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	15 µg/m ³		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	None	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—		
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.03 ppm (56 µg/m ³)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.18 ppm (338 µg/m ³)		—		
	24-Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (365 µg/m ³)		
Lead	30-day average	1.5 µg/m ³	Atomic Absorption	—	—	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³	Same as Primary Standard	
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (80 µg/m ³)	—	Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (365 µg/m ³)	—	
	3-Hour	—		—	0.5 ppm (1300 µg/m ³)	
	1-Hour	0.25 ppm (655 µg/m ³)		—	—	
Visibility-Reducing Particles	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		
Sulfates	24-Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ^h	24-Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

Source: ARB, 2007.

- ^a California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM₁₀, PM_{2.5}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- ^b National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
- ^c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ^d Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- ^e National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- ^f National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ^g Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.
- ^h The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Table V.D-2: Health Effects of Air Pollutants

Pollutant	Health Effects	Examples of Sources
Suspended Particulate Matter (PM _{2.5} and PM ₁₀)	- Reduced lung function - Aggravation of the effects of gaseous pollutants - Aggravation of respiratory and cardio respiratory diseases - Increased cough and chest discomfort - Soiling - Reduced visibility	- Stationary combustion of solid fuels - Construction activities - Industrial processes - Atmospheric chemical reactions
Ozone (O ₃)	- Breathing difficulties - Lung damage	Formed by chemical reactions of air pollutants in the presence of sunlight; common sources are motor vehicles, industries, and consumer products
Carbon Monoxide (CO)	- Chest pain in heart patients - Headaches, nausea - Reduced mental alertness - Death at very high levels	Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Lead (Pb)	- Organ damage - Neurological and reproductive disorders - High blood pressure	- Metals processing - Fuel combustion - Waste disposal
Nitrogen Dioxide (NO ₂)	Lung damage	See carbon monoxide sources
Toxic Air Contaminants	- Cancer - Chronic eye, lung, or skin irritation - Neurological and reproductive disorders	- Cars and trucks, especially diesels - Industrial sources such as chrome platers - Neighborhood businesses such as dry cleaners and service stations - Building materials and products

Source: ARB and EPA, 2005.

Federal Clean Air Act. The Federal 1970 Clean Air Act authorized the establishment of national health-based air quality standards and also set deadlines for the attainment of these standards. The Federal Clean Air Act Amendments of 1990 changed deadlines for attaining National Ambient Air Quality Standards as well as the remedial actions required of areas in the nation that exceed the standards. Under the Clean Air Act, State and local agencies in areas that exceed the National Ambient Air Quality Standards are required to develop State Implementation Plans to show how they will achieve the National Ambient Air Quality Standards for O₃ by specific dates.

The Clean Air Act requires that projects receiving federal funds demonstrate conformity to the approved State Implementation Plan and local air quality attainment plan for the region. Conformity with the State Implementation Plan requirements would satisfy the Clean Air Act requirements.

California Clean Air Act. In 1988, the California Clean Air Act required that all air districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards for O₃, CO, SO₂ and NO₂ by the earliest practical date. Plans for attaining California Ambient Air Quality Standards were submitted to the California Air Resource Board every three years since 1991. The California Clean Air Act provides districts with new authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each district plan must achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. Additional physical or economic development within the region would tend to impede the emissions reduction goals of the California Clean Air Act. The State standards for these pollutants are more stringent than the national standards.

The most recent BAAQMD plan for attaining California Ambient Air Quality Standards, the Bay Area 2005 Ozone Strategy, was adopted by the District's Board of Directors on January 4, 2006. The 2005 Ozone Strategy demonstrates how the San Francisco Bay Area will achieve compliance with the State 1-hour air quality standard for ozone and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. The Ozone Strategy also includes stationary source control measures, mobile source control measures and transportation control measures.

(3) Attainment Status Designations. The California Air Resources Board is required to designate areas of the State as attainment, nonattainment or unclassified for any State standard. An "attainment" designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A "nonattainment" designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An "unclassified" designation signifies that data does not support either an attainment or nonattainment status. The California Clear Air Act divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for O₃, CO, and NO₂ as either "does not meet the primary standards," or "cannot be classified," or "better than national standards." For SO₂, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." In 1991, new nonattainment designations were assigned to areas that had previously been classified as Group I, II, or III for PM₁₀ based on the likelihood that they would violate national PM₁₀ standards. All other areas are designated "unclassified."

Table V.D-3 provides a summary of the attainment status for the San Francisco Bay Area with respect to national and State ambient air quality standards.

b. Existing Climate and Air Quality. The following discussion provides brief summaries of regional air quality, local climate and air quality, and air pollution climatology.

(1) Regional Air Quality. The City of San Jose is located in the San Francisco Bay Area, a large shallow air basin ringed by hills that taper into a number of sheltered valleys around the perimeter. Two primary atmospheric outlets exist. One is through the strait known as the Golden Gate, a direct outlet to the Pacific Ocean. The second extends to the northeast, along the west delta region of the Sacramento and San Joaquin Rivers.

The City of San Jose is within the jurisdiction of the BAAQMD. Air quality conditions in the San Francisco Bay Area have improved significantly since the BAAQMD was created in 1955. Ambient concentrations of air pollutants and the number of days during which the region exceeds air quality standards have fallen dramatically. Exceedances of air quality standards occur primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights or hot, sunny summer afternoons.

Ozone levels, measured by peak concentrations and the number of days over the State one-hour standard, have declined substantially as a result of aggressive programs by the BAAQMD and other regional, State and federal agencies. The reduction of peak concentrations represents progress in improving public health; however, the Bay Area still exceeds the State standard for one-hour ozone. Levels of PM₁₀ in the Bay Area have exceeded State standards at least three times per year the last three years. As such, the Bay Area is considered a nonattainment area for PM₁₀ relative to the State standards, but is considered an unclassified area according to the federal standard. The Bay Area has been designated as an attainment area for federal standards, but is a nonattainment area for PM_{2.5} under State standards.

No exceedances of the State or federal CO standards have been recorded at any of the region's monitoring stations since 1991. The Bay Area is currently considered a maintenance area for State and federal CO standards.

(2) Local Climate and Air Quality. Air quality is a function of both local climate and local sources of air pollution. Air quality is the balance of the natural dispersal capacity of the atmosphere and emissions of air pollutants from human uses of the environment. Northwesterly and northerly winds are most common in the project area, reflecting the orientation of the Bay and the San Francisco Peninsula. Winds from these directions carry pollutants released by autos and factories from upwind areas of the Peninsula toward San Jose, particularly during the summer months. Winds are lightest on the average in fall and winter at which time local pollutants tend to build up in the atmosphere.

Pollutants can be diluted by mixing in the atmosphere both vertically and horizontally. Vertical mixing and dilution of pollutants are often suppressed by inversion conditions, when a warm layer of air traps cooler air close to the surface. During the summer, inversions are generally elevated above ground level, but are present over 90 percent of both the morning and afternoon hours. In winter, surface-based inversions dominate in the morning hours, but frequently dissipate by afternoon.

Table V.D-3: Bay Area Attainment Status

Pollutant	Averaging Time	California Standards ^a		National Standards ^b	
		Concentration	Attainment Status	Concentration	Attainment Status
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m ³)	Attainment	9 ppm (10 mg/m ³)	Attainment ^c
	1-Hour	20 ppm (23 mg/m ³)	Attainment	35 ppm (40 mg/m ³)	Attainment
Nitrogen Dioxide (NO ₂)	Annual Mean	Not Applicable	Not Applicable	0.053 ppm (100 µg/m ³)	Attainment
	1-Hour	0.25 ppm (470 µg/m ³)	Attainment	Not Applicable	Not Applicable
	24-Hour	0.04 ppm (105 µg/m ³)	Attainment	0.14 ppm (365 µg/m ³)	Attainment
Ozone (O ₃)	8-Hour	0.07 ppm (137 µg/m ³)	Unclassified	0.08 ppm	Marginal
	1-Hour	0.09 ppm (180 µg/m ³)	Nonattainment	Not Applicable	Not Applicable ^d
Suspended Particulate Matter (PM ₁₀)	Annual Mean	20 µg/m ³	Nonattainment	Not Applicable	Not Applicable
	24-Hour	50 µg/m ³	Nonattainment	150 µg/m ³	Unclassified
Suspended Particulate Matter (PM _{2.5})	Annual Mean	12 µg/m ³	Nonattainment	15 µg/m ³	Attainment
	24-Hour	Not Applicable	Not Applicable	35 µg/m ³	Unclassified
Lead (pb)	30-Day Average	1.5 µg/m	Attainment	Not Applicable	Not Applicable
	Calendar Quarter	Not Applicable	Not Applicable	1.5 µg/m ³	Attainment
Sulfur Dioxide (SO ₂)	Annual Mean	Not Applicable	Not Applicable	0.03 ppm (80 µg/m ³)	Attainment
	24-Hour	0.04 ppm (105 µg/m ³)	Attainment	0.14 ppm (365 µg/m ³)	Attainment
	1-Hour	0.25 ppm (655 µg/m ³)	Attainment	Not Applicable	Not Applicable

^a California standards for O₃, CO (except Lake Tahoe), SO₂ (1-hour and 24-hour), NO₂ and PM₁₀ are values that are not to be exceeded. If the standard is for a 1-hour, 8-hour, or 24-hour average, then some measurements may be excluded. In particular, measurements are excluded that ARB determines would occur less than once per year on the average.

^b National standards other than for O₃ and those based on annual averages or annual arithmetic means are not to be exceeded more than once a year. For example, the O₃ standard is attained if, during the most recent 3- year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than 1.

^c In April 1998, the Bay Area was redesignated to Attainment for the national 8-hour CO standard.

^d The National 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005.

Lead (Pb) is not listed in the above table because it has been in attainment since the 1980s.

ppm = parts per million

mg/m³ = milligrams per cubic meter

µg/m³ = micrograms per cubic meter

Source: Bay Area Air Quality Management District, Bay Area Attainment Status, 2007.

Topography can restrict horizontal dilution and mixing of pollutants by creating a barrier to air movement. The South Bay has significant terrain features that affect air quality. The Santa Cruz Mountains and Diablo Range on either side of the South Bay restrict horizontal dilution, and this

alignment of the terrain also channels winds from the north to the south, carrying air pollution from the northern Peninsula toward San Jose.

The combined effects of moderate ventilation, frequent inversions that restrict vertical dilution, and terrain that restricts horizontal dilution give San Jose a relatively high atmospheric potential for air pollution compared to other parts of the San Francisco Bay Air Basin.

Pollutant monitoring results for the years 2004 to 2006 shown in Table V.D-4 at the San Jose-Jackson Street ambient air quality monitoring station indicate that air quality in the project area has generally been good. As indicated in the monitoring results, there were four recorded violations of the State PM₁₀ standard during 2004, and two violations in both 2005 and 2006; no violations of the federal PM₁₀ standard were recorded. No violations of the State and federal PM_{2.5} standards were recorded during the 3-year period. State 1-hour O₃ standards were exceeded up to five times in 2006 at this monitoring station. Federal O₃ concentration standards have not been exceeded within the 3-year period at this monitoring station. CO, NO₂, and SO₂ standards were not exceeded in this area during the 3-year period. The closest monitoring station with recorded SO₂ concentration data was the monitoring station at Arkansas Street in San Francisco.

c. Air Quality Issues. Five key air quality issues in the Bay Area—CO hotspots, vehicle emissions, fugitive dust, odors, and construction equipment exhaust—are described below.

(1) Local Carbon Monoxide Hotspots. Local air quality is most affected by CO emissions from motor vehicles. CO is typically the pollutant of greatest concern because it is created in abundance by motor vehicles and it does not readily disperse into the air. Idling freight trains are also a source of CO emissions. Because CO does not readily disperse, areas of vehicle congestion can create “pockets” of high CO concentration called “hot spots.” These pockets have the potential to exceed the State 1-hour standard of 20.0 ppm and/or the 8-hour standard of 9.0 ppm.

While CO transport is limited, it disperses with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations near congested roadways or intersections may reach unhealthful levels that adversely affect local sensitive receptors (e.g., residents, schoolchildren, the elderly, hospital patients, etc.). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentration, modeling is recommended to determine a project’s effect on local CO levels.

(2) Vehicle Emissions. Long-term air emission impacts are those associated with changes in automobile travel within the City. Mobile source emissions would result from vehicle trips associated with increased vehicular travel. As is true throughout much of the U.S., motor vehicle use is projected to increase substantially in the region. The BAAQMD, local jurisdictions, and other parties responsible for protecting public health and welfare will continue to seek ways of minimizing the air quality impacts of growth and development in order to avoid further exceedances of the standards.

(3) Fugitive Dust. Fugitive dust emissions are generally associated with demolition, land clearing, exposure of soils to the air, and cut and fill operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions.

Table V.D-4: Ambient Air Quality at the Jackson Street, San Jose Monitoring Station

Pollutant	Standard	2004	2005	2006
Carbon Monoxide (CO)				
Maximum 1 hour concentration (ppm)		4.4	4.3	4.1
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8 hour concentration (ppm)		3.0	3.1	2.9
Number of days exceeded:	State: > 9 ppm	0	0	0
	Federal: > 9 ppm	0	0	0
Ozone (O₃)				
Maximum 1 hour concentration (ppm)		0.090	0.113	0.118
Number of days exceeded:	State: > 0.09 ppm	0	1	5
Maximum 8 hour concentration (ppm)		0.068	0.080	0.087
Number of days exceeded:	State: > 0.07 ppm	ND	ND	ND
	Federal: > 0.08 ppm	0	0	1
Coarse Particulates (PM₁₀)				
Maximum 24 hour concentration (µg/m ³)		55	50	69
Number of days exceeded:	State: > 50 µg/m ³	4	2	2
	Federal: > 150 µg/m ³	0	0	0
Annual arithmetic average concentration (µg/m ³)		22	22	20
Exceeded for the year:	State: > 20 µg/m ³	Yes	Yes	No
	Federal: > 50 µg/m ³	No	No	No
Fine Particulates (PM_{2.5})				
Maximum 24 hour concentration (µg/m ³)		52	55	64
Number of days exceeded:	Federal: > 65 µg/m ³	0	0	0
Annual arithmetic average concentration (µg/m ³)		11.6	11.8	10.8
Exceeded for the year:	State: > 12 µg/m ³	No	No	No
	Federal: > 15 µg/m ³	No	No	No
Nitrogen Dioxide (NO₂)				
Maximum 1 hour concentration (ppm)		0.073	0.074	0.074
Number of days exceeded:	State: > 0.25 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.019	0.019	0.018
Exceeded for the year:	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO₂)^a				
Maximum 1 hour concentration (ppm)		0.044	0.019	0.025
Number of days exceeded:	State: > 0.25 ppm	0	0	0
Maximum 3 hour concentration (ppm)		0.027	0.013	0.015
Number of days exceeded:	Federal: > 0.5 ppm	0	0	0
Maximum 24 hour concentration (ppm)		0.008	0.007	0.006
Number of days exceeded:	State: > 0.04 ppm	0	0	0
	Federal: > 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.002	0.002	0.002
Exceeded for the year:	Federal: > 0.030 ppm	No	No	No

Source: ARB and EPA Web sites.

ppm = parts per million

µg/m³ = micrograms per cubic meter

ND = No data. There was insufficient (or no) data to determine the value.

^a San Francisco-Arkansas Street was the closest monitoring station with SO₂ data.

The U.S. EPA has developed an approximate emission factor for construction-related emissions of total suspended particulate of 1.2 tons per acre per month of activity. This factor assumes a moderate activity level, moderate silt content in soils being disturbed, and a semi-arid climate. The California

Air Resources Board estimates that 64 percent of construction-related total suspended particulate emissions is PM₁₀. Therefore, the emission factors for uncontrolled construction-related PM₁₀ emissions are:

- 0.77 tons per acre per month of PM₁₀; or
- 51 pounds per acre per day of PM₁₀.

However, construction emissions can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors. There are a number of feasible control measures that can be reasonably implemented to significantly reduce PM₁₀ emissions from construction. Rather than attempting to provide detailed quantification of anticipated construction emissions from projects, the BAAQMD suggests the following:

“The determination of significance with respect to construction emissions should be based on a consideration of the control measures to be implemented. From the District’s perspective, quantification of emissions is not necessary, although a lead agency may elect to do so. If all of the control measures indicated as appropriate, depending on the size of the project, are implemented, then air pollution from emissions from construction activities would be considered a less-than-significant impact.”²

(4) Odors. Odors are also an important element of local air quality conditions. Specific activities allowed within each of the major general plan land use categories can raise concerns on the part of nearby neighbors. Major sources of odors include restaurants, manufacturing plants, and agricultural operations. Other odor producers include the industrial facilities within the region. While sources that generate objectionable odors must comply with air quality regulations, the public’s sensitivity to locally produced odors often exceeds regulatory thresholds.

(5) Construction Equipment Exhaust. Construction activities cause combustion emissions from utility engines, heavy-duty construction vehicles, equipment hauling materials to and from construction sites, and motor vehicles transporting construction crews. Exhaust emissions from construction activities vary daily as construction activity levels change. The use of construction equipment results in localized exhaust emissions.

2. Impacts and Mitigation Measures

This section evaluates potential impacts to air quality resulting from implementation of the proposed project. The evaluation of environmental effects presented in this section focuses on consistency with air quality management plans, and potential air quality impacts associated with construction emissions, odors, and development-related traffic emissions. Mitigation measures are proposed as appropriate.

a. Criteria of Significance. The criteria of significance described below establish the thresholds for determining whether an impact is significant. A significant impact would occur with implementation of the proposed project if it would result in an exceedance of the following criteria. The project would result in a significant air quality impact if it would:

² Bay Area Air Quality Management District, 1966. *BAAQMD CEQA Guidelines Assessing the Air Quality Impacts of Projects and Plans*. April. (Amended in December 1999.)

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate the District's air quality standards or contribute substantially to an existing or projected air quality violation by:
 - o Contributing to CO concentrations exceeding the State ambient air quality standards of 9 ppm averaged over 8 hours or 20 ppm for 1 hour; or
 - o Generating criteria air pollutant emissions of ROG, NO_x, or PM₁₀ in excess of 15 tons per year, or 80 pounds per day.
- Frequently expose a substantial number of people to objectionable odors.
- Expose sensitive receptors or the general public to substantial levels of toxic air contaminants in excess of the following thresholds:
 - o Probability of contacting cancer for the Maximally Exposed Individual (MEI) exceeds 10 in one million; or
 - o Ground-level concentrations of non-carcinogenic toxic air contaminants would result in a Hazard Index greater than 1 from the MEI.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). Projects that would individually have a significant air quality impact due to project operations would also result in a cumulative air quality impact. For projects that do not individually have significant operational air quality impacts, a cumulative impact would result if the project would cause the City's General Plan to conflict with the Clean Air Plan or if the City's General Plan is already inconsistent with the Clean Air Plan and the project would combine with other reasonably foreseeable future projects to either 1) exceed the BAAQMD individual operational thresholds of significance, or 2) or exceed the CAP population and VMT assumptions for growth in the City or County.

The BAAQMD does not consider construction impacts to be significant if the District's control measures for construction emission for PM₁₀ are implemented. It should be noted that the emission thresholds were established based on the attainment status of the air basin in regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

b. Less-than-Significant Impacts. This section discusses less-than-significant air quality impacts.

(1) Clean Air Plan (CAP) Consistency. The Bay Area 2005 Ozone Attainment Plan discussed above is the relevant regional air quality plan. The BAAQMD uses the CAP to evaluate a project's potential cumulative air quality impacts. The BAAQMD CEQA Guidelines state that "for any project that does not individually have significant operational air quality impacts, the determination of significant cumulative impacts should be based on an evaluation of the consistency of the project with the local general plan and the general plan with the regional air quality plan." The BAAQMD CEQA Guidelines present the following elements for evaluation of consistency between the General Plan and the CAP:

- General Plan population projections are consistent with CAP and ABAG projections;
- Rate of increase in vehicle miles traveled (VMT) does not exceed rate of increase in population;
- General plan implements CAP transportation control measures; and
- General plan provides buffer zones around sources of odors, toxics and accidental releases.

The proposed project would require a General Plan Amendment to allow the development of the proposed project. The General Plan Amendment would allow for the project's mixed use and housing density. The project would increase the City's population by 2,154 persons. This increase in population would represent less than one percent of the City's 2005 and 2010 population, respectively. The proposed project would not result in substantial population growth beyond that planned for the City.

ABAG projects that the City of San Jose will build 18,630 new housing units between 2005 and 2010 and 150,632 new housing units between 2000 and 2035. The proposed project would fulfill 3.7 percent of the units between 2005 and 2010 and less than one percent of the units between 2000 and 2035. The increase in population and VMT associated with the proposed project would be consistent with CAP and ABAG projections for the City of San Jose.

The City of San Jose's General Plan is in general conformance with the CAP and the proposed project would not expose sensitive receptors to objectionable odors, toxics, or accidental releases of hazardous materials.

(2) Odor Emissions. The project would not contain any major sources of odor, and would not be located in an area with existing objectionable odors. It therefore would have a less-than-significant impact.

(3) Operational Emissions – CO Analysis. Vehicular traffic associated with the proposed project would emit carbon monoxide (CO) into the air along roadway segments and near intersections. Because CO does not readily disperse, areas of vehicle congestion can create pockets of high CO concentrations, called "hot spots." Typically, high CO concentrations are associated with roadways or intersections operating at deficient levels of service (LOS) or with extremely high traffic volumes. Table V.D-5 lists the 1-hour and 8-hour CO concentrations for the existing (2007) conditions at sixteen intersections in the project study area. Table V.D-6 lists the background (existing plus approved projects) without and with the project concentrations. Table V.D-7 lists the cumulative (year 2025) without and with the project CO concentrations at the indicated intersections.

Based on the methodology suggested by the U.S. EPA and the California Department of Transportation, the second highest CO concentrations monitored at the nearest air monitoring station in the past 2 years (in this case 4.0 ppm for the 1-hour period and 3.0 ppm for the 8-hour period) were used as the background CO concentrations. Emission factors for study scenarios were obtained from the latest ARB data.

Table V.D-5: Existing CO Concentrations

Intersection	Receptor Distance to Road Centerline (Meters)	Existing One-Hour CO Concentration (ppm)	Existing Eight-Hour CO Concentration (ppm)	Exceeds State Standards	
				1-Hr	8-Hr
SR 87 NB Ramps and Taylor Street	21	4.7	3.0	No	No
	21	4.7	3.0	No	No
	19	4.7	3.0	No	No
	15	4.6	3.0	No	No
North 1st Street and I-880 NB Ramps	20	4.5	3.0	No	No
	19	4.4	3.0	No	No
	17	4.4	3.0	No	No
	12	4.4	3.0	No	No
North 1st Street and Hedding Street	17	4.4	3.0	No	No
	17	4.4	3.0	No	No
	17	4.4	3.0	No	No
	17	4.3	3.0	No	No
North 1st Street and Taylor Street	14	4.4	3.0	No	No
	14	4.4	3.0	No	No
	14	4.4	3.0	No	No
	14	4.4	3.0	No	No
North 1st Street and Jackson Street	12	4.2	3.0	No	No
	12	4.2	3.0	No	No
	10	4.2	3.0	No	No
	10	4.2	3.0	No	No
4th Street and Hedding Street	17	4.3	3.0	No	No
	17	4.3	3.0	No	No
	17	4.3	3.0	No	No
	17	4.3	3.0	No	No
4th Street and Taylor Street	17	4.4	3.0	No	No
	16	4.4	3.0	No	No
	14	4.4	3.0	No	No
	14	4.4	3.0	No	No
4th Street and Jackson Street	14	4.2	3.0	No	No
	14	4.2	3.0	No	No
	14	4.2	3.0	No	No
	14	4.2	3.0	No	No

Table V.D-5 *Continued*

Intersection	Receptor Distance to Road Centerline (Meters)	Existing One- Hour CO Con- centration (ppm)	Existing Eight- Hour CO Concen- tration (ppm)	Exceeds State Standards	
				1-Hr	8-Hr
7th Street and Hedding Street	14	4.3	3.0	No	No
	13	4.3	3.0	No	No
	13	4.3	3.0	No	No
	13	4.3	3.0	No	No
7th Street and Taylor Street	14	4.3	3.0	No	No
	14	4.3	3.0	No	No
	14	4.2	3.0	No	No
	14	4.2	3.0	No	No
10th Street and Hedding Street	17	4.5	3.0	No	No
	16	4.4	3.0	No	No
	15	4.4	3.0	No	No
	14	4.4	3.0	No	No
10th Street and Taylor Street	17	4.4	3.0	No	No
	16	4.3	3.0	No	No
	14	4.3	3.0	No	No
	13	4.3	3.0	No	No
10th Street and Jackson Street	17	4.3	3.0	No	No
	17	4.3	3.0	No	No
	16	4.3	3.0	No	No
	16	4.3	3.0	No	No
Oakland Road and US 101 SB Ramps	17	4.6	3.0	No	No
	17	4.6	3.0	No	No
	17	4.5	3.0	No	No
	12	4.5	3.0	No	No
13th Street and Hedding Street	17	4.5	3.0	No	No
	17	4.4	3.0	No	No
	17	4.4	3.0	No	No
	17	4.4	3.0	No	No
13th Street and Taylor Street	14	4.3	3.0	No	No
	14	4.3	3.0	No	No
	14	4.3	3.0	No	No
	14	4.3	3.0	No	No

^a Includes ambient 1-hour concentrations of 4.0 ppm and ambient 8-hour concentration of 3.0 ppm, measured at the Jackson Street, San Jose air monitoring station.

Source: LSA Associates, Inc., 2008.

Table V.D-6: Background Without and With the Project CO Concentrations

Intersection	Receptor Distance to Road Centerline (Meters)	Project Related Increase 1-hr/8-hr (ppm)	Without/With Project 1-Hour CO Concentration (ppm)	Without/With Project 8-Hour CO Concentration (ppm)	Exceeds State Standards	
					1-Hr	8-Hr
SR 87 NB Ramps and Taylor Street	21	0.1 / 0.0	4.8 / 4.9	3.6 / 3.6	No	No
	19	0.1 / 0.1	4.7 / 4.8	3.5 / 3.6	No	No
	19	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
	15	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
North 1st Street and I-880 NB Ramps	20	0.0 / 0.0	4.6 / 4.6	3.4 / 3.4	No	No
	19	0.0 / 0.0	4.6 / 4.6	3.4 / 3.4	No	No
	17	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	12	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
North 1st Street and Hedding Street	17	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	17	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	17	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	17	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
North 1st Street and Taylor Street	14	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	14	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	14	0.1 / 0.1	4.4 / 4.5	3.3 / 3.4	No	No
	14	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
North 1st Street and Jackson Street	12	0.0 / 0.0	4.2 / 4.2	3.1 / 3.1	No	No
	12	0.0 / 0.0	4.2 / 4.2	3.1 / 3.1	No	No
	10	0.0 / 0.0	4.2 / 4.2	3.1 / 3.1	No	No
	10	0.0 / 0.0	4.2 / 4.2	3.1 / 3.1	No	No
4th Street and Hedding Street	17	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
	17	0.1 / 0.1	4.3 / 4.4	3.2 / 3.3	No	No
	17	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	17	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
4th Street and Taylor Street	17	0.1 / 0.1	4.4 / 4.5	3.3 / 3.4	No	No
	16	0.1 / 0.1	4.4 / 4.5	3.3 / 3.4	No	No
	14	0.1 / 0.1	4.4 / 4.5	3.3 / 3.4	No	No
	14	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
4th Street and Jackson Street	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	14	0.0 / 0.0	4.2 / 4.2	3.1 / 3.1	No	No
7th Street and Hedding Street	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	13	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	13	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No

Table V.D-6 *Continued*

Intersection	Receptor Distance to Road Centerline (Meters)	Project Related Increase 1-hr/8-hr (ppm)	Without/With Project 1-Hour CO Concentration (ppm)	Without/With Project 8-Hour CO Concentration (ppm)	Exceeds State Standards	
					1-Hr	8-Hr
7th Street and Taylor Street	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	14	0.1 / 0.1	4.2 / 4.3	3.1 / 3.2	No	No
10th Street and Hedding Street	17	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
	16	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
	16	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
	15	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
10th Street and Taylor Street	17	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
	16	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	13	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
10th Street and Jackson Street	17	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	17	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	16	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	16	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
Oakland Road and US 101 SB Ramps	17	0.0 / 0.0	4.8 / 4.8	3.6 / 3.6	No	No
	17	0.0 / 0.0	4.8 / 4.8	3.6 / 3.6	No	No
	17	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
	17	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
13th Street and Hedding Street	17	0.0 / 0.0	4.6 / 4.6	3.4 / 3.4	No	No
	17	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	17	0.1 / 0.1	4.4 / 4.5	3.3 / 3.4	No	No
	17	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
13th Street and Taylor Street	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	14	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No

^a Includes ambient 1-hour concentrations of 4.0 ppm and ambient 8-hour concentration of 3.0 ppm, measured at the Jackson Street, San Jose air monitoring station.

Source: LSA Associates, Inc., 2008.

Table V.D-7: Cumulative (2025) Without and With the Project CO Concentrations

Intersection	Receptor Distance to Road Centerline (Meters)	Project Related Increase 1-hr/8-hr (ppm)	Without/With Project 1-Hour CO Concentration (ppm)	Without/With Project 8-Hour CO Concentration (ppm)	Exceeds State Standards	
					1-Hr	8-Hr
SR 87 NB Ramps and Taylor Street	21	0.0 / 0.0	5.4 / 5.4	4.0 / 4.0	No	No
	21	0.0 / 0.0	5.2 / 5.2	3.8 / 3.8	No	No
	19	0.1 / 0.0	5.1 / 5.2	3.8 / 3.8	No	No
	19	0.0 / 0.0	5.1 / 5.1	3.8 / 3.8	No	No
North 1st Street and I-880 NB Ramps	20	0.1 / 0.1	4.9 / 5.0	3.6 / 3.7	No	No
	19	0.0 / 0.0	4.9 / 4.9	3.6 / 3.6	No	No
	17	0.0 / 0.0	4.9 / 4.9	3.6 / 3.6	No	No
	12	0.1 / 0.0	4.8 / 4.9	3.6 / 3.6	No	No
North 1st Street and Hedding Street	17	0.1 / 0.0	4.8 / 4.9	3.6 / 3.6	No	No
	17	0.0 / 0.0	4.8 / 4.8	3.6 / 3.6	No	No
	17	0.0 / 0.0	4.8 / 4.8	3.6 / 3.6	No	No
	17	0.1 / 0.1	4.7 / 4.8	3.5 / 3.6	No	No
North 1st Street and Taylor Street	14	0.1 / 0.0	4.8 / 4.9	3.6 / 3.6	No	No
	14	0.0 / 0.0	4.8 / 4.8	3.6 / 3.6	No	No
	14	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
	14	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
North 1st Street and Jackson Street	12	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
	12	0.1 / 0.1	4.3 / 4.4	3.2 / 3.3	No	No
	10	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
	10	0.0 / 0.0	4.3 / 4.3	3.2 / 3.2	No	No
4th Street and Hedding Street	17	0.0 / 0.0	4.6 / 4.6	3.4 / 3.4	No	No
	17	0.1 / 0.0	4.5 / 4.6	3.4 / 3.4	No	No
	17	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	17	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
4th Street and Taylor Street	17	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
	17	0.1 / 0.1	4.6 / 4.7	3.4 / 3.5	No	No
	16	0.1 / 0.1	4.6 / 4.7	3.4 / 3.5	No	No
	16	0.1 / 0.1	4.6 / 4.7	3.4 / 3.5	No	No
4th Street and Jackson Street	14	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	14	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	14	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	14	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
7th Street and Hedding Street	14	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	14	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	13	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	13	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No

Table V.D-7 *Continued*

Intersection	Receptor Distance to Road Centerline (Meters)	Project Related Increase 1-hr/8-hr (ppm)	Without/With Project 1-Hour CO Concentration (ppm)	Without/With Project 8-Hour CO Concentration (ppm)	Exceeds State Standards	
					1-Hr	8-Hr
7th Street and Taylor Street	14	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	14	0.1 / 0.1	4.4 / 4.5	3.3 / 3.4	No	No
	14	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
	14	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
10th Street and Hedding Street	17	0.0 / 0.0	5.1 / 5.1	3.8 / 3.8	No	No
	16	0.0 / 0.0	5.1 / 5.1	3.8 / 3.8	No	No
	16	0.1 / 0.1	5.0 / 5.1	3.7 / 3.8	No	No
	15	0.1 / 0.1	5.0 / 5.1	3.7 / 3.8	No	No
10th Street and Taylor Street	17	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
	17	0.0 / 0.0	4.6 / 4.6	3.4 / 3.4	No	No
	16	0.0 / 0.0	4.6 / 4.6	3.4 / 3.4	No	No
	13	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
10th Street and Jackson Street	17	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	17	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	16	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	16	0.0 / 0.0	4.4 / 4.4	3.3 / 3.3	No	No
Oakland Road and US 101 SB Ramps	17	0.0 / 0.0	5.3 / 5.3	3.9 / 3.9	No	No
	17	0.0 / 0.0	5.2 / 5.2	3.8 / 3.8	No	No
	17	0.0 / 0.0	5.1 / 5.1	3.8 / 3.8	No	No
	17	0.1 / 0.1	5.0 / 5.1	3.7 / 3.8	No	No
13th Street and Hedding Street	17	0.1 / 0.1	4.9 / 5.0	3.6 / 3.7	No	No
	17	0.0 / 0.0	4.8 / 4.8	3.6 / 3.6	No	No
	17	0.0 / 0.0	4.8 / 4.8	3.6 / 3.6	No	No
	17	0.0 / 0.0	4.7 / 4.7	3.5 / 3.5	No	No
13th Street and Taylor Street	14	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	14	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	14	0.0 / 0.0	4.5 / 4.5	3.4 / 3.4	No	No
	14	0.1 / 0.1	4.4 / 4.5	3.3 / 3.4	No	No

^a Includes ambient 1-hour concentrations of 4.0 ppm and ambient 8-hour concentration of 3.0 ppm, measured at the Jackson Street, San Jose air monitoring station.

Source: LSA Associates, Inc., 2008.

Tables V.D-6 and V.D-7 show that all of the background and cumulative without and with the project 1-hour and 8-hour CO concentrations would be below the federal and State CO standards. The cumulative plus project 1-hour CO levels range from 4.3 ppm to 5.4 ppm, much lower than the State CO standard of 20 ppm. The 8-hour CO levels range from 3.2 ppm to 4.0 ppm, also much lower than the State and federal standard of 9 ppm. Modeled input values are included in Appendix C.

Results indicate that CO concentrations would increase by less than 1 ppm with implementation of the proposed project. Implementation of the proposed project would not cause an exceedance of State or federal CO standards. Therefore, the proposed project would not lead to significant CO impacts, nor would the proposed project, in combination with other cumulative development, lead to CO concentrations that exceed federal or State standards.

(4) Toxic Air Contaminants. In 1998 the ARB identified diesel engine particulate matter as a toxic air contaminant. Facilities that may have substantial diesel exhaust emissions include truck stops; warehouse/distribution centers; large retail or industrial facilities; high volume transit centers; schools with high volume of bus traffic; high volume highways or high volume arterial/roadways with high levels of diesel traffic. Areas surrounding train stations also have a high level of diesel exhaust emissions due to idling of locomotive engines.

According to the BAAQMD CEQA Guidelines, any project with the potential to expose sensitive receptors (including residential areas) or the general public to substantial levels of toxic air contaminants would be deemed to have a significant impact. This applies to receptors locating near existing sources of toxic air contaminants, as well as sources of toxic air contaminants locating near existing receptors. The proposed project is located more than 1 mile from the nearest train station and is not located adjacent a high volume freeway, therefore the proposed project would not expose future residents of the project site to substantial levels of toxic air contaminants.

c. Significant Impacts. The proposed project would result in the following significant impacts related to air quality as describe below.

Impact AIR-1: Demolition and construction period activities could generate significant dust, exhaust, and organic emissions. (S)

The proposed project would require excavation/removal of substantial amounts of soil from the site and other site preparation work. The breaking up of pavement, removal of trees, excavation of soil and existing infrastructure are activities with a high potential to generate air pollutants. In addition to the dust generated during excavation, substantial dust emissions could result from the loading of debris and soil into trucks for disposal. After removal of existing structures, construction dust would also continue to affect local air quality during construction of the project. Construction activities would generate exhaust emissions from vehicles/equipment and fugitive particulate matter emissions that would affect local air quality.

Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-water-base paints, thinners, some insulating materials and caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

The effects of construction activities would be increased dustfall and locally elevated levels of PM₁₀ downwind of construction activity. Construction dust would be generated at levels that would create an annoyance to nearby properties.

Mitigation Measure AIR-1: Consistent with guidance from the BAAQMD, the following actions shall be required of construction contracts and specifications for both the Corporation Yard site and the City parking lot site.

Demolition. The following controls shall be implemented during demolition:

- Water during demolition work, including the break-up of pavement and infrastructure, to control dust generation;
- Cover all trucks hauling demolition debris from the site; and
- Use dust-proof chutes to load debris into trucks whenever feasible.

Construction. The following controls shall be implemented at all construction sites:

- Water all active construction areas at least twice daily and more often during windy periods; active areas adjacent to existing land uses shall be kept damp at all times, or shall be treated with non-toxic stabilizers to control dust;
- Cover all trucks hauling soil, sand, and other loose materials;
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites;
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality;
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;
- Apply non-toxic soil stabilizers to inactive construction areas;
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);
- Limit traffic speeds on unpaved roads to 15 mph;
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways;
- Replant vegetation in disturbed areas as quickly as possible;
- Install baserock at entryways for all exiting trucks, and wash off the tires or tracks of all trucks and equipment in designated areas before leaving the site; and
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.

Implementation of this mitigation measure would reduce construction period air quality impacts to a less-than-significant level. (LTS)

Impact AIR-2: Long-term project-related regional emissions would exceed the BAAQMD thresholds of significance for the ozone precursor ROG. (S)

Long-term air emission impacts would be those associated with changes in permanent usage of the project site. Mobile source emissions would result from vehicle trips associated with the proposed project. The Urban Emission Model (URBEMIS 2007 v. 9.2) computer program, which is the most current air quality model available in California for estimating emissions associated with land use development projects, was used to calculate long-term mobile source emissions associated with the proposed project. URBEMIS output sheets are included in Appendix C of this report. Increases in long-term stationary emissions from natural gas and electricity use as well as mobile source emissions were included in the calculation.

The daily emission increase associated with project operational trip generation is identified in Table V.D-8 for reactive organic gases (ROG) and nitrogen oxides (NO_x) (two precursors of ozone) and coarse particle matter (PM₁₀). The BAAQMD has established thresholds of significance for ozone precursors and PM₁₀ of 80 pounds per day; however, they have not established a threshold for emissions of

PM_{2.5}. Proposed project emissions shown in Table V.D-8 would not exceed the threshold for NO_x, however it would exceed the threshold of significance for ROG and PM₁₀, and therefore, the proposed project would have a significant effect on regional air quality. It should also be noted that individual projects that have a significant effect on regional air quality also have a significant cumulative effect on regional air quality.

Table V.D-8: Project Regional Emissions in Pounds Per Day

	Reactive Organic Gases	Nitrogen Oxides	PM ₁₀	PM _{2.5}
Regional Emissions	297.7	70.78	93.7	43.41
BAAQMD Significance Threshold	80.0	80.0	80.0	NA
Exceed?	Yes	No	Yes	NA

Source: LSA Associates, Inc., 2008.

Mitigation Measure AIR-2: The *BAAQMD CEQA Guidelines* document identifies potential mitigation measures for various types of projects. The following are considered to be feasible and effective in further reducing vehicle trip generation and resulting emissions from the project:

- Provide transit facilities (e.g., bus bulbs/turnouts, benches, shelters).
- Provide bicycle lanes and/or paths, connected to community-wide network.
- Provide sidewalks and/or paths, connected to adjacent land uses, transit stops, and/or community-wide network.
- Provide secure and conveniently located bicycle and storage.
- Implement feasible transportation demand management (TDM) measures including a ride-matching program, coordination with regional ridesharing organizations and provision of transit information.

The proposed project includes trip reduction strategies including mixed land use and the availability of transit which both reduce regional air quality emissions. These emission reductions were included in the regional emission estimates shown in Table V.D-8. There is no mitigation available with currently feasible technology to reduce the project's regional air quality impact to a less-than-significant level. Therefore, the project's regional air quality impacts would remain significant and unavoidable. (SU)

d. Projects, Criteria Pollutants and Public Health. Despite great progress in air quality improvement, approximately 146 million people nationwide lived in counties with pollution levels above the national standards in 2002. Out of the 230 nonattainment areas identified during the 1990 Clean Air Act Amendment designation process, 124 areas remain under nonattainment status or designation today. In these nonattainment areas, however, the severity of air pollution episodes has decreased. Air quality in the San Francisco Bay Area Air Basin in the past 20 years has improved steadily and dramatically, even with the increase in population and vehicles and other sources.

As shown in Table V.D-2, long-term exposure to elevated levels of criteria pollutants could result in potential health effects. However, as stated in the thresholds of significance, emission thresholds established by the air district are used to manage total regional emissions within an air basin, based on the air basin attainment status for criteria pollutants. These emission thresholds were established for individual projects that would contribute to regional emissions and pollutant concentrations that may affect or delay the projected attainment target year for certain criteria pollutants.

Because of the conservative nature of the thresholds and the basin-wide context of individual project emissions, there is no direct correlation of a single project to localized health effects. One individual project having emissions exceeding a threshold does not necessarily result in adverse health effects for residents in the project vicinity. This condition is especially true when the criteria pollutants exceeding thresholds are those with regional effects, such as ozone precursors like NO_x and ROG.

Based on the above discussion, the potential for an individual project to significantly degrade regional air quality or contribute to significant health risk is small, even if the emission thresholds are exceeded by the project. Because of the overall improvement trend in air quality in the air basin, it is unlikely the regional air quality would worsen or health risk increase from the current condition due to emissions from an individual project.

E. NOISE

This section describes existing noise conditions in the vicinity of the site, describes criteria for determining the significance of noise impacts, and estimates the likely noise that would result from construction activities, vehicular traffic, aircraft, and other noise sources. Where appropriate, mitigation measures are recommended to reduce project-related noise impacts to a less-than-significant level.

1. Setting

This setting section begins with an introduction to several key concepts and terms that are used in evaluating noise. It then explains the various agencies that regulate the noise environment in the City of San Jose and summarizes key standards that are applicable to the proposed project. This setting section concludes with a description of current noise sources that affect the project site and the noise conditions that are experienced in the project vicinity.

a. Characteristics of Sound. Noise is generally defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: *pitch* and *loudness*. Pitch is the number of complete vibrations or cycles per second of a wave that results in the range of tone from high to low. Loudness is the strength of a sound that describes a noisy or quiet environment, and it is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the human ear. Sound intensity refers to how hard the sound wave strikes an object, which in turn produces the sound's effect. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the project area in terms of sound intensity and its effects on adjacent sensitive land uses.

(1) Measurement of Sound. Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale, representing points on a sharply rising curve. Table V.E-1 contains a list of typical acoustical terms and definitions. Table V.E-2 shows representative outdoor and indoor noise levels in units of dBA.

A decibel (dB) is a unit of measurement which indicates the relative intensity of a sound. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense, 30 dB is 1,000 times more intense. Each 10-dB increase in sound level is perceived as approximately a doubling of loudness.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound

Table V.E-1: Definitions of Acoustical Terms

Term	Definitions
Decibel, dB	A unit of level that denotes the ratio between two quantities proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted, unless reported otherwise.
L ₀₁ , L ₁₀ , L ₅₀ , L ₉₀	The fast A-weighted noise levels equaled or exceeded by a fluctuating sound level for 1 percent, 10 percent, 50 percent, and 90 percent of a stated time period.
Equivalent Continuous Noise Level, L _{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of five decibels to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level, L _{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L _{max} , L _{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all encompassing noise associated with a given environment at a specified time, usually a composite of sound from many sources at many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, 1991.

Table V.E-2: Typical A-Weighted Sound Levels

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments
Near Jet Engine	140	Deafening
Civil Defense Siren	130	Threshold of pain
Hard Rock Band	120	Threshold of feeling
Accelerating Motorcycle at a Few Feet Away	110	Very loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very loud
Ambulance Siren; Food Blender	95	Very loud
Garbage Disposal	90	Very loud
Freight Cars; Living Room Music	85	Loud
Pneumatic Drill; Vacuum Cleaner	80	Loud
Busy Restaurant	75	Moderately loud
Near Freeway Auto Traffic	70	Moderately loud
Average Office	60	Moderate
Suburban Street	55	Moderate
Light Traffic; Soft Radio Music in Apartment	50	Quiet
Large Transformer	45	Quiet
Average Residence Without Stereo Playing	40	Faint
Soft Whisper	30	Faint
Rustling Leaves	20	Very faint
Human Breathing	10	Very faint

Source: Compiled by LSA Associates, Inc., 2008.

level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} , the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on A-weighted decibels (dBA). CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours. Typical A-weighted sound levels from various sources are described in Table V.E-2.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level (L_{max}), which is the highest exponential time averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions, and addresses the annoying aspects of intermittent noise.

Noise standards in terms of percentile exceedance levels, L_n , are often used together with the L_{max} for noise enforcement purposes. When specified, the percentile exceedance levels are not to be exceeded by an offending sound over a stated time period. For example, the L_{10} noise level represents the level exceeded ten percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the lowest noise level experienced during a monitoring period. It is normally referred to as the background noise level. For a relatively steady noise, the measured L_{eq} and L_{50} are approximately the same.

Noise impacts can be described in three categories. The first is audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3.0 dBA or greater, since, as described earlier, this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1.0 and 3.0 dBA. This range of noise levels has been found to be noticeable only in laboratory environments. The last category is changes in noise level of less than 1.0 dBA that are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

(2) Psychological and Physiological Effects of Noise. Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects our entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, and thereby affecting blood pressure, functions of the ear, and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell

damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling.

b. Characteristics of Ground-borne

Vibration. Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. As the vibration propagates from the foundation throughout the remainder of the building, the vibration of floors and walls may cause perceptible vibration from the rattling of windows or a rumbling noise. The rumbling sound caused by the vibration of room surfaces is called ground-borne noise. When assessing annoyance from ground-borne noise, vibration is typically expressed as root mean square (rms) velocity in units of decibels of 1 micro-inch per second. To distinguish vibration levels from noise levels, the unit is written as “VdB.” Human perception to vibration starts at levels as low as 67 VdB and sometimes lower. Annoyance due to vibration in residential settings starts at approximately 70 VdB. Ground-borne vibration is almost never annoying to people who are outdoors. Although the motion of the ground may be perceived, without the effects associated with the shaking of the building, the motion does not provoke the same adverse human reaction.

Table V.E-3: Typical Vibration Source Levels for Construction Equipment

Equipment		Approximate VdB at 25 feet
Pile Driver (impact)	Upper range	112
	Typical	104
Pile Driver (sonic)	Upper range	105
	Typical	93
Clam shovel drop (slurry wall)		94
Hydromill (slurry wall)	In soil	66
	In rock	75
Vibratory roller		94
Hoe ram		87
Large bulldozer		87
Caisson drilling		87
Loaded trucks		86
Jackhammer		79
Small bulldozer		58

Source: Federal Transit Administration, 2006. *Transit Noise and Vibration Impact Assessment*. May.

In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of ground-borne vibration include trains and construction activities such as blasting, pile driving and operating heavy earthmoving equipment. Typical vibration source levels from construction equipment are shown in Table V.E-3.

c. Noise Regulatory Framework. The following section summarizes the regulatory framework related to noise, including federal, State and City of San Jose plans, policies and standards.

(1) U.S. Environmental Protection Agency (EPA). In 1972 Congress enacted the Noise Control Act. This act authorized the EPA to publish descriptive data on the effects of noise and establish levels of sound “requisite to protect the public welfare with an adequate margin of safety.” These levels are separated into health (hearing loss levels) and welfare (annoyance levels), as shown in Table V.E-4. The EPA cautions that these identified levels are not standards because they do not take into account the cost or feasibility of the levels.

For protection against hearing loss, 96 percent of the population would be protected if sound levels are less than or equal to an $L_{eq(24)}$ of 70 dBA. The “(24)” signifies an L_{eq} duration of 24 hours. The EPA activity and interference guidelines are designed to ensure reliable speech communication at about 5 feet in the outdoor environment. For outdoor and indoor environments, interference with activity and annoyance should not occur if levels are below 55 dBA and 45 dBA, respectively.

The noise effects associated with an outdoor L_{dn} of 55 dBA are summarized in Table V.E-5. At 55 dBA L_{dn} , 95 percent sentence clarity (intelligibility) may be expected at 3.5 meters, and no community reaction. However, one (1) percent of the population may complain about noise at this level and 17 percent may indicate annoyance.

(2) State of California. The State of California has established regulations that help prevent adverse impacts to occupants of buildings located near noise sources. Referred to as the “State Noise Insulation Standard,” it requires buildings to meet performance standards through design and/or building materials that would offset any noise source in the vicinity of the receptor. State regulations include requirements for the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings that are intended to limit the extent of noise transmitted into habitable spaces. These requirements are found in the California Code of Regulations, Title 24 (known as the Building Standards Administrative Code), Part 2 (known as the California Building Code), Appendix Chapters 12 and 12A. For limiting noise transmitted between adjacent dwelling units, the noise insulation standards specify the extent to which walls, doors, and floor ceiling assemblies must block or absorb sound. For limiting noise from exterior noise sources, the noise insulation standards set an interior standard of 45 dBA L_{dn} in any habitable room with all doors and windows closed. In addition, the standards require preparation of an acoustical analysis demonstrating the manner in which dwelling units have been designed to meet this interior standard, where such units are proposed in an area with exterior noise levels greater than 60 dBA L_{dn} .

The State has also established land use compatibility guidelines for determining acceptable noise levels for specified land uses. However, the City has adopted and modified the State’s land use compatibility guidelines, as discussed below.

Table V.E-4: Summary of EPA Noise Levels

Effect	Level	Area
Hearing loss	$L_{eq}(24) \leq 70$ dB	All areas.
Outdoor activity interference and annoyance	$L_{dn} \leq 55$ dB	Outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places in which quiet is a basis for use.
	$L_{eq}(24) \leq 55$ dB	Outdoor areas where people spend limited amounts of time, such as school yards, playgrounds, etc.
Indoor activity interference and annoyance	$L_{eq} \leq 45$ dB	Indoor residential areas.
	$L_{eq}(24) \leq 45$ dB	Other indoor areas with human activities such as schools, etc.

Source: U.S. Environmental Protection Agency, 1974. “Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.” March.

Table V.E-5: Summary of Human Effects in Areas Exposed to 55 dBA L_{dn}

Type of Effects	Magnitude of Effect
Speech – Indoors	100 percent sentence intelligibility (average) with a 5 dB margin of safety.
Speech – Outdoors	100 percent sentence intelligibility (average) at 0.35 meters. 99 percent sentence intelligibility (average) at 1.0 meters. 95 percent sentence intelligibility (average) at 3.5 meters.
Average Community Reaction	None evident; 7 dB below level of significant complaints and threats of legal action and at least 16 dB below “vigorous action.”
Complaints	1 percent dependent on attitude and other non-level related factors.
Annoyance	17 percent dependent on attitude and other non-level related factors.
Attitude Towards Area	Noise essentially the least important of various factors.

Source: U.S. Environmental Protection Agency, 1974. “Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.” March.

(3) City of San Jose. The standards within the San Jose 2020 General Plan Noise Element¹ determine the acceptable noise environment for each land use. For residential and commercial land uses, noise levels up to 60 dBA L_{dn} are acceptable. In areas with noise levels from 60 dBA to 70 dBA L_{dn} , construction of noise sensitive land use buildings would require acoustic analysis to determine the insulation needed to maintain an indoor level of 45 dBA L_{dn} . A noise level of 76 dBA L_{dn} has been established as the maximum exterior level necessary to avoid significant adverse health effects. An interior noise level of 45 dBA L_{dn} has been established for noise sensitive land uses. The City's land use compatibility standards for community noise are shown in Table V.E-6. The Noise Element recognizes that full attainment of noise standards may not be achievable in the environs of San Jose International Airport and the Downtown Core Area. Furthermore, for new developments that would be located near railroads, the City encourages maximum separation between the rail line and the planned residential and commercial units.

The Municipal Code of the City of San Jose outlines includes the restriction of the hours of construction as a mitigation measure as part of the required construction impact mitigation plan for all major construction projects. The Zoning Ordinance of the Municipal Code² further establishes exterior noise standards for commercial and residential land uses shown in Table V.E-7. Projects that would exceed these noise standards can receive Planned Development permits to allow for the exceedance.

c. Existing Noise Environment. The project is located in an urban area and is, therefore, influenced by several surrounding noise sources including traffic, railroad, aircraft, delivery truck loading and unloading activities, and occasional festival noise as discussed below.

(1) Existing Ambient Noise Levels. An LSA noise technician conducted short-term ambient noise monitoring on the project site on July 12, 2007 between the hours of 11:00 a.m. and 2:00 p.m. at four separate locations in the project vicinity. The purpose of this noise monitoring was to document the existing noise environment and capture the noise levels associated with operations and activities in the project vicinity. Table V.E-8 lists the noise levels measured during the short-term 20-minute noise measurements. Maximum and minimum noise levels were recorded as well as the equivalent continuous noise level measure L_{eq} . The meteorological conditions at the time of each noise measurement are shown in Table V.E-9. Long term noise monitoring was conducted from September 4th through September 6th, 2007. The measurement was taken with the sound level meter equipment positioned 10 feet above the ground on a light pole located 10 feet west of 7th Street, 75 feet north of Jackson Street, and 100 feet from the centerline of the railroad tracks. Noise monitoring locations are shown in Figure V.E-1. Table V.E-10 lists the long-term noise monitoring results; these include the calculated 24-hour L_{eq} and L_{dn} values. The L_{dn} is the time-varying noise over a 24-hour period, with a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). Recorded noise sources include vehicle traffic and freight trains. The ambient noise level for the measured time period was 62 dBA L_{dn} .

¹ San Jose, City of, 2005. *Focus on the Future, San Jose 2020 General Plan*. May 4.

² San Jose, City of, 2005. *City of San Jose Municipal Code*. December 31.

Table V.E-6: City of San Jose Land Use Compatibility Guidelines for Community Noise

San Jose Land Use Categories	DNL Value in Decibels								
	40	45(a)	50	55(b)	60(c)	65	70	75	80
Public & Quasi-Public Schools (d), Hospitals, Libraries, Auditoriums									
Public, Quasi-Public, & Residential Parks, Playgrounds, Public Buildings, Single Family, Multi Family, Mobile Home Park									
Commercial Shopping Center, Self-Generative Business, Offices, Banks, Clinics, Hotels, Motels									
Industrial Non-Manufacturing Industry, Transportation, Communications, Utilities, Manufacturing									
Agriculture & Vacant Urban Extractive, Open land, Orchards, Crops, Water Supply, Brush Lands, Vacant									

Notes:

 Satisfactory

 When new development requires a full EIR, an acoustical analysis should be made indicating amount of attention necessary to maintain an indoor level of DNL <=45. Onsite outdoor activity limited to acoustically protected areas. Existing uses should receive remedial.

 New development permitted only if uses are entirely indoors and building design limits interior levels to <=45 DNL. Outside activity areas should be permitted if site planning and noise barriers can achieve levels of 60 DNL or less. Existing uses have top priority for remedial treatment.

 DNL >=76 levels considered hazardous to health as determined by EPA.

(a) Interior Noise Level; (b) Long-Range Exterior Noise Quality Level; (c) Short-Range Exterior Noise Quality Level; and (d) Leq value of Leq (30) = is used for the evaluation of school impact by the airport.

Source: City of San Jose, *San Jose General Plan 2020*. Figure 16.**Table V.E-7: Exterior Noise Standards for Commercial and Residential Land Uses**

Land Use	Maximum Noise Level in Decibels at Property Line
Commercial use adjacent to a property used or zoned for residential purposes	55
Commercial use adjacent to a property used or zoned for commercial or other non-residential purposes.	60
Any Residential or non-residential use	55

Source: City of San Jose, *Municipal Code*. 2005.

Primary noise sources that affect the existing noise level of the area include the following:

- Vehicle traffic on East Taylor Street and Jackson Street.
- Railroad noise from the Southern Pacific Railroad tracks adjacent to the southeastern boundary of the site.

Table V.E-8: Short-Term Ambient Noise Monitoring Results, dBA

Location Number	Location Description	Start Time	L_{eq} ^a	L_{max} ^b	L_{min} ^c	Primary Noise Sources
1	Across from 275 Taylor Street	11:15	65.8	81.9	46.6	Traffic on Taylor Street
2	Parking lot by Fuji Towers	12:00	51.8	72.0	44.4	Traffic on Taylor Street & 6th Street
3	Corner Jackson Street & 7th Street	12:30	61.4	79.4	46.7	Traffic on Jackson Street & 7th Street
4	7th Street between Taylor Street & Jackson Street	12:55	68.5	88.3	46.0	Train passing, traffic on 7th Street

^a L_{eq} represents the average of the sound energy occurring over the 20-minute time period.

^b L_{max} is the highest instantaneous sound level measured during the 20-minute time period.

^c L_{min} is the lowest instantaneous sound level measured during the 20-minute time period.

Source: LSA Associates, Inc., January 2008.

Table V.E-9: Meteorological Conditions During Ambient Noise Monitoring

Location Number	Maximum Wind Speed (mph)	Average Wind Speed (mph)	Temperature (F)	Relative Humidity (%)
1	6.4	1.8	72.1	61
2	3.2	1.0	79	39
3	7.6	2.0	77.5	49
4	6.9	1.7	78.2	49

Source: LSA Associates, Inc., January 2008.

Table V.E-10: Long-Term Ambient Noise Monitoring Results (September 4–6, 2007)

Measurement	Description	dBA	Time Period the Event Occurred
L_{dn}	Weighted 24 hour average	62.0	NA
L_{eq}	24 hour average	58.0	NA
L_{max}	Highest recorded L_{max} for 24 hour period	101.9	1:00 p.m. – 2:00 p.m., September 4
L_{min}	Lowest recorded L_{min} for 24 hour period	42.4	11:00 p.m. – 12:00 a.m., September 4

Source: LSA Associates, Inc., January 2008.

(2) **Existing Aircraft Noise Levels.** Mineta San Jose International Airport is located approximately 1-mile west-northwest of the project site. Noise exposure information in the community is developed for airport operations by the City of San Jose on a quarterly basis, based on current airport operations data and continuously measured noise levels. According to the most recent available quarterly report on existing noise contours and according to the projected 2010 conditions, the project site would not be located within the 65 dBA CNEL contour of the airport.³

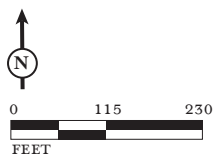
(3) **Existing Railroad Noise Levels.** The existing at-grade Southern Pacific railroad crossing at 7th Street is approximately 90 feet from potential on-site noise sensitive land that would be located at the southeastern corner boundary of the project site. Approximately three to four trains use the line per day. Activity on the rail line represents a source of noise and groundborne vibration in the City. Freight trains generally emit higher noise levels than passenger or commuter trains. Therefore, in areas where the tracks are used more frequently by freight trains, the single event noise exposure levels and total train noise would be higher than in areas with less frequent freight train use. Trains were observed on the tracks adjacent to the project site during the noise monitoring.

³ Mineta San Jose International Airport, 2007. *Fourth Quarter 2006 Noise Monitoring Report, Contour Map and 2010 65dB Contour Map*. <http://www.sjc.org/community/noise.html>. July 16.



LSA

FIGURE V.E-1



PROJECT SITE

①

SHORT-TERM NOISE MONITORING LOCATIONS



48-HOUR NOISE MONITORING LOCATION

*Japantown Corporation Yard
Redevelopment Project
Noise Monitoring Locations*

SOURCE: GOOGLE MAPS, 2007.

I:\WDD0701 japantown\figures\Fig_VE1.ai (10/25/07)

Slow moving freight trains typically produce an average single-event noise level of 80 to 85 dBA at 100 feet.

Assuming four trains per day (two daytime and two nighttime trains), the average L_{dn} at 100 feet is likely to range from 44 to 40 dBA.

(4) Existing Traffic Noise Levels. Existing traffic noise levels were calculated using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model. Traffic data used in the model were obtained from the traffic impact analysis prepared by Hexagon Transportation Consultants, Inc. and included in Section V.C of this EIR. Table V.E-11 lists the calculated traffic noise levels in the project study area under the existing (2007) conditions. Traffic noise in the project vicinity is generally moderate, except along Hedding Street and Taylor Street, where the 65.0 dBA L_{dn} contours extend beyond the roadway right-of-way. Existing traffic noise levels along these roadway segments range from 64.2 dBA to 65.1 dBA L_{dn} at 50 feet from the centerline of the outermost travel lane. The traffic noise model printouts are included in Appendix D. The City considers environments with noise levels of up to 60.0 dBA L_{dn} as normally acceptable for residential development; environments with noise levels between 60.0 dBA and 76.0 dBA L_{dn} require acoustic analysis to determine necessary mitigation to maintain an interior noise level of 45 dBA L_{dn} .

(5) Existing Noise Sensitive Land Uses in the Project Vicinity. Land uses surrounding the project site consist of commercial, retail, residential, and church buildings on North 6th Street and Jackson Street. The closest sensitive receptors to the project site are the residential land uses (Fuji Towers) on North 6th Street and the apartment complex on 5th Street whose properties border the City parking lot site where the proposed affordable senior housing building would be located. These land uses are located within 50 feet of this portion of the project site. The construction and operation of the proposed project could affect these surrounding land uses.

(6) Existing Stationary and Activity Noise Sources in the Project Vicinity. Existing stationary noise sources in the project vicinity include noise generated by idling trucks during deliveries, fans and compressor noise sources associated with HVAC systems. Additionally, the Japantown area is the center of Japanese and Japanese-American culture in the City of San Jose, as is often expressed in festivals and parades such as Nikkei Matsuri in May, Obon/Bazaar in July, Aki Matsuri in September, and the Spirit of Japantown Festival in October. The Japantown area also is host to a certified farmers market, art galleries and other street venues throughout the year.

2. Impacts and Mitigation Measures

a. Criteria of Significance. A project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of the community in which it is located. The applicable noise standards governing the project site are the criteria in the City's Noise Element of the General Plan. For the purposes of this project, a noise impact is considered significant if the project would:

Table V.E-11: Existing Year (2007) Without Project Traffic Noise Levels

Roadway Segment	Average Daily Trips	Centerline to 70 dBA L _{dn} (feet)	Centerline to 65 dBA L _{dn} (feet)	Centerline to 60 dBA L _{dn} (feet)	L _{dn} (dBA) 50 Feet From Outermost Lane
Hedding Street - First Street to Fourth Street	10,800	< 50 ^a	< 50	152	63.6
Hedding Street - Fourth Street to 7th Street	14,500	< 50	67	204	64.9
Hedding Street - 7th Street to Tenth Street	14,300	< 50	66	201	64.9
Fourth Street - Hedding Street to Taylor Street	8,100	< 50	< 50	81	60.8
7th Street - Hedding Street to Taylor Street	2,700	< 50	< 50	< 50	56.7
Eleventh Street - Hedding Street to Taylor Street	3,700	< 50	< 50	< 50	57.7
Taylor Street - First Street to Fourth Street	14,000	< 50	63	197	65.1
Taylor Street - Fourth Street to 7th Street ^b	12,400	< 50	56	174	64.6
Taylor Street - 7th Street to Tenth Street	11,800	< 50	53	166	64.7
Taylor Street - Tenth Street to Eleventh Street	10,800	< 50	< 50	152	64.4
Taylor Street - Eleventh Street to Thirteenth Street	11,300	< 50	52	159	64.2
Fourth Street - Taylor Street to Jackson Street	6,500	< 50	< 50	66	59.8
7th Street - Taylor Street to Jackson Street ^b	2,100	< 50	< 50	< 50	55.6
Tenth Street - Taylor Street to Jackson Street	11,900	< 50	< 50	116	62.8
Eleventh Street - Taylor Street to Jackson Street	3,300	< 50	< 50	< 50	57.2
Thirteenth Street - Taylor Street to Jackson Street	6,300	< 50	< 50	62	60.4
Jackson Street - First Street to Fourth Street	3,700	< 50	< 50	< 50	57.7
Jackson Street - Fourth Street to 7th Street ^b	3,000	< 50	< 50	< 50	57.2
Jackson Street - 7th Street to Tenth Street	2,100	< 50	< 50	< 50	55.6
Jackson Street - Tenth Street to Eleventh Street	2,000	< 50	< 50	< 50	55.4
Jackson Street - Eleventh Street to Thirteenth Street	2,200	< 50	< 50	< 50	55.8

^a Traffic noise within 50 feet of roadway centerline requires site specific analysis.^b Shaded cells represent roadway segments adjacent to the project site.

Source: LSA Associates, Inc., January 2008.

- Expose persons to or generate noise levels in excess of standards established in the San Jose General Plan, or applicable standards of other agencies;
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels;
- Result in a substantial temporary, periodic, or permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- 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, expose people residing or working in the project area to excessive noise levels.

b. Less than Significant Impacts. The following noise sources would produce less-than-significant effects on sensitive receptors in the project area.

(1) Transportation of Construction Workers and Equipment. The transport of workers and construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Because workers and construction equipment would use existing routes, noise from passing trucks (85 dBA L_{max} at 50 feet) would be similar to existing truck-generated noise. For this reason, short-term intermittent noise from trucks would be minor when averaged

over a longer time period. In addition, noise associated with on-road vehicles is regulated by federal and State governments and is exempted from local government regulations. Therefore, short-term construction-related noise associated with worker and equipment transport to the proposed project site would result in a less-than-significant impact on receptors along the access routes leading to the proposed project site.

(2) Aircraft Noise Impacts. The proposed project site is not located within an airport land use plan. Mineta San Jose International Airport is located approximately 1-mile west-northwest of the project site. However, the project site would not be located within the 65 dBA CNEL contour of the airport.⁴ Therefore, implementation of the project would not expose persons to residing or working in the project area to excessive noise levels from aircraft.

(3) Stationary Noise Impacts. The potential long-term stationary noise impacts at the project site would be primarily from outdoor activities and operations associated with parking lot and delivery truck activities. Additional stationary noise sources associated with project implementation would include the proposed Taiko drumming facility. The closest sensitive receptors would be on-site residential land uses. Specific future on-site commercial uses are yet to be determined. On-site commercial and retail uses would generate noise from occasional truck delivery, loading/unloading activities, and typical parking lot activities. These activities are potential point sources of noise that could affect noise-sensitive receptors in the project vicinity.

Of the on-site stationary noise sources, noise generated by delivery truck activity would generate the highest maximum noise levels. Representative parking activities, such as people conversing or doors slamming, would generate approximately 60 dBA to 70 dBA L_{max} at 50 feet. Delivery truck loading and unloading activities can result in maximum noise levels from 75 dBA to 85 dBA L_{max} at 50 feet. The closest sensitive receptors would consist of the residential and commercial land use components of the project.

According to the standards outlined in the Zoning Ordinance of the Municipal Code, a Planned Development permit may be required for this project due to stationary noise source impacts. In addition, Title 24 of the California Building Code establishes construction engineering standards for reducing noise impacts in multi-family residential units. However, project related stationary noise source impacts would not exceed the City's established significance criteria.

Existing activity noise sources in the project vicinity also occasionally includes festivals and street fairs. Noise generated by such existing activities could impact proposed sensitive land uses. However, festivals and similar activities would be regulated through the City's permit process and would be temporary in nature. Thus all existing and project related stationary noise source impacts would be considered less-than-significant and no mitigation would be required.

c. Significant Noise Impacts. Noise impacts related to the following sources would result in potentially significant impacts.

⁴ Mineta San Jose International Airport, 2007. *Fourth Quarter 2006 Noise Monitoring Report, Contour Map and 2010 65dB Contour Map*. <http://www.sjc.org/community/noise.html>. July 16.

Impact NOI-1: Noise levels from construction activities may range up to 91 dBA L_{max} at the nearest sensitive land uses to the project site. (S)

Noise generated during excavation, grading, site preparation, and building erection on the project site would result in potential noise impacts on off-site uses. Existing receptors in the vicinity, such as the residences and churches on North 6th Street and Jackson Street, would be subject to short-term noise generated by construction equipment and activities on the project site when construction occurs near the project boundary.

Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These phases would change the character of the noise generated on the project site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase. Table V.E-12 lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor. Typical noise levels range up to 91 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels, because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backhoes, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three or four minutes at lower power settings.

Construction of the proposed project is expected to require the use of earthmovers such as bulldozers and scrapers, loaders and graders, water trucks, and pickup trucks. As shown in Table V.E-12, the typical maximum noise level generated by backhoes on the proposed project site is assumed to be 86 dBA L_{max} at 50 feet from the operating equipment. The maximum noise level generated by bulldozers is approximately 88 dBA L_{max} at 50 feet. The maximum noise level generated by water and other trucks is approximately 85 dBA L_{max} at 50 feet from these vehicles. Each doubling of the sound sources with equal strength would increase the noise level by 3 dBA. Assuming each piece of construction equipment operates at some distance apart from the other equipment, the worst-case combined noise level during this phase of construction would be 91 dBA L_{max} at a distance of 50 feet from an active construction area.

Table V.E-12: Typical Construction Equipment Maximum Noise Levels, L_{max}

Type of Equipment	Range of Maximum Sound Levels (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers	81 to 96	93
Rock Drills	83 to 99	96
Jackhammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	68 to 80	77
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Electric Saws	66 to 72	70
Portable Generators	71 to 87	80
Rollers	75 to 82	80
Dozers	85 to 90	88
Tractors	77 to 82	80
Front-End Loaders	86 to 90	88
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	85
Air Compressors	76 to 89	85
Trucks	81 to 87	85

Source: Bolt, Beranek & Newman, 1987. *Noise Control for Buildings and Manufacturing Plants*.

The closest noise sensitive land uses to the construction area are the Fuji Towers on North 6th Street and the apartment complex on 5th Street that border the City parking lot site, the site of the proposed affordable senior housing, at a distance of approximately 50 feet. Construction on the Corporation Yard site would be approximately 80 feet from this sensitive land use. These residences could be exposed to noise levels of up to 91 dBA L_{max} during construction.

In accordance with City standards, implementation of the following multi-part mitigation measure for buildout of the City parking lot site and the Corporation Yard site would reduce potential construction period noise impacts to less-than-significant levels.

Mitigation Measure NOI-1a: All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.

Mitigation Measure NOI-1b: The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site as much as is reasonably feasible.

Mitigation Measure NOI-1c: The construction contractor shall locate equipment staging in areas that would create the greatest distance feasible between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.

Mitigation Measure NOI-1d: Except as otherwise permitted, construction activities shall be restricted to between 7:00 a.m. and 7:00 p.m. Monday through Friday. No construction shall be permitted on Sundays or federal holidays.

Implementation of the multi-part Mitigation Measure NOI-1 would sufficiently mitigate construction-related noise impacts to a less-than-significant level. (LTS)

Impact NOI-2: Groundborne noise and vibration levels from construction activities may range up to 96 VdB L_{max} at the nearest sensitive land uses to the project site. (S)

Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. When assessing annoyance from groundborne noise, vibration is typically expressed as root mean square (rms) velocity in units of decibels of 1 micro-inch per second. To distinguish vibration levels from noise levels, the unit is written as "VdB." Human perception to vibration starts at levels as low as 67 VdB and sometimes lower. Annoyance due to vibration in residential settings starts at approximately 70 VdB. The damage threshold for buildings considered of particular historical significance or that are particularly fragile structures is approximately 96 VdB; the damage threshold for other structures is 100 VdB.⁵

Pile driving can be a potential source of groundborne vibration. However, the project will not employ pile driving as a construction method; instead, auger cast piles will be used. Auger cast piles are a drilled and pumped pile, not a driven pile. This eliminates the hammer impact noise and vibration created by driving piles. The elimination of a pile-driving hammer allows the installation of auger

⁵ Harris, C.M. 1998. *Handbook of Acoustical Measurements and Noise Control*.

cast piles adjacent to existing structures without the danger of settlement or damage to existing footings, walls, other structural components, or nearby equipment.⁶

Typical groundborne vibration levels measured at a distance of 50 feet from heavy construction equipment in full operation, such as bulldozers or other heavy tracked equipment, range up to approximately 94 VdB. This is below the damage threshold for historic or fragile buildings. However, groundborne vibration-producing construction-related activities could occur as close as within 10 feet of the historic structure located at 665 North 6th Street (identified as Building 16 of the Cultural section of this EIR) during buildout of the City surface parking lot site. In addition, buildout of the Corporation Yard site could require utility construction to occur within the right of way of North 6th Street and, thus, possibly less than 50 feet from nearby sensitive structures.

Therefore, a detailed vibration impact assessment would be required to reduce these potential groundborne vibration impacts on sensitive receptors in the project vicinity. However, at the present stage of the project development, the necessary level of construction detail is not yet available to conduct such an analysis. Therefore, the following multi-part mitigation measure shall be implemented.

Mitigation Measure NOI-2a: The City parking lot site project applicant shall prepare a vibration impact assessment to determine potential construction-related groundborne vibration impacts to the historic structure located at 665 North 6th Street. If mitigation measures cannot be identified that would reduce groundborne vibration impacts to below the groundborne vibration damage criteria of 96 VdB for fragile structures then the measures outlined in the Cultural Resources section Mitigation Measure CULT-4a and -4b shall be incorporated into construction plans for the project.

Mitigation Measure NOI-2b: If utility construction would occur within the right of way of North 6th Street and within less than 50 feet of nearby sensitive structures on North 6th Street as a result of buildout of the Corporation Yard site, the site's project applicant shall prepare a vibration impact assessment to determine potential construction-related groundborne vibration impacts. If mitigation measures cannot be identified that would reduce groundborne vibration impacts to below the groundborne vibration damage criteria of 96 VdB for fragile structures then the measures outlined in the Cultural resources section Mitigation Measure CULT-4a and -4b shall be incorporated into construction plans for the project.

Implementation of the multi-part Mitigation Measure NOI-2 would sufficiently mitigate construction-related groundborne noise and vibration impacts to a less-than-significant level. (LTS)

Impact NOI-3: The existing ambient noise environment would exceed the City of San Jose's land use compatibility guidelines. (S)

Vehicular and contributions from railroad noise are the primary noise sources in the project vicinity. The measured ambient noise from these noise sources on the project site is 62 dBA L_{dn} ; which is above the City's normally acceptable standard for new residential developments of 60 dBA L_{dn} . Therefore, mitigation would be required to reduce this impact to a less-than-significant level.

⁶ AugerCastPiles.com. 2007. Auger Cast Piles Technology Overview. <http://www.augercastpiles.com/auger-cast-piles-technology/auger-cast-piles-technology.asp#2> . August 27.

Railroad Noise. Factors that influence the overall impact of railroad noise on adjacent uses include the distance of the uses from the tracks, surrounding land topography, the intermittent nature of train events, and the lack of sound walls or other barriers between the tracks and adjacent uses. Although the rail activity generates noise and groundborne vibration, the rail activity is intermittent. It is also influenced by the sporadic use of warning horns by trains when they approach at-grade crossings.

The Southern Pacific rail line borders project site. Approximately four trains per day use the rail line (two daytime and two nighttime trains) resulting in noise levels of 44 to 49 dBA L_{dn} . As a result, rail activity would not exceed City time-averaged noise level standards for residential use. Therefore, no significant noise impacts from rail operations would occur. Slow-moving freight trains, however, typically produce single-event noise levels of approximately 80 to 85 dBA at a distance of 100 feet. This noise level could result in interference in speech and disturb residents if they are sleeping. Therefore, residential uses proposed adjacent to the tracks would potentially be exposed to intermittent single-event train noise that may be viewed as an annoyance to future residents.

Traffic Noise. The FHWA highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate traffic-related noise conditions in the vicinity of the project site. Traffic data was obtained from the traffic report prepared for this project by Hexagon Transportation Consultants, Inc. (August 2007). The resultant noise levels were weighted and summed over a 24-hour period in order to determine the L_{dn} values. Table V.E-13 lists the background (existing plus approved projects) traffic noise levels. Table V.E-14 lists the traffic noise levels for background plus the project conditions. Tables V.E-15 and V.E-16 show the traffic noise levels for the cumulative (year 2020) conditions without the project and with the project respectively.

Results of the model shown in Tables V.E-14 and V.E-16 indicate small increases in noise levels would occur with the project in comparison to without the project conditions. The largest such increases would occur on 7th Street which would experience a 1.5 dBA increase over without the project conditions under both background and cumulative plus project conditions. These noise level increases of less than 3 dBA would not be perceptible by humans in an outdoor environment. As the project would not create a significant increase in traffic noise, no mitigation is required to address off-site traffic related noise.

On-site land uses would be exposed to traffic noise levels of up to 65.5 dBA L_{dn} along Taylor Street under background plus project conditions and up to 67.7 dBA L_{dn} under cumulative plus project conditions. On-site land uses would also be exposed to a combination of railroad and traffic noise levels of up to 62.0 dBA L_{dn} along 7th Street and Jackson Street under both background plus project and cumulative plus project conditions. For ambient noise levels that range from 60.0 dBA L_{dn} to 70.0 dBA L_{dn} the City of San Jose Noise Element requires an analysis of how building design would reduce interior noise to 45 dBA L_{dn} . Based on the EPA's Protective Noise Levels,⁷ with a combination of walls, doors, and windows, standard construction for northern California residential buildings would provide more than 25 dBA in exterior to interior noise reduction with windows closed and 15 dBA or more with windows open. With windows open, the residents within 310 feet of Taylor Street and within 50 feet of 7th Street⁸ would not meet the interior noise standard of 45 dBA

⁷ EPA 550/9-79-100, November 1978.

⁸ Based on the measured ambient noise levels shown in Table V.E-9 of 62.2 dBA L_{dn} .

Table V.E-13: Background Traffic Noise Levels

Roadway Segment	Average Daily Trips	Centerline to 70 dBA L _{dn} (feet)	Centerline to 65 dBA L _{dn} (feet)	Centerline to 60 dBA L _{dn} (feet)	L _{dn} (dBA) 50 Feet From Outermost Lane
Hedding Street - First Street to Fourth Street	12,400	< 50 ^a	58	175	64.2
Hedding Street - Fourth Street to 7th Street	16,100	< 50	74	226	65.4
Hedding Street - 7th Street to Tenth Street	15,700	< 50	72	221	65.3
Fourth Street - Hedding Street to Taylor Street	10,300	< 50	< 50	102	61.8
7th Street - Hedding Street to Taylor Street	3,100	< 50	< 50	< 50	57.3
Eleventh Street - Hedding Street to Taylor Street	9,800	< 50	< 50	96	61.9
Taylor Street - First Street to Fourth Street	16,100	< 50	72	226	65.7
Taylor Street - Fourth Street to 7th Street ^b	13,700	< 50	62	192	65.0
Taylor Street - 7th Street to Tenth Street	12,600	< 50	56	177	65.0
Taylor Street - Tenth Street to Eleventh Street	12,100	< 50	54	170	64.8
Taylor Street - Eleventh Street to Thirteenth Street	13,200	< 50	60	185	64.8
Fourth Street - Taylor Street to Jackson Street	7,700	< 50	< 50	77	60.6
7th Street - Taylor Street to Jackson Street ^b	2,600	< 50	< 50	< 50	56.6
Tenth Street - Taylor Street to Jackson Street	13,700	< 50	< 50	134	63.4
Eleventh Street - Taylor Street to Jackson Street	4,300	< 50	< 50	< 50	58.4
Thirteenth Street - Taylor Street to Jackson Street	6,800	< 50	< 50	66	60.7
Jackson Street - First Street to Fourth Street	3,700	< 50	< 50	< 50	57.7
Jackson Street - Fourth Street to 7th Street ^b	3,400	< 50	< 50	< 50	57.7
Jackson Street - 7th Street to Tenth Street	2,200	< 50	< 50	< 50	55.8
Jackson Street - Tenth Street to Eleventh Street	2,000	< 50	< 50	< 50	55.4
Jackson Street - Eleventh Street to Thirteenth Street	2,600	< 50	< 50	< 50	56.6

^a Traffic noise within 50 feet of roadway centerline requires site specific analysis.

^b Shaded cells represent roadway segments adjacent to the project site.

Source: LSA Associates, Inc., January 2008.

Table V.E-14: Background Plus Project Traffic Noise Levels

Roadway Segment	Average Daily Trips	Centerline to 70 dBA L_{dn} (feet)	Centerline to 65 dBA L_{dn} (feet)	Centerline to 60 dBA L_{dn} (feet)	L_{dn} (dBA) 50 Feet From Outermost Lane	Increase from Background Conditions
Hedding Street - First Street to Fourth Street	12,800	< 50 ^a	59	180	64.4	0.2
Hedding Street - Fourth Street to 7th Street	16,500	< 50	75	232	65.5	0.1
Hedding Street - 7th Street to Tenth Street	16,000	< 50	73	225	65.3	0.0
Fourth Street - Hedding Street to Taylor Street	10,400	< 50	< 50	103	61.9	0.1
7th Street - Hedding Street to Taylor Street	3,500	< 50	< 50	< 50	57.9	0.6
Eleventh Street - Hedding Street to Taylor Street	9,800	< 50	< 50	96	61.9	0.0
Taylor Street - First Street to Fourth Street	17,800	< 50	80	250	66.1	0.4
Taylor Street - Fourth Street to 7th Street ^b	15,500	< 50	70	218	65.5	0.5
Taylor Street - 7th Street to Tenth Street	13,300	< 50	59	187	65.3	0.3
Taylor Street - Tenth Street to Eleventh Street	12,700	< 50	57	178	65.1	0.3
Taylor Street - Eleventh Street to Thirteenth Street	13,700	< 50	62	192	65.0	0.2
Fourth Street - Taylor Street to Jackson Street	7,700	< 50	< 50	77	60.6	0.0
7th Street - Taylor Street to Jackson Street ^b	3,700	< 50	< 50	< 50	58.1	1.5
Tenth Street - Taylor Street to Jackson Street	13,700	< 50	< 50	134	63.4	0.0
Eleventh Street - Taylor Street to Jackson Street	4,300	< 50	< 50	< 50	58.4	0.0
Thirteenth Street - Taylor Street to Jackson Street	6,900	< 50	< 50	67	60.8	0.1
Jackson Street - First Street to Fourth Street	4,000	< 50	< 50	< 50	58.1	0.4
Jackson Street - Fourth Street to 7th Street ^b	3,700	< 50	< 50	< 50	58.1	0.4
Jackson Street - 7th Street to Tenth Street	2,500	< 50	< 50	< 50	56.4	0.6
Jackson Street - Tenth Street to Eleventh Street	2,400	< 50	< 50	< 50	56.2	0.8
Jackson Street - Eleventh Street to Thirteenth Street	2,800	< 50	< 50	< 50	56.9	0.3

^a Traffic noise within 50 feet of roadway centerline requires site specific analysis.^b Shaded cells represent roadway segments adjacent to the project site.

Source: LSA Associates, Inc., January 2008.

Table V.E-15: Cumulative (2025) Without Project Traffic Noise Levels

Roadway Segment	Average Daily Trips	Centerline to 70 dBA L _{dn} (feet)	Centerline to 65 dBA L _{dn} (feet)	Centerline to 60 dBA L _{dn} (feet)	L _{dn} (dBA) 50 Feet From Outermost Lane
Hedding Street - First Street to Fourth Street	20,500	< 50 ^a	93	288	66.4
Hedding Street - Fourth Street to 7th Street	26,600	< 50	119	373	67.5
Hedding Street - 7th Street to Tenth Street	25,900	< 50	116	363	67.4
Fourth Street - Hedding Street to Taylor Street	17,000	< 50	55	166	64.0
7th Street - Hedding Street to Taylor Street	5,100	< 50	< 50	< 50	59.5
Eleventh Street - Hedding Street to Taylor Street	16,200	< 50	< 50	158	64.1
Taylor Street - First Street to Fourth Street	26,500	< 50	118	372	67.9
Taylor Street - Fourth Street to 7th Street ^b	22,600	< 50	101	317	67.2
Taylor Street - 7th Street to Tenth Street	20,700	< 50	92	291	67.2
Taylor Street - Tenth Street to Eleventh Street	20,000	< 50	89	281	67.0
Taylor Street - Eleventh Street to Thirteenth Street	21,800	< 50	97	306	67.0
Fourth Street - Taylor Street to Jackson Street	12,700	< 50	< 50	125	62.7
7th Street - Taylor Street to Jackson Street ^b	4,300	< 50	< 50	< 50	58.8
Tenth Street - Taylor Street to Jackson Street	22,600	< 50	70	220	65.6
Eleventh Street - Taylor Street to Jackson Street	7,100	< 50	< 50	70	60.5
Thirteenth Street - Taylor Street to Jackson Street	11,200	< 50	< 50	109	62.9
Jackson Street - First Street to Fourth Street	6,100	< 50	< 50	60	59.9
Jackson Street - Fourth Street to 7th Street ^b	5,600	< 50	< 50	55	59.9
Jackson Street - 7th Street to Tenth Street	3,500	< 50	< 50	< 50	57.9
Jackson Street - Tenth Street to Eleventh Street	3,400	< 50	< 50	< 50	57.7
Jackson Street - Eleventh Street to Thirteenth Street	4,300	< 50	< 50	< 50	58.8

^a Traffic noise within 50 feet of roadway centerline requires site specific analysis.

^b Shaded cells represent roadway segments adjacent to the project site.

Source: LSA Associates, Inc., January 2008.

Table V.E-16: Cumulative (2025) Plus Project Traffic Noise Levels

Roadway Segment	Average Daily Trips	Centerline to 70 dBA L_{dn} (feet)	Centerline to 65 dBA L_{dn} (feet)	Centerline to 60 dBA L_{dn} (feet)	L_{dn} (dBA) 50 Feet From Outermost Lane	Increase from Background Conditions
Hedding Street - First Street to Fourth Street	21,200	< 50 ^a	96	297	66.6	0.2
Hedding Street - Fourth Street to 7th Street	27,200	< 50	122	381	67.6	0.1
Hedding Street - 7th Street to Tenth Street	26,400	< 50	118	370	67.5	0.1
Fourth Street - Hedding Street to Taylor Street	17,100	< 50	56	167	64.0	0.0
7th Street - Hedding Street to Taylor Street	5,700	< 50	< 50	56	60.0	0.5
Eleventh Street - Hedding Street to Taylor Street	16,200	< 50	< 50	158	64.1	0.0
Taylor Street - First Street to Fourth Street	29,400	< 50	131	412	68.3	0.4
Taylor Street - Fourth Street to 7th Street ^b	25,600	< 50	114	359	67.7	0.5
Taylor Street - 7th Street to Tenth Street	21,900	< 50	97	307	67.4	0.2
Taylor Street - Tenth Street to Eleventh Street	20,900	< 50	93	293	67.2	0.2
Taylor Street - Eleventh Street to Thirteenth Street	22,700	< 50	101	318	67.2	0.2
Fourth Street - Taylor Street to Jackson Street	12,700	< 50	< 50	125	62.7	0.0
7th Street - Taylor Street to Jackson Street ^b	6,100	< 50	< 50	60	60.3	1.5
Tenth Street - Taylor Street to Jackson Street	22,600	< 50	70	220	65.6	0.0
Eleventh Street - Taylor Street to Jackson Street	7,100	< 50	< 50	70	60.5	0.0
Thirteenth Street - Taylor Street to Jackson Street	11,400	< 50	< 50	111	63.0	0.1
Jackson Street - First Street to Fourth Street	6,600	< 50	< 50	65	60.2	0.3
Jackson Street - Fourth Street to 7th Street ^b	6,100	< 50	< 50	60	60.3	0.4
Jackson Street - 7th Street to Tenth Street	4,200	< 50	< 50	< 50	58.7	0.8
Jackson Street - Tenth Street to Eleventh Street	3,900	< 50	< 50	< 50	58.3	0.6
Jackson Street - Eleventh Street to Thirteenth Street	4,600	< 50	< 50	< 50	59.1	0.3

^a Traffic noise within 50 feet of roadway centerline requires site specific analysis.^b Shaded cells represent roadway segments adjacent to the project site.

Source: LSA Associates, Inc., January 2008.

L_{dn} for residential land uses (i.e., 67.7 dBA – 15 dBA = 52.7 dBA). As a result, an alternative form of ventilation, such as air conditioning systems, would be required in these units to ensure that windows could remain closed for a prolonged period of time. With windows closed, the proposed units would meet the 45 dBA L_{dn} interior noise standard (i.e., 67.7 dBA – 25 dBA = 42.7 dBA) for traffic and railroad noise levels.

The proposed development on the Corporation Yard site includes a public park/plaza. Outdoor activity areas on this site located within 359 feet of the centerline of Taylor Street could be exposed to noise levels exceeding the 60 dBA L_{dn} exterior noise threshold established by the City for parks. It

would not be possible to reduce outdoor noise to City standards using standard mitigation measures such as sound walls or berms due to required property access from surrounding streets. However, fully shielding such uses by building placement could reduce noise levels from traffic and railroad noise sources by as much as 15 dBA. This reduction would reduce noise levels to below the 60 dBA L_{dn} standard.

To meet City of San Jose land use compatibility guidelines and interior noise level standards, development on all parcels shall comply with multi-part Mitigation Measure NOI-3.

Mitigation Measure NOI-3a: All noise sensitive development on both the Corporation Yard and City parking lot sites that are located within 310 feet of Taylor Street or within 50 feet of 7th Street shall include an alternate form of ventilation, such as an air conditioning system, in order to ensure that windows can remain closed for a prolonged period of time.

Mitigation Measure NOI-3b: All on-site outdoor activity areas shall be located so that they are completely sheltered by buildings from direct exposure to Taylor Street.

Mitigation Measure NOI-3c: All residential bedroom units with direct exposure to and within 320 feet of the railroad tracks shall include upgraded façade assemblies with an overall minimum sound transmission class rating of STC-36 including windows with a minimum rating of STC-38 in order to reduce nighttime train passby single event noise levels to below 50 dBA L_{max} .

Implementation of Mitigation Measure NOI-3 would sufficiently mitigate railroad and traffic related noise impacts to less-than-significant levels. (LTS)

F. GEOLOGY, SOILS AND SEISMICITY

This section describes the geologic environment based on a site reconnaissance, published and unpublished regional geologic reports and maps, and site-specific technical reports. In addition, this section assesses potential impacts from seismically-induced fault rupture, strong ground shaking, liquefaction, slope failure, lateral slope deformation, differential settlement and unstable or expansive soils. Mitigation measures for the identified significant impacts are provided, where appropriate.

1. Setting

This section describes the existing geologic and seismic conditions of the project and the vicinity and associated hazards.

a. Geologic Conditions. The geology, topography and soils of the project site and vicinity are described below.

(1) Geology. The project site is located at the western coastal margin of the Coast Range Geomorphic Province of Northern California, a relatively geologically young and seismically-active region on the western margin of the North American plate.¹ More specifically, the site is located at the northern end of the Santa Clara Valley, an alluvial valley and plain developed along the Guadalupe River and its tributaries. The project site has been mapped as being underlain by Quaternary-aged sand, gravel, silt, and mud on a regional scale.² The near surface materials of the site have been extensively examined as part of the ongoing remediation efforts at the site (please see the Hazards section of this EIR for discussion). Based on examinations of soil cuttings and extracted samples from borings collected as part of the remediation process, the site is underlain by at least 20 feet of unconsolidated, moderately compressible, alluvial soils consisting of soft to stiff silts and clays and loose to dense sands.³ The uppermost two feet of the site is artificial fill, almost certainly from the original site development, and virtually the entire site is paved with either concrete or asphalt.⁴

(2) Topography. The approximately 5.78-acre project site is located within a relatively flat urbanized area. The existing ground surface elevation varies from about 67 feet to about 63 feet National Geodetic Vertical Datum (NGVD). No open creek or stream channels cross the site; the nearest open water is the Guadalupe River, located approximately 0.6 miles west of the project site.⁵

(3) Soils. Surface soils at the project site are mapped by the Natural Resource Conservation Service⁶ as soils of the Yolo Association. The Yolo association soils are characterized as well-

¹ California Geographic Survey (CGS), 2002. California Geomorphic Provinces, Note 36.

² Wentworth, C.M., 1997. Geologic Materials of the San Francisco Bay Region, United States Geological Survey (USGS) Open File Report 97-744.

³ Wahler Associates, 1992. Remedial Investigation Report, City of San Jose Main Service Yard, Pro. No. SJC-303H.200, February.

⁴ Brown and Caldwell, 1988. Supplemental Hydrogeologic and Closure Investigation for Main Service Yard for City of San Jose (draft), September.

⁵ City of San Jose, 1983. *Fault Hazard Map, San Jose West Quadrangle*, based on 1980 7.5' USGS Topographic Map.

⁶ U.S. Department of Agriculture (USDA), 1968. Soils of Santa Clara County, Soil Conservation Service.

drained, medium and moderately fine textured soils developed in medium textured sedimentary alluvium. Yolo association soils have moderate to high shrink/swell potential, low to moderate corrosivity, and fair strength.

b. Seismic Conditions. The Regional and site specific seismic conditions are discussed below.

(1) Regional Seismicity. The entire San Francisco Bay Area is located within the San Andreas Fault Zone (SAFZ), a complex of active faults forming the boundary between the North American and Pacific lithospheric plates. Movements of the plates relative to one another result in the accumulation of strain along the faults which is released during earthquakes. Numerous moderate to strong historic earthquakes have been generated in northern California by the SAFZ. The level of active seismicity results in classification of the area of seismic risk Zone 4 (the highest risk category) in the California Building Code.

The SAFZ includes numerous active faults found by the California Geological Survey under the Alquist-Priolo Earthquake Fault Zoning Act (A-PEFZA) to be “active” (i.e., to have evidence of fault rupture in the past 11,000 years). The primary faults within the zone are the San Andreas, Hayward-Rodgers Creek, Calaveras, and San Gregorio faults. Regional active faults are shown on Figure V.F-1. There are no known active faults crossing the project site.⁷

The U.S. Geological Survey’s Working Group on California Earthquake Probabilities estimated that there is a 62 percent probability that one or more Moment Magnitude (M_w) 6.7⁸ or greater earthquakes will occur in the San Francisco Bay Area between 2002 and 2031.⁹ The probability of a M_w 6.7 magnitude or greater earthquake occurring along individual faults was estimated to be 21 percent along the San Andreas Fault, 27 percent along the Hayward Fault, eleven percent along the Calaveras Fault, four percent along the Concord Fault, and three percent on the Greenville (Clayton/Marsh Creek) Fault. When predictions are expanded to 100 years it is estimated that about three M_w 6.7 or greater events could occur during that time. Thus the probability of at least one M_w 6.7 or greater magnitude earthquake rises to the near certainty of about 96 percent when calculated for a 100-year span.¹⁰

(2) Site-Specific Seismicity. The project site is about 12.4 miles northeast of the SAFZ¹¹ and about 4.7 miles southwest of the southern Hayward fault.¹² Both faults are right lateral strike-slip faults with a northwest-southeast axis.¹³ The site is not within an Alquist-Priolo Earthquake Fault

⁷ City of San Jose, 1983. op. cit.

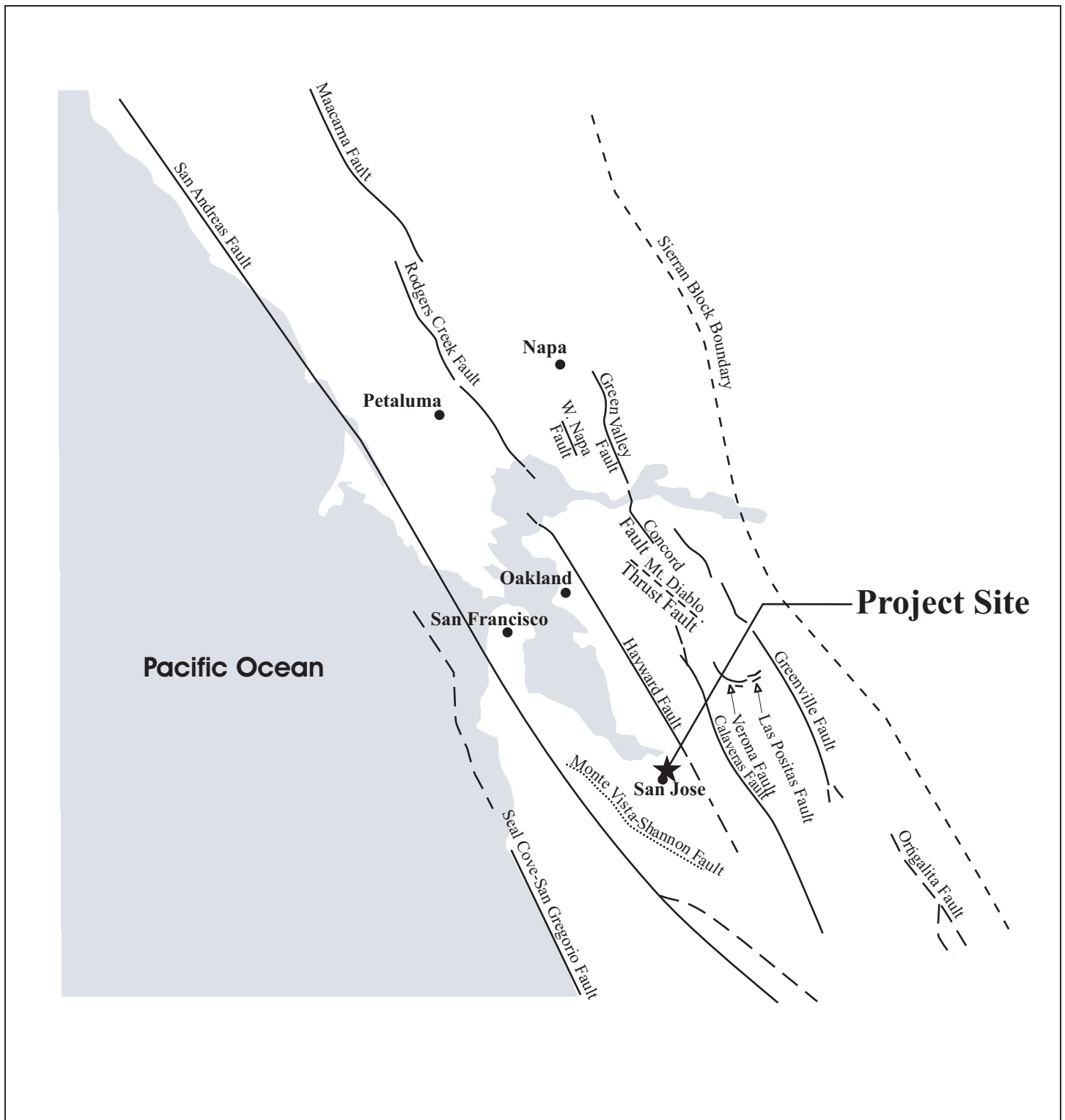
⁸ Moment magnitude (M_w) is now commonly used to characterize seismic events as opposed to Richter Magnitude. Moment magnitude is determined from the physical size (area) of the rupture of the fault plane, the amount of horizontal and/or vertical displacement along the fault plane, and the resistance to rupture of the rock type along the fault. Therefore, the magnitudes of expected earthquakes in the San Francisco Bay Area are reported as moment magnitude.

⁹ USGS, 2003. *Earthquake Probabilities in the San Francisco Bay Region: 2002 to 2031 – A Summary of Findings*, Open File Report 03-214.

¹⁰ Ibid.

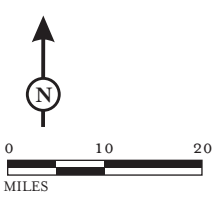
¹¹ California Division of Mines and Geology (CDMG), 1974. *Special Studies Zone Map of the Cupertino Quadrangle*.

¹² California Division of Mines and Geology (CDMG), 1982. *Special Studies Zone Map of the San Jose East Quadrangle*



LSA

FIGURE V.F-1



- LEGEND**
- ACTIVE FAULT -
FAULT HAS EVIDENCE OF SURFACE
DISPLACEMENT WITHIN THE PAST
11,000 YEARS (DASHED WHERE INFERRED)
 - POTENTIALLY ACTIVE FAULT -
FAULT HAS EVIDENCE OF SURFACE DISPLACEMENT
IN THE PAST 1.6 MILLION YEARS, BUT NOT WITHIN
THE PAST 11,000 YEARS
 - - - - SEISMIC SOURCE WITHOUT SURFACE RUPTURE

*Japantown Corporation Yard
Redevelopment Project EIR
Regional Faults*

Zone or a City of San Jose Potential Fault Hazard Zone, although two unnamed inactive faults are located approximately 0.5 miles northeast of the site.¹⁴ The site is located within a California Department of Conservation Seismic Hazard Zone as defined by the Seismic Hazards Mapping Act. Specifically, the project site falls within a liquefaction hazard zone.¹⁵

c. Seismic and Geologic Hazards. Seismic and geologic hazards, including surface rupture, ground shaking, peak acceleration, liquefaction and lateral spreading expansive soils, slope stability, and settlement and differential settlement are discussed below.

(1) Surface Rupture. Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. The location of surface rupture generally can be assumed to be along an active or potentially active major fault trace. No active faults have been mapped at the project site. Therefore, potential for fault rupture at the site is low, and no portion of the site is located within an Alquist-Priolo Earthquake Fault Zone.

The closest active fault to the project site is the Hayward fault, located approximately 4.7 miles to the northeast. Other potentially damaging active faults are located within ten miles of the project site, including the Calaveras and Monte Vista-Shannon faults. The Calaveras fault is listed by A-PEFZA as an active fault and is about eight miles northeast of the site. The Monte Vista-Shannon fault is about ten miles southwest of the project site and is considered a 'potentially active' fault that has not shown evidence of activity in the last 11,000 years.

(2) Ground Shaking. Ground shaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake, and is normally the major cause of damage in seismic events. The extent of ground shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. The Modified Mercalli Intensity Scale (MMI) is the most commonly used scale for measurement of the subjective effects of earthquake intensity. A related concept, acceleration, is measured as a fraction or percentage of the acceleration under gravity (g).

A seismic event on the San Andreas fault is considered capable of generating a M_w 7.9 maximum earthquake. A combined North and South Hayward fault event is estimated to be capable of producing a M_w 6.9 earthquake. Either of these events would generate very strong seismic shaking (MMI VIII) at the project site.¹⁶

¹⁴ City of San Jose, 1983.

¹⁵ California Department of Conservation (CDC), 2002. *Seismic Hazard Zones Map, San Jose West Quadrangle*

¹⁶ ABAG, 2005. *Earthquake Shaking Scenario Map*, www.abag.ca.gov/bayarea/eqmaps/mapsba.html, accessed July 24, 2007.

Table V.F-1: Modified Mercalli Scale

Category	Definition
I	Not felt except by a very few under especially favorable circumstances.
II	Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.
III	Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration like passing of truck. Duration estimated.
IV	During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Felt by nearly everyone, many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.
VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.
VII	Everybody runs outdoors. Damage negligible in building of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.
VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.
XI	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
XII	Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted.

Source: California Geological Survey, 2002, How Earthquakes and Their Effects are Measured.

(3) Peak Acceleration. Estimates of the peak ground acceleration from earthquakes have been made for the Bay Area based on probabilistic models that account for multiple seismic sources. Under these models, consideration of the probability of expected seismic events is incorporated into the determination of the level of ground shaking at a particular location. The expected peak horizontal acceleration (with a ten percent chance of being exceeded in the next 50 years) generated by any of

the seismic sources potentially affecting the project area, including the project site, is estimated by the California Geological Survey as 0.51.¹⁷ This level of ground acceleration at the project site is a potentially significant hazard.

(4) Liquefaction and Lateral Spreading. Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. In the process, the soil undergoes transient loss of strength, which commonly causes ground displacement or ground failure to occur. Since saturated soils are a necessary condition for liquefaction, soil layers in areas where the groundwater table is near the surface have higher liquefaction potential than those in which the water table is located at greater depths.

As mentioned above, the project is located within a State of California-defined Liquefaction Hazard Zone. The vicinity of the site is rated as a moderate liquefaction hazard area by Association of Bay Area Governments (ABAG) studies.¹⁸ The susceptibility (hazard combined with the likelihood of occurring) at the site for liquefaction is rated as moderate to high by ABAG.¹⁹

Lateral spreading is a form of horizontal displacement of soil toward an open channel or other “free” face, such as an excavation boundary. Lateral spreading can result from either the slump of low cohesion unconsolidated material or more commonly by liquefaction of either the soil layer or a subsurface layer underlying soil material on a slope.²⁰ Earthquake shaking leading to liquefaction of saturated soil can result in lateral spreading where the soil undergoes a temporary loss of strength.

The lateral spreading hazard will tend to mirror the liquefaction hazard for the project, and by definition needs an open channel or “free” face to expand into; this can include temporary excavations resulting from the construction process. The project proposes excavations up to 24 feet in depth at the Corporation Yard site for subsurface parking areas and foundations structures, and removal of 100,000 cubic yards of subsurface materials from the site. Proposed grading and off-haul of materials from the smaller existing City surface parking lot site would be minimal, as subsurface parking structures are not planned for this portion of the development. Regional mapping provided by ABAG indicates the susceptibility at the site to liquefaction to be moderate to high, therefore the risk of lateral spreading is considered to be moderate to high during excavation activities.²¹

(5) Expansive Soils. Expansion and contraction of volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes markedly. As a consequence of such volume changes, structural damage to building and infrastructure may occur if the potentially expansive soils were not considered in project design and during construction.

¹⁷ California Geological Survey (CGS), 2006. *Probabilistic Seismic Hazards Mapping Ground Motion Page*, accessed July 24, 2007, www.consrv.ca.gov/cgs/rghm/pshamap/pshamain.html.

¹⁸ ABAG, 2003. *Liquefaction Hazard Map for San Jose, Scenario: North and South Hayward Earthquake*, accessed July 24, 2007 at www.abag.ca.gov/cgi-bin/pickmapliq.pl.

¹⁹ ABAG, 2000. *Liquefaction Susceptibility Map for San Jose, Scenario: North and South Hayward Earthquake*, accessed July 24, 2007 at www.abag.ca.gov/cgi-bin/pickmapliq.pl.

²⁰ Rauch, Alan F., 1997. *EPOLLS: An Empirical Method for Predicting Surface Displacements due to Liquefaction-Induced Lateral Spreading in Earthquakes*, Ph. D. Dissertation, Virginia Tech, Blacksburg, VA.

²¹ ABAG, 2003. op. cit.

Alluvium can develop into compressible or expansive soils. Regional mapping indicates the risk of expansive soils for the general area of the project to be moderate to high, therefore the risk of expansive soils in the project site should be considered to be moderate to high unless site-specific investigations determine otherwise.²²

(6) Slope Stability. Slope failure can occur as either rapid movement of large masses of soil (“landslide”) or slow, continuous movement (“creep”). The primary factors influencing the stability of a slope are: 1) the nature of the underlying soil or bedrock, 2) the geometry of the slope (height and steepness), 3) rainfall, and 4) the presence of previous landslide deposits.

The site is nearly flat and located in the middle of a large alluvial plain with no adjacent or nearby sloping land features. Regional mapping shows that the project and surrounding area is mapped as Category 1, stable areas of zero to five percent slope that are not underlain by landslide deposits.²³

(7) Settlement and Differential Settlement. Differential settlement or subsidence could occur if buildings or other improvements were built on low-strength foundation materials (including imported fill) or if improvements straddle the boundary between different types of subsurface materials (e.g., a boundary between native material and fill). Although differential settlement generally occurs slowly enough that its effects are not dangerous to inhabitants, it can cause significant building damage over time. Portions of the project site that may contain loose or uncontrolled (non-engineered) fill could be susceptible to differential settlement. The project site has been developed since early in the last century. Near the middle of the site, several large underground storage tanks were removed in the 1990’s, and new underground tanks subsequently installed would be removed as part of the site development. The resultant areas of old fill adjacent to native soils and new fill in excavations may pose a risk of settlement or differential settlement.

d. San Jose 2020 General Plan.²⁴ Applicable Goals and Policies from the General Plan are included below.

Soils and Geologic Conditions Goal: Protect the community from the hazards of soil erosion, soil contamination, weak and expansive soils and geologic instability.

- *Soils and Geologic Conditions Policy 1:* The City should require soils and geologic review of development proposals to assess such hazards as potential seismic hazards, surface ruptures, liquefaction, land-sliding, mud-sliding, erosion, and sedimentation in order to determine if these hazards can be adequately mitigated.
- *Soils and Geologic Conditions Policy 2:* The City should not locate public improvements and utilities in areas with identified soils and/or geologic hazards to avoid any extraordinary maintenance and operating expenses. When the location of public improvements and utilities in such areas cannot be avoided, effective mitigation measures should be implemented.
- *Soils and Geologic Conditions Policy 6:* Development in areas subject to soils and geologic hazards should incorporate adequate mitigation measures.
- *Soils and Geologic Conditions Policy 8:* Development proposed within areas of potential geological hazards should not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties.

²² USDA, 1968. op. cit.

²³ USGS, 1970. *Regional Slope Stability Map of the Southern San Francisco Bay Region*.

²⁴ City of San Jose, California, 2005. *General Plan 2020*, accessed July 24, 2007 at: www.sanjoseca.gov/planning/.

- *Soils and Geologic Conditions Policy 9:* Residential development proposed on property formerly used for agricultural or heavy industrial uses should incorporate adequate mitigation/remediation for soils contamination as recommended through the Development Review process.

Earthquakes Goal: Minimize the risk from exposure to seismic activity.

- *Earthquake Policy 1:* The City should require that all new buildings be designed and constructed to resist stresses produced by earthquakes.
- *Earthquake Policy 2:* The City should foster the rehabilitation or elimination of structures susceptible to collapse or failure in an earthquake.
- *Earthquake Policy 3:* The City should only approve new development in areas of identified seismic hazard if such hazard can be appropriately mitigated.
- *Earthquake Policy 4:* The location of public utilities and facilities, in areas where seismic activity could produce liquefaction should only be allowed if adequate mitigation measures can be incorporated into the project.
- *Earthquake Policy 5:* The City should continue to require geotechnical studies for development proposals; such studies should determine the actual extent of seismic hazards, optimum location for structures, the advisability of special structural requirements, and the feasibility and desirability of a proposed facility in a specified location.
- *Earthquake Policy 6:* Vital public utilities as well as communication and transportation facilities should be located and constructed in a way which maximizes their potential to remain functional during and after an earthquake.

Hazards Goal: Strive to protect the community from injury and damage resulting from natural catastrophes and other hazard conditions.

- *Hazards Policy 1:* Development should only be permitted in those areas where potential danger to the health, safety, and welfare of the residents of the community can be mitigated to an acceptable level.
- *Hazards Policy 2:* Levels of "acceptable exposure to risk" established for land uses and structures based on descriptions of land use groups and risk exposure levels are outlined in Figure 15, "Acceptable Exposure to Risk Related to Various Land Uses", of the San Jose General Plan 2020 and should be considered in the development review process.
- *Hazards Policy 3:* Provisions should be made to continue essential emergency public services during natural catastrophes.

2. Impacts and Mitigation Measures

This section analyzes the impacts related to geology, soils and seismicity that could result from implementation of the proposed project. The subsection begins with criteria of significance, which establish the thresholds for determining whether a project impact is significant. The latter part of this section presents the potential geological, soil or seismic impacts associated with the proposed project. Mitigation measures are provided as appropriate.

a. Criteria of Significance. The project would have a significant geology, soils, or seismicity impact if it would:

- Expose people or structures to substantial risk of loss, injury, or death involving:
 - o Rupture of a known active or potentially active earthquake fault, as delineated 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;
 - o Strong seismic ground shaking;
 - o Seismic-related ground failure, including liquefaction;
 - o or Landslides.

- Result in substantial soil erosion or loss of topsoil.
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in an on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
- Be located on expansive soils (as defined in Table 18-1-B of the 1994 Uniform Building Code) or corrosive soils, which could cause substantial damage to building foundations, pavements, utilities, and/or other improvements.

b. Less-than-Significant Impacts. The proposed project would not be expected to expose people or structures to substantial risk of loss, injury or death from rupture of a known earthquake fault as delineated by the State Geologist, as the site is not located within an active or potentially active fault zone as defined by the A-PEFZA. The proposed project would not be subject to substantial risk from landslides, as the site is relatively flat, and is not underlain by, or adjacent to an area subject to slope hazards. The proposed project is not located on an unstable geologic unit, the development of which would be subject to, or contribute to, on- or off-site fault rupture, landslide, or subsidence.²⁵ Implementation of the proposed project would not result in the loss of a known mineral resource; the site is classified MRZ-1, "Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources."²⁶ The proposed project would not hinder energy reserve development, as the project site is not located over a known gas, oil or geothermal field.²⁷ Potential impacts associated with erosion and loss of topsoil are discussed in the Hydrology and Water Quality section of this DEIR.

c. Significant Impacts The following four potentially significant impacts associated with the project have been identified.

Impact GEO-1: Seismically-induced ground shaking at the project could result in damage to life and/or property. (S)

All structures in the Bay Area could potentially be affected by ground shaking in the event of an earthquake along regional active faults. The amount of ground shaking depends on the magnitude of the earthquake, the distance from the epicenter, and the type of earth materials in between. Very strong ground shaking is expected at the project site during expected earthquakes on the Hayward, San Andreas and other regional faults. This level of seismic shaking could cause extensive non-structural damage in buildings at the site. In addition, limited structural damage may occur.

Mitigation Measure GEO-1: For each of the Corporation Yard and City parking lot sites, prior to the issuance of individual site-specific grading or building permits for the applicable site, a design-level geotechnical investigation shall be prepared by a licensed professional, commissioned by the project applicant, and submitted to the City of San Jose Department of Public Works for review and confirmation that the proposed development fully complies with the California Building Code (Seismic Zone 4). The reports shall describe each project site's geotechnical conditions and address potential seismic hazards, such as liquefaction. The

²⁵ Sloan, Doris, 2006. *Geology of the San Francisco Bay Region*, University of California Press.

²⁶ CDC, 1987. *Mineral Land Classification Special Report 146 part 2*, Map plate 2.50, San Jose West Quadrangle,

²⁷ CDC, 2000. *Energy Map of California, Third Edition*, Division of Oil, Gas or Geothermal Resources.

reports shall identify building techniques appropriate to minimize seismic damage. In addition, analysis presented in the geotechnical reports shall conform to the California Division of Mines and Geology recommendations presented in the *Guidelines for Evaluating Seismic Hazards in California*.²⁸

All mitigation measures, design criteria, and specifications set forth in the geotechnical and soils reports shall be followed.

It is acknowledged that seismic hazards cannot be completely eliminated even with site-specific geotechnical investigation and advanced building practices. However, exposure to seismic hazards is a generally accepted part of living in the San Francisco Bay Area. The mitigation measure described above reduces the potential hazards associated with seismic activity to a less-than-significant level. (LTS)

Impact GEO-2: Structures or property at the project could be adversely affected by expansive soils or by settlement of project soils. (S)

Soils underlying portions of the entire project site have moderate to high shrink/swell potential.²⁹ This condition could significantly damage structures and utilities. In addition, non-uniformly compacted imported fill placed previously at the site that could experience settlements under new structural loads. Structural damage, warping, and cracking of roads and other infrastructure, and rupture of utility lines may occur if the potential expansive soils and the nature of the imported fill were not considered during design and construction of improvements.

Mitigation Measure GEO-2: The Corporation Yard and the City parking lot sites are underlain by expansive soils and/or non-engineered fill and the designers of building foundations and other improvements (including the sidewalks, roads, and underground utilities) shall consider these conditions. The design-level geotechnical investigations required under Mitigation Measure GEO-1 shall include measures to ensure potential damages related to expansive soils and non-uniformly compacted fill are minimized. Mitigation options may range from removal of the problematic soils and replacement, as needed, with properly conditioned and compacted fill to design and construction of improvements to withstand the forces exerted during the expected shrink-swell cycles and settlements.

All mitigation measures, design criteria, and specifications set forth in the geotechnical and soils reports shall be followed to reduce impacts associated with shrink-swell soils to a less-than-significant level. (LTS)

Impact GEO-3. Differential settlement at the project site could result in damage to project buildings and other improvements. (S)

²⁸ California Division of Mines and Geology (CDMG), 1997. *Guidelines for Evaluating Seismic Hazards in California*, CDMG Special Publication 117, 74 p.

²⁹ USDA, 1968. op. cit.

Grading of the project site in preparation for construction of buildings and utilities may result in areas of cut and fill. Excavation for sublevel parking garages and the removal of up to 100,000 cubic yards of materials has been proposed for the Corporation Yard site. Areas of fill exist on the Corporation Yard site related to the removal of former underground storage tanks. In addition, the demolition of foundations and excavation and removal of subsurface components such as former hydraulic automotive lifts and tanks, may result in areas containing fills of irregular depths. Fills of different thickness and fills adjacent to cut areas where native soils are exposed at the surface could create the potential for differential settlement. If the settlement is not uniform, structural damage could occur. Buried utilities may also experience differential settlement along their alignments.

Historical uses of the parking lot site have included a Chinese movie theater and residential and commercial uses. From approximately 1950³⁰ to the present, the site was undeveloped and used as a parking lot. In addition, two underground electrical utility vaults were identified on-site during the preparation of the Phase I ESA.

Uncompacted and loose fill and existing un-engineered and historic fill will be subject to varying rates of compaction and settlement compared to the native undisturbed soil. Structures built over discontinuous materials of varying densities and compactness may be subject to stress or damage due to differential settlement.

Mitigation Measure GEO-3: For each of the Corporation Yard and City parking lot sites, as required under Mitigation Measure GEO-1, prior to the issuance of individual grading permits for the applicable site, a site-specific grading plan and geotechnical report shall be prepared by licensed professionals and submitted to the City of San Jose Department of Public Works for review and approval. The plans shall include specific recommendations for mitigating potential settlement associated with fill placement and areas of different fill thickness. All mitigations measures set forth in the geotechnical report and/or grading plan shall be followed. (LTS)

Impact GEO-4. Liquefaction at the project site could result in damage to buildings and other improvements. (S)

The site is located within a California Department of Conservation Seismic Hazard Zone as defined by the Seismic Hazards Mapping Act. Specifically, the project site falls within a liquefaction hazard zone.³¹ Regional mapping by ABAG also indicates moderate to high susceptibility to liquefaction within the project site. Adverse effects of liquefaction can take many forms including land failures, lateral spreading, ground oscillation, loss of soil bearing strength, settlement, and increased lateral pressure on retaining walls.³² When the soil supporting a building or other structure liquefies and loses strength, large deformations can occur within the soil that may allow the structure to settle and tip and smaller settlements may occur as soil pore-water pressures dissipate and the soil consolidates after the earthquake. Determination that the site is within a State defined Seismic Hazard zone

³⁰ The Phase I Environmental Site Assessment for the Parking Lot indicated that these uses occurred to 1970; the Sanborn maps reviewed for 1950 and 1969 showed this area as vacant. CCC, 2006, op. cit.

³¹ CDC, 2002, op.cit.

³² Earthquake Engineering Research Institute (EERI), 1994. *Earthquake Basics: Liquefaction – What is it and what to do about it*. Accessed at www.eeri.org on October 20, 2005.

requires the preparation of site-specific a geotechnical report and assessment of the seismic hazards present.³³

Mitigation Measure GEO-4: Project design for each of the Corporation Yard site and the City parking lot site shall be in accordance with the recommendations contained in site-specific geotechnical reports, as required under Mitigation Measure GEO-1, prepared by a licensed professional and reviewed and approved by the San Jose Department of Public Works. The City of San Jose Department of Public Works shall approve all final design and engineering plans. Project design and construction shall be in conformance with current best standards for earthquake resistant construction in accordance with the California Building Code (Seismic Zone 4), applicable local codes and in accordance with the generally accepted standard of geotechnical practice for seismic design in Northern California. The City shall submit one copy of the approved geotechnical reports, including mitigation measures, if any, that are to be taken, to the State Geologist within 30 days of approval of the reports. The design-level geotechnical investigations shall include measures to reduce potential damage related to liquefaction to a less-than-significant level. (LTS)

³³ California Codes Public Resources Code Section 2690-2699.6;

2697 (a) Cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard. If the city or county finds that no undue hazard of this kind exists, based on information resulting from studies conducted on sites in the immediate vicinity of the project and of similar soil composition to the project site, the geotechnical report may be waived. After a report has been approved or a waiver granted, subsequent geotechnical reports shall not be required, provided that new geologic datum, or data, warranting further investigation is not recorded. Each city and county shall submit one copy of each approved geotechnical report, including the mitigation measures, if any, that are to be taken, to the State Geologist within 30 days of its approval of the report;

(b) In meeting the requirements of this section, cities and counties shall consider the policies and criteria established pursuant to this chapter. If a project's approval is not in accordance with the policies and criteria, the city or county shall explain the reasons for the differences in writing to the State Geologist, within 30 days of the project's approval; and

2698. Nothing in this chapter is intended to prevent cities and counties from establishing policies and criteria which are more strict than those established by the board.

G. HYDROLOGY AND WATER QUALITY

This section describes the existing hydrological setting for the project site, including runoff, drainage, and water quality based on available information from published and unpublished reports, site-specific environmental investigation reports, internet sources, and a reconnaissance of the site conducted in June 2007. Based on the information reviewed, this section identifies impacts that may result from project development, and provides mitigation measures to reduce potential impacts to a less-than-significant level, if feasible.

1. Setting

A description of the existing conditions related to hydrology and storm drainage is provided below.

a. Climate. The climate of the San Jose area is characterized as dry-summer subtropical (often referred to as Mediterranean), with cool wet winters and relatively warmer dry summers. The annualized average high temperature is 71.0° Fahrenheit (F); the average low is 49.6° F. The mean annual rainfall in the vicinity of the project site, for the period between 1948 and 2006, is approximately 14.8 inches. During the period of record, annual rainfall has varied from 6.12 inches (1953) to 32.6 inches (1983), with a one-day high of 3.6 inches of precipitation on January 30th, 1968.¹ Analysis of long-term precipitation records indicates that wetter and drier cycles lasting several years are common in the region. Severe, damaging rainstorms occur at a frequency of about once every three years.²

b. Runoff and Drainage. The approximately 5.78-acre project site is located within a relatively flat urbanized area. The existing ground surface elevation varies from about 67 feet to about 63 feet National Geodetic Vertical Datum (NGVD) resulting in a slope of less than one percent to the northwest. No open creek or stream channels cross the site; the nearest open water is the Guadalupe River, located approximately 0.6 miles west of the project site.³ The project site is largely covered with impervious surfaces (pavement and buildings). Most of the rainfall at the site encounters the impervious surfaces, travels by sheetflow to collectors set into the paved areas between buildings and near the periphery of the site, and from there into the City-maintained storm drain system. The project site is located in the local Guadalupe River watershed and is served by a storm sewer network which discharges directly to the Guadalupe River northwest of the site. The Guadalupe River flows north to empty into South San Francisco Bay.⁴

c. Flooding. A small portion of the project site is located within the 100-year flood hazard zone, as mapped by FEMA, and a majority of the site is located within an urbanized area classified as Zone

¹ Western Regional Climate Center, 2007. *General Climate Summary, Station 047821, San Jose, CA*, accessed July 25, 2007 at: www.wrcc.dri.edu.

² Brown, William M. III, 1988. Historical Setting of the Storm: Perspectives on Population, Development, and Damaging Rainstorms in the San Francisco Bay Region, in *Landslides, Floods, and Marine Effects of the Storm of January 3-5, 1982*, in the San Francisco Bay Region, California, Stephen D. Ellen and Gerald F. Wiczorek, Eds., U.S. Geological Survey Professional Paper 1434.

³ City of San Jose, 1983. *Fault Hazard Map, San José West Quadrangle*, based on 7.5' USGS Topographic Map, 1980.

⁴ City of San Jose, 2007. Environmental Services: *Watersheds, Creeks and Rivers Map*, accessed at: www.sanjoseca.gov/esd/stormwater/watersheds.asp on 25 July, 2007.

D, “Areas in which flood hazards are undetermined,” and both 7th and Taylor Streets, where adjacent the project site, are classified as Zone AO⁵ (DEPTH 1, flooding depth of 1 foot).⁶

Catastrophic structural dam failure can be caused by an earthquake or overflow. Existing dams under DWR’s jurisdiction are periodically inspected to assure that they are adequately maintained and to direct the owner to correct any identified deficiencies. Regular inspections and required maintenance of the dams substantially reduces the potential for catastrophic failure. Dam failure inundation hazard maps for this area can be viewed at the Association of Bay Area Governments website. The vicinity of the project site is not within a mapped flood inundation area due to dam failure.⁷

The location of the project site (more than ten miles from the southern portion of the San Francisco Bay) and the elevation of the site (greater 60 feet NGVD) would be expected to preclude exposure of the site to coastal hazards, such as tsunamis, seiche, extreme high tides, or sea level rise.

d. Water Quality. The quality of surface water and groundwater in the vicinity of the project site is affected by past and current land uses at the site and within the watershed, and the composition of geologic materials in the vicinity. Water quality in surface and groundwater bodies is regulated by the State Water Resources Control Board and Regional Water Quality Control Boards. The project site is under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (Water Board), which is responsible for implementation of state and federal water quality protection regulations and guidelines in the Bay Area. The Water Board implements the Water Quality Control Plan (Basin Plan), a master policy document for managing water quality issues in the region. The Basin Plan establishes beneficial water uses for waterways and water bodies within the region. Designated beneficial uses for South San Francisco Bay, which is the receiving water for drainage from the project site, include estuarine habitat, fish migration, preservation of rare and endangered species, water contact and non-contact water recreation, fish spawning, and wildlife habitat. South San Francisco Bay is listed on the State’s 303(d) list as impaired for several pesticides (chlordane, DDT, diazinon, and dieldrin), dioxin compounds, exotic species, furan compounds, mercury, PCBs, and selenium (the Water Board has determined that the assimilative capacity of the Bay for these pollutants has already been exceeded).

(1) Stormwater. Runoff water quality is regulated by the National Pollutant Discharge Elimination System (NPDES) Program (established through the Clean Water Act)⁸; the NPDES program objective is to control and reduce pollutants to water bodies from point source⁹ discharges. Locally, the NPDES program is administered by the Water Board. The Water Board has conveyed responsibility for implementation of storm water regulations in the vicinity of the project site to the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). The SCVURPPP

⁵ “Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.”

⁶ Federal Emergency Management Agency (FEMA), 1988 (as revised to reflect LOMR dated Oct. 25, 2006). Flood Insurance Rate Map (FIRM), City of San Jose, California, Community Panel Number 060349 0019 E, December 16.

⁷ ABAG, 1995. *Dam Failure Inundation Hazard Map for NW San Jose/Milpitas/Santa Clara*, accessed July 25, 2007 at: www.abag.ca.gov/cgi-bin/pickdamx.pl.

⁸ US Environmental Protection Agency, 2007. NPDES Overview, accessed July 31, 2007 at: cfpub.epa.gov/npdes/index.cfm.

⁹ Point sources are discrete conveyances such as pipes or man-made ditches.

maintains compliance with the NPDES Permit and promotes storm water pollution prevention within that context. Compliance with the NPDES Permit is mandated by state and federal statutes and regulations.

Participating agencies (including the City of San Jose) must comply with the provisions of the County permit by ensuring that new development and redevelopment mitigate water quality impacts to storm water runoff both during the construction and operation of projects to the maximum extent practicable (MEP). The reduction of pollutant loading from new and redevelopment projects is addressed in Council Policy 6-29 (Urban Runoff), approved on February 3, 1998, and revised on October 7, 2003, February 15, 2005, May 17, 2005 and August 15, 2006.

Recent changes to the permit held by the SCVURPPP are detailed in Water Board Order No. R2-2005-0035 (NPDES Permit No. CAS029718). Participating agencies (including the City of San Jose) are required to manage development-related increases in peak runoff flow, volume and duration ("hydromodification"), where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams and creeks. On May 19, 2005, the San Jose City Council approved the Hydromodification Management Plan (HMP) Final Report, which was prepared for SCVURPPP, to meet the Permit's hydromodification control measure (HCM) requirements. The San Jose City Council approved Policy 8-14 (Post-Construction Hydromodification Management) for immediate implementation of the plan on October 18, 2005.

Per City Policy 6-29, all new and redevelopment projects are required to implement post-construction Best Management Practices (BMPs) and treatment control measures (TCMs) to the maximum extent practicable. This policy also established specific design standards for post-construction TCMs for applicable projects, which includes significant redevelopment projects adding or replacing 10,000 square feet of impervious surface. New development and significant redevelopment projects that are subject to Provision C.3 of the Water Board order would be required to meet all the terms of the permit, including (but not limited to):

- **Numeric Sizing Criteria for Pollutant Removal Treatment Systems.** The project must include source controls, design measures, and treatment controls to minimize storm water pollutant discharges. Treatment controls must be sized to treat a specific amount of average annual runoff (in the Bay Area this is equivalent to a storm with precipitation measuring 1 inch or a uniform intensity of 0.2 inches per hour).
- **Operation and Maintenance of Treatment Measures.** Treatment controls often do not work unless adequately maintained. The permit requires an operations and maintenance (O&M) program, which includes: 1) identifying the properties with treatment controls; 2) developing agreements with private entities to maintain the controls, and 3) periodic inspection, maintenance (as needed), and reporting.
- **Limitation on Increase of Peak Storm Water Runoff Discharge Rates.** Urbanization creates impervious surfaces that reduce the landscape's natural ability to absorb water and release it slowly to creeks. These impervious surfaces increase peak flows in creeks and can cause erosion. Projects must evaluate the potential for this to occur and provide mitigation as necessary.

In addition, projects disturbing one acre or more of land during construction are required to file a Notice of Intent (NOI) with the Water Board to be covered under the State NPDES General Construction Permit (Water Quality Order 99-08-DWQ) for discharges of storm water associated

with construction activity. A developer must propose control measures that are consistent with the State General Permit. A Storm Water Pollution Prevention Plan (SWPPP) must be developed and implemented for each site covered by the general permit. A SWPPP should include BMPs designed to reduce potential impacts to surface water quality to the maximum extent practicable (MEP) during the construction of the project.

The terms of both the General Construction Permit and SCVURPPP Municipal Stormwater Discharge Permit are revised and amended from time to time. The project applicants would be required to comply with the terms of the permits as codified at the time of each project approval, and under any circumstances to protect the quality of surface water to the MEP standard. Currently, a revision to the General Permit is under consideration and in the public review phase. The Municipal permit is usually revised about every five years, and was last revised in 2005; however, either permit may be subject to more frequent revision as deemed necessary to achieve public policy goals. Revisions generally result in more rigorous standards and may include additional water monitoring and testing responsibilities for the project applicants.

Municipal Regional Urban Runoff Phase I NPDES Stormwater Permit (MRP)

The Water Board is preparing a draft for an updated Municipal Regional Urban Runoff Phase I NPDES permit, which is currently in review and undergoing agency comment. This new version of the MRP is intended to increase compliance by simplifying the complex NPDES permit system, making the requirements more uniform, and lessening the number of separate regulatory documents necessary to effectively communicate the goals and standards.

In the previous NPDES permit issuances, the detailed actions to be implemented by the Permittees (agencies) were contained in Stormwater Management Plans, which were separate from the NPDES permits, and incorporated, by reference. Since those plans were actually part of the NPDES permits, and were required to undergo complete public notice and comment, it is a natural evolution in process that this latest MRP permit reissuance incorporates those plan level details in the permit. This permit specifies the actions necessary to reduce the discharge of pollutants in stormwater to the maximum extent practicable, in a manner designed to achieve compliance with water quality standards and objectives, and effectively prohibit non-stormwater discharges into municipal storm drain systems and watercourses within the Permittees' jurisdictions. This set of specific actions is equivalent to the requirements that in past permit cycles were included in a separate Stormwater Management Plan for each Permittee, or Countywide group of Permittees. With this permit reissuance, that level of specific compliance detail is integrated into the permit language, and is not a separate document.

The revised MRP will include requirements for the following components:

- Municipal Maintenance Activities
- New Development and Redevelopment
- Industrial and Commercial Inspections
- Illicit Discharge and Elimination
- Construction Inspections
- Public Information and Outreach
- Water Quality Monitoring

- Pesticides Load Reduction
- Trash Reduction
- Mercury Load Reduction
- PCBs Load Reduction
- Copper Load Reduction
- Polybrominated Diphenyl Ethers (PBDE), Legacy Pesticides and Selenium
- Exempt and Conditionally Exempt Discharges

The new permit will become effective once it is accepted by the agencies and then adopted and issued by the Water Board.

(2) Groundwater. The project site has been undergoing remediation and cleanup due to several leaking underground storage tanks that were removed in 1990. Site investigations related to the remediation have focused primarily on the uppermost 20 feet of the subsurface which consist of alternating layers of clay and sand. Based on a site-specific remediation and water monitoring study conducted in 2006, groundwater in the vicinity of the project site occurs at elevations of approximately 53 to 57 feet NGVD.¹⁰ The site's surface elevation ranges from about 63 to 67 feet NGVD, and therefore groundwater would be expected to occur within about ten feet of the ground surface.¹¹ The first sandy layer occurs at a depth of about eight feet and is approximately two to four feet thick. This is the first water-bearing zone, and becomes nearly devoid of water during dry periods and is probably a 'perched' water table. Beneath this is a four- to six-foot thick layer of silty clay that is relatively impermeable. Underlying the clay is a stratum of sandy clay, which constitutes a second water-bearing unit.¹² Though water may rise to near the ground surface in wells that penetrate this deeper, potentially confined aquifer, excavations that do not penetrate the upper confining layer may not encounter free groundwater beyond that which is present in the perched zone. Fluctuations in the depth to shallow groundwater would be expected to occur seasonally with variations in recharge from winter storms.

Shallow groundwater at the project site has been affected by releases of petroleum-related compounds, and the ongoing remediation of soil and groundwater contaminant issues at the project site are discussed in Hazards section of this DEIR.

e. City of San Jose Policies. Applicable policies from the San Jose 2020 General Plan and other City Council Policies are compiled below.

Natural Resources - Water Resources

- *Water Resources Policy 7:* The City shall require the proper construction and monitoring of facilities storing hazardous materials in order to prevent contamination of the surface water, groundwater and underlying aquifers. In furtherance of

¹⁰ Earth Tech, Inc., 2006. Second Quarter 2006 Groundwater Monitoring Report, City of San Jose Main Service Yard, Project No. 92464.01, July 31.

¹¹ City of San Jose, 1983. *Fault Hazard Map, San Jose West Quadrangle*, based on 1980 7.5' USGS Topographic Map.

¹² Earth Tech, Inc., 2006. op. cit.

this policy, design standards for such facilities should consider high groundwater tables and/or the potential for freshwater or saltwater flooding.

- *Water Resources Policy 8:* The City should establish policies, programs, and guidelines to adequately control the discharge of urban runoff and other pollutants into the City's storm drains.
- *Water Resources Policy 9:* The City should take a proactive role in the implementation of the Santa Clara Valley Urban Runoff Pollution Prevention Program.
- *Water Resources Policy 10:* The City should encourage more efficient use of water by promoting water conservation and the use of water-saving devices.
- *Water- Resources Policy 11:* The City should promote the use of reclaimed water when feasible, particularly for industrial users, for irrigation and in groundwater recharge areas.
- *Water Resources Policy 12:* For all new discretionary development permits for projects incorporating large paved areas or other hard surface areas (e.g., building roofs), or major expansion of a building or use, the City should require specific construction and post-construction measures to control the quantity and improve the water quality of urban runoff.

Natural Resources – Natural Communities and Wildlife Habitats

- *Bay and Baylands Policy 5:* The City should continue to participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program and take other necessary actions to formulate and meet regional water quality standards which are implemented through the National Pollution Discharge Elimination System Permits and other measures.

Services and Facilities

- *Storm Drainage and Flood Control Policy 12:* New projects should be designed to minimize potential damage due to storm waters and flooding to the site and other properties.

Hazards

- *Flooding Policy 1:* New development should be designed to provide protection from potential impacts of flooding during the 100-year-flood.

City Council Policies

- *Post-Construction Urban Runoff Management Policy (No. 6-29, revised Aug15, 2006):* It is the purpose of this Policy to establish an implementation framework, consistent with SCVURPPP NPDES MS4 Permit requirements, for incorporating storm water runoff pollution control measures into new and redevelopment projects to reduce storm water runoff pollution from such projects to the maximum extent practicable. All projects shall be encouraged to minimize impervious surface through techniques such as those described in the Bay Area Storm Water Management Agencies Association's (BASMAA's) "Start at the Source Design Guidance Manual for Stormwater Quality protection," 1999 edition, and the SCVURPPP Stormwater Handbook, including the use of permeable pavement, where appropriate.
- *Post-construction Hydromodification Management Policy (No. 8-14, effective Oct 18, 2005):* It is the purpose of this Policy to establish an implementation framework, consistent with the SCVURPPP NPDES MS4 Permit requirements, for incorporating measures into the City's development review and approval process to control hydromodification impacts from new and redevelopment projects where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams and creeks. Group 1 Projects shall not cause an increase in the erosion potential of the receiving stream over the pre-project (existing) condition, where such increase is likely to impact beneficial uses. All Group 1 Projects are encouraged to install Post-Construction hydromodification control measures.

2. Impacts and Mitigation Measures

This section analyzes the impacts related to hydrology and water quality that could result from implementation of the proposed project. The subsection begins with criteria of significance, which establish the thresholds for determining whether a project impact is significant. The latter part of this section presents the potential hydrology and water quality impacts associated with the proposed project. Mitigation measures are provided as appropriate.

a. Criteria of Significance. The project would have a significant effect on hydrology or water quality if it would:

- Violate any water quality standards or waste discharge requirements.
- Create or contribute runoff that would be an additional source of water quality degradation.
- Result in substantial erosion or sedimentation on- or off-site that would affect the quality of receiving water.
- Create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems and/or increase upstream or downstream flooding and 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.
- 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.
- Expose people or structures to a substantial risk of loss, injury or death involving flooding.
- Expose people or structures to a substantial risk of inundation by seiche, tsunami, extreme high tides, and/or sea level rise.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a significant net deficit in aquifer volume or a lowering of the local groundwater table level.

b. Less-than-Significant Impacts. The distance from the Bay and elevation of the project site (greater than 60 feet NGVD) would be expected to protect the site from coastal flooding hazards, including tsunami, extreme high tides, seiche and sea level rise. There are no surface water bodies in the vicinity of the project site that could generate damaging seiches. The site is not located within a mapped dam failure inundation zone. These potential impacts are therefore less-than-significant.

The project area is highly urbanized under existing conditions and both the Corporation Yard and City parking lot sites are largely covered with impervious surfaces, with the exception of a small amount of lawn and landscaping in the northwest corner of the corporation yard. See Tables V.G-1 and V.G-2 for existing impervious surface coverage on the corporation yard and surface parking lot sites, respectively. It is expected that the proposed projects would include areas of lawn, trees, permeable pavement and/or gravel walkways, and may result in a net reduction in impervious surfaces, as shown in Tables V.G-1 and V.G-2, and therefore the groundwater recharge rate at the site would be expected to be the same or potentially greater than current conditions. An underground parking garage is proposed for the Corporation Yard site, however, the total footprint of impervious surfaces, including sub-surface structures resistant to recharge, can be no greater than current conditions, as at present the site is nearly completely paved. The City parking lot site is also completely covered in asphalt pavement, and any introduction of pervious surfaces, such as lawns or planters hydraulically connected to subsurface soils, should provide a recharge improvement. The project does not propose to pump groundwater (aside from necessary construction period dewatering operations to clear excavations) and therefore would not deplete local groundwater supplies by extraction of the resource. Compared to current conditions, additional depletion of groundwater resources associated with the proposed project is not expected. This is a less-than-significant impact.

Table V.G-1: Pervious and Impervious Surfaces Comparison – Corporation Yard Site

	Existing Condition (square feet)	% of Site	Proposed Condition (square feet)	% of Site	Difference (square feet)	% of Change
Site Size (gross acres):	5.23	--	--	--	--	--
Site Size (square feet):	227,940	--	--	--	--	--
Building Footprint(s)	82,689	36%	164,657	72%	81,968	36%
Parking	46,134	20%	7,380	3%	38,754	17%
Streets - Private and/or Public (As Applicable)	0	0%	7,150	3%	7,150	3%
Driveways, Sidewalks, Patios, Paths, etc.	94,178	42%	3,330	2%	90,848	40%
Landscaping	4,939	2%	45,423	20%	40,484	18%
Total	227,940	100%	227,940	100%		
Impervious Surfaces	223,001	98%	182,517	80%	-40,484	-18%
Pervious Surfaces	4,939	2%	45,423	20%	40,484	18%
Total	227,940	100%	227,940	100%		

Note: Calculations of proposed coverage are based on conceptual plans provided by the project applicant, and are only estimates.

Source: Williams and Dame Development, Inc., 2008.

Table V.G-2: Pervious and Impervious Surfaces Comparison – Surface Parking Site

	Existing Condition (square feet)	% of Site	Proposed Condition (square feet)	% of Site	Difference (square feet)	% of Change
Site Size (gross acres):	0.55					
Site Size (square feet):	23,884					
Building Footprint(s)	0	0%	13,703	57%	13,703	57%
Parking	23,884	100%	Under Building Footprint	0%	-23,884	-100%
Streets - Private and/or Public (As Applicable)	0	0%	0	0%	0	0%
Driveways, Sidewalks, Patios, Paths, etc.	0	0%	2,366	10%	2,366	10%
Landscaping	0	0%	7,815	33%	7,815	33%
Total	23,884	100%	23,884	100%	--	--
Impervious Surfaces	23,884	100%	16,069	67%	-7,815	-33%
Pervious Surfaces	0	0	7,815	0	7,815	33%
Total	23,884	100%	23,884	100%	--	--

Note: Calculations of proposed coverage are based on conceptual plans provided by the project applicant, and are only estimates.

Source: First Community Housing, 2008.

The project does not propose to alter the course of an established stream or river at or adjacent to the project site. Drainage patterns at the site may be locally modified; however, the amount of impervious cover is expected to be similar to existing conditions. Alteration of drainage patterns can result in hydromodification impacts to downstream creeks. Hydromodification is defined as the alteration of the hydrologic characteristics of coastal and noncoastal waters, which in turn could cause degradation of water resources. In the case of a stream channel, this is the process whereby a stream bank is eroded by flowing water. This typically results in the suspension of sediments in the water course.

Provision C.3.f of the applicable NPDES Permit specifies the enhanced requirements for limiting “the increase of peak stormwater runoff rates.” However, the NPDES Permit amendment (Order No. R2-2005-0035, NPDES Permit No.CAS029718) states that:

...projects within “Redevelopment Project Areas” (as defined by the [California] Health and Safety Code Section 33000, et seq.) that redevelop an existing Brownfield site or create housing units affordable to persons of low or moderate income as defined by Health and Safety Code Section 50093, are excepted from the requirements of Provision C.3.f. and the HMP, and after impracticability of including onsite treatment measures is established, from the requirement for alternate, equivalent offsite treatment. Significant change in impervious surface or significant change in stormwater runoff volume or timing is unlikely in these redevelopment circumstances, because these developments would be within a largely already paved catchment, and on a site that is largely already paved or otherwise impervious.¹³

In addition, the proposed project would be required to meet the current NPDES permitting requirements, which include the use of BMPs. The project applicant has provided a Conceptual Storm Water Treatment plan, shown in Figure V.G-1¹⁴ which tentatively includes, but does not limit itself to, the use of methods such as maximizing planting areas, flow through planters, and grassy swales. The proposed park area may be of ‘self treating’ landscaping, and the community building drained to the park area. In addition, the larger runoff areas of the primary buildings may be serviced by precast manhole stormwater filter units, to be maintained by a homeowner association. Generally, these BMPs would result in a reduction of both peak and total runoff from a site. The project is required to comply with City Council Policies 6-29 and 8-14, as applicable, at the Development Permit stage. Therefore, potential impacts associated with hydromodification from the proposed project are less than significant.

The project site is in the Guadalupe River watershed, which empties to South San Francisco Bay.¹⁵ The Water Board has designated the Guadalupe River as water quality impaired for diazinon and mercury, and South San Francisco Bay as impaired for several pesticides (chlordane, DDT, diazinon, and dieldrin), dioxin compounds, exotic species, furan compounds, mercury, PCBs, and selenium.¹⁶

The site stormwater discharges to storm mains which in turn empty into the Guadalupe River, which flows to the Bay. If there is a chance that the project could increase the load of any of these pollutants discharged to these surface water bodies, then a significant impact would be expected to occur (the Water Board has determined that the assimilative capacity of the Bay for these pollutants has already been exceeded). The contaminants that have been identified as causing the water quality impairment of South San Francisco Bay are unlikely to be used at the project site. Each of the pesticides (chlordane, DDT, diazinon, and dieldrin) has been banned and is therefore not available for legal use. The source of the dioxin and furan compounds has been identified as atmospheric deposition. The

¹³ California Regional Water Quality Control Board, San Francisco Bay Region, 2005. *Amendment Revising Order No. 01-119*, Order No. R2-2005-0035, NPDES Permit No.CAS029718).

¹⁴ Charles W. Davidson Co., 2007, Conceptual Storm Water Treatment, Lands of City of San Jose, Jackson St, & Taylor St. between N. 6th St. & N 7th St., San Jose, CA. Job # 1752, 6 September.

¹⁵ City of San Jose, 2007. Environmental Services: *Watersheds, Creeks and Rivers Map*, accessed at: www.sanjoseca.gov/esd/stormwater/watersheds.asp on 25 July, 2007.

¹⁶ Regional Water Quality Control Board (Water Board), San Francisco Bay Region, 2003. 2002 CWA Section 303(d) List of Water Quality Limited Segment, Approved by USEPA. July 2003.

proposed project would not alter the rate of atmospheric deposition, and therefore would not change the current loading rate of these compounds (in fact, the rate may be decreased by reducing throughput of these compounds due to improved BMPs for stormwater). The proposed project would not introduce exotic species to South San Francisco Bay or increase the impact of existing exotic species. PCBs and mercury would not be used at the project site and discharges of these contaminants would not be expected to be created by the project (a review of a Historical Site Analysis Results¹⁷ does not indicate any of the materials listed in the 303d list noted above were present at the site). The selenium impairment of South San Francisco Bay has been caused by industrial point sources, natural sources, and exotic species. None of these uses is proposed for the project site. Therefore, the project would not be expected to result in impacts to surface water quality.

c. Significant Impacts. The project could result in the following significant impacts related to hydrology and water quality.

Impact HYD-1: Alteration of local drainage patterns could potentially result in exceedance of the capacity of downstream stormwater conveyance structures, resulting in localized flooding. (S)

Under existing conditions, the project site is urbanized and almost entirely covered with impervious surfaces (with the exceptions of the lawn areas and landscaping in the northwest corner of the site and very limited amounts of unpaved areas around the perimeter of the site). Although the exact details of the specific design of the project are still in development, conceptual plans include open space and a plaza on the Corporation Yard site, which may result in a net decrease in impervious surfaces compared to current conditions. In addition, the proposed project would be required to meet the current NPDES permitting requirements, which include the use of BMPs. Generally, these BMPs result in a reduction of both peak and total runoff from a site. Drainage from the site would be directed to storm mains located under Taylor Street.

Mitigation Measure HYD-1: As a condition of approval of the Planned Development Permit plans of the Corporation Yard and the City parking lot sites, the respective applicants shall demonstrate through the preparation of a detailed hydraulic analysis, that implementation of proposed drainage plans for the applicable development site would not increase total off-site peak flow rates, or exceed the capacities of local system components. The projects must use drainage components and methods that are designed in compliance with City of San Jose standards. The grading and drainage plans shall be reviewed for compliance with these requirements by the City of San Jose Department of Public Works. Any improvements deemed necessary by the City will be part of the conditions of approval. Implementation of this mitigation measure would reduce potential impacts associated with increased peak runoff volumes to a less-than-significant level. (LTS)

Impact HYD-2: Construction activities and post-construction site uses could result in degradation of water quality in the receiving waters by reducing the quality of stormwater runoff. (S)

(1) Construction-Period Impacts and Grading. Construction within the project site would require temporary disturbance of surface soils. During the construction period, grading and excavation activities would result in exposure of soil to runoff, potentially causing erosion and entrainment

¹⁷ Earth Tech, Inc., 2006. op. cit. (Appendix C)

of sediment (and potentially contaminants associated with releases that may have occurred at Industrial sites) in the runoff. Soil stockpiles and excavated areas on the project site would be exposed to runoff and, if not managed properly, the runoff could cause erosion and increased sedimentation and pollutants in stormwater.

The potential for chemical releases is present at most construction sites given the types of materials used, including fuels, oils, paints, and solvents. Once released, these substances could be transported to the Guadalupe River and the Bay in stormwater runoff, wash water, and dust control water, potentially reducing water quality. In addition, the project site is the location of historic chemical releases that have affected soil quality. Erosion of contaminated soils could result in the transport of pollutants (along with the sediments) to the Bay. The City of San Jose regularly inspects construction sites to ensure that the sites are doing their part to protect the stormdrains and creeks and are operating in compliance with the law. Most construction sites are inspected by a Building Inspector, Public Works Inspector and an Environmental Services Inspector. All three types of City inspectors are trained to ensure that the construction site is protecting the stormdrains and creeks from polluted runoff. If a site has difficulty complying with stormwater regulations, that site would be inspected by the City more frequently and would be subject to fines.¹⁸ Grading would not be allowed between October 15th and April 15th of any year without Erosion Control plans and measures approved by the Director of Public Works. Stormwater pollution prevention measures in accordance with City specifications and with the document "Clean Bay Blueprint" shall be implemented throughout the year to the satisfaction of the Director of Public Works.¹⁹

Mitigation Measure HYD-2a: The applicant(s) shall each prepare a SWPPP designed to reduce potential impacts to surface water quality through the construction period of the project. The SWPPPs must be maintained on-site and made available to City inspectors and/or Water Board staff upon request. The SWPPPs shall include specific and detailed BMPs designed to mitigate construction-related pollutants. At minimum, BMPs shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater. The SWPPPs shall specify properly designed centralized storage areas that keep these materials out of the rain.

An important component of the stormwater quality protection effort is the knowledge of the site supervisors and workers. To educate on-site personnel and maintain awareness of the importance of stormwater quality protection, site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPPs. The SWPPPs shall specify a monitoring program to be implemented by the construction site supervisor, which must include both dry and wet weather inspections. In addition, in accordance with State Water Resources Control Board

¹⁸ City of San Jose, 2007, *Environmental Services: Construction Activities and Stormwater Pollution; Requirements*, accessed 9-12-2007 at: <http://www.sanjoseca.gov/esd/stormwater/construction.asp>.

¹⁹ City of San Jose, revision 4/4/03, *Grading Permit: Submittal Instructions including Standard Notes*, accessed 9-12-2007 at: http://www.sanjoseca.gov/publicworks/tds/pdfs/grading_permit_info.pdf

Resolution No. 2001-046,²⁰ monitoring would be required during the construction period for pollutants that may be present in the runoff that are “not visually detectable in runoff.”²¹

BMPs designed to reduce erosion of exposed soil may include, but are not limited to: soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales, and sediment basins. The potential for erosion is generally increased if grading is performed during the rainy season as disturbed soil can be exposed to rainfall and storm runoff. If grading must be conducted during the rainy season, the primary BMPs selected shall focus on erosion control; that is, keeping sediment on the site. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. If hydroseeding is selected as the primary soil stabilization method, then these areas shall be seeded by September 1 and irrigated as necessary to ensure that adequate root development has occurred prior to October 1. Entry and egress from the construction site shall be carefully controlled to minimize off-site tracking of sediment. Vehicle and equipment wash-down facilities shall be designed to be accessible and functional during both dry and wet conditions.

The City of San Jose Department of Public Works shall review and approve the SWPPPs and drainage plans prior to approval of the planning development permit or grading plan. The Director of Public Works and City inspectors from Building, Public Works or Environmental Services Departments may require more stringent stormwater treatment measures than required by the SWPPPS, at their discretion. Implementation of this two-part mitigation would reduce this impact to a less-than-significant level. (LTS)

(2) Operation-Period Impacts. New construction and intensified land uses at the project site would result in increased vehicle use and potential discharge of associated pollutants. Increased numbers of vehicles and parking facilities at the project site would likely result in increased leaks of fuel, lubricants, tire wear, and fallout from exhaust, which would contribute petroleum hydrocarbons, heavy metals, and sediment to the pollutant load in runoff being transported to receiving waters. Runoff from the landscaped areas at the proposed project may contain residual pesticides and nutrients. Long-term degradation of runoff water quality from the site could impact local water quality in the Guadalupe River, impaired for diazinon and mercury, or the receiving waters of South San Francisco Bay, impaired for several pesticides (chlordane, DDT, diazinon, and dieldrin), dioxin compounds, exotic species, furan compounds, mercury, PCBs, and selenium.²²

The project applicant has provided a Conceptual Storm Water Treatment plan (see Figure V.G-1) which tentatively includes, but does not limit itself to, the use of methods such as maximizing planting areas, flow through planters, and grassy swales. The proposed park area may be of ‘self treating’ landscaping, and the community building drained to the park area. In addition, the larger runoff areas of the primary buildings may be serviced by precast manhole stormwater filter units, to be maintained by a homeowner association. Any untreated discharge from the site would likely con-

²⁰ State Water Resources Control Board, 2001. Modification of Water Quality Order 99-08-DWQ State Water Resources Control Board (SWRCB) National Pollutant Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity.

²¹ Construction materials and compounds that are not stored in water-tight containers under a water-tight roof or inside a building are examples of materials for which the discharger may have to implement sampling and analysis procedures.

²² Water Board, 2003. op. cit.

tain elevated levels of pollutants and therefore could result in a significant impact to water quality requiring mitigation.

Mitigation Measure HYD-2b: Project applicants for both the Corporation Yard and City parking lot sites shall comply with the City of San Jose's Post-Construction Urban Runoff Management Policy (Policy Number 6-29), which requires:

All new and redevelopment projects to implement Post-Construction Best Management Practices (BMPs) and Treatment Control Measures (TCMs) to the maximum extent practicable. This Policy also establishes specified design standards for Post-Construction TCMs for Major Projects and minimum Post-Construction BMPs for all Land Uses of Concern, including Expansion Projects. This Policy further establishes the criteria for determining the situations in which it is impracticable to comply with the Major Project design standards, including the criteria for evaluating the equivalency of Alternative Compliance Measure(s).²³

The applicants for each of the Corporation Yard and City parking lot sites shall have a stormwater control plan prepared by a qualified professional, prior to approval of the planning development permit. In accordance and compliance with City of San Jose Policy 6-29, the stormwater control plan for each site shall include, and show, calculations in compliance with the numerical sizing criteria listed in Chapter 4 of the C.3 Stormwater manual, as issued by the SCVURPPP. As part of the determination as to suitability of the site, location-specific soil testing is required if landscape treatment is part of the treatment strategy to be employed at the site(s).

The stormwater control plans shall demonstrate through detailed hydraulic analysis that implementation of the proposed drainage plans would result in treatment of the appropriate percentage of the runoff from the sites (in compliance with the County NPDES permit). The permit provides for more than one methodology for calculating numeric sizing criteria; however, the amount of runoff that is typically required to be treated is about 85 percent of the total average annual runoff from the site. The qualified professionals preparing the design-level stormwater control plans shall consider additional measures designed to mitigate potential water quality degradation of runoff from all portions of the completed developments. In general, passive, low-maintenance BMPs (e.g., grassy swales, porous pavements) are preferred by the agency. The City shall ensure that both the Corporation Yard and City parking lot site project designs include features and operational BMPs to reduce potential impacts to surface water quality associated with operation of the projects to the maximum extent practicable. These features shall be included in the stormwater control plans and final development drawings.

The design teams for each of the Corporation Yard and City parking lot sites shall review and incorporate as many concepts as practicable from *Start at the Source, Design Guidance Manual for Stormwater Quality Protection*²⁴ and the California Stormwater Quality Association's

²³ City of San Jose, 2005. City Council Policy, Post-Construction Urban Runoff Management, Policy Number 6-29, May 17, page 2.

²⁴ Bay Area Stormwater Management Agencies Association, 1999. *Start at the Source, Design Guidance Manual for Stormwater Quality Protection*.

Stormwater Best Management Practice Handbook, New Development and Redevelopment. Any use of end-of-pipe treatment systems must be accompanied by a viable maintenance program. Specifically, drainage from the project sites should be treated prior to discharge to city storm drains.

The enclosed parking areas shall not be drained to the stormwater conveyance system. The garages should be dry-swept or, if washdown water is used the effluent should be discharged to the sanitary sewer system under permit from the San Jose/Santa Clara Water Pollution Control Plant.

The City of San Jose Department of Public Works shall review and approve the stormwater control plans and drainage plans prior to approval of the planning development permit. The Director of Public Works and City inspectors from Building, Public Works or Environmental Services Departments may require more stringent stormwater treatment measures than required by the SWPPPS, at their discretion. Implementation of this two-part mitigation would reduce this impact to a less-than-significant level. (LTS)

Impact HYD-3: Dewatering discharges may contain contaminants and if not properly managed could cause impacts to construction workers and the environment. (S)

Groundwater at the project site could be encountered at about ten feet below the ground surface (and on a seasonal basis may be present at shallower depths) and may therefore be encountered during excavation for building foundations, utilities, and other improvements. There are two general classes of pollutants that may result from dewatering operations: sediment, and chemical compounds. High sediment content in dewatering discharges is common because of the nature of the operation in which soil and water mixes in the turbulent flow of high volume pump intakes. Chemical pollutants are most commonly found in dewatering in areas with a history of groundwater contamination (e.g. leaks to the subsurface from historical uses). The project site has a history of industrial activity (refer to the Hazards section of this Draft EIR for discussion of identified areas of potential subsurface contamination and impacts and mitigations required before site development). Direct discharge of dewatered groundwater to the storm drainage system could result in water quality impacts to the receiving waters.

Mitigation Measure HYD-3: As required under Mitigation Measure HYD-2a, the project applicants for both the Corporation Yard and City parking lot sites shall each have a SWPPP prepared for their sites. The SWPPPs shall include provisions for the proper management of construction-period dewatering activities. At minimum, all dewatering shall be contained prior to discharge to allow the sediment to settle out, and filtered, if necessary, to ensure that only sediment-free water is discharged to the storm or sanitary sewer system, as appropriate. The General Permit makes allowance for circumstances where limited amounts of uncontaminated dewatering effluent, from foundation excavations for example, may be released after sediment has settled out and the effluent has been filtered, in compliance with the terms of the SWPPP. This may be appropriate for the City parking lot site, however, the applicant is responsible for ensuring that any necessary field or laboratory test are performed if contamination is suspected, and appropriate steps taken.

For the Corporation Yard site, in areas of suspected groundwater contamination (i.e., near sites where chemical releases are known or suspected to have occurred), the groundwater shall be

analyzed by a State-certified laboratory for the suspected pollutants prior to discharge. Based on the results of the analytical testing, the project applicant(s) shall acquire the appropriate permit(s) prior to discharge of the dewatering effluent. Discharge of the dewatering effluent would require a permit from the Water Board (for discharge to the storm sewer system) and/or the San Jose/Santa Clara Water Pollution Control Plant (for discharge to the sanitary sewer system).

Proper implementation of this mitigation measure would reduce this impact to a less-than-significant level. (LTS)

Impact HYD-4: Redevelopment of the Corporation Yard site proposes below-ground parking structures which could be inundated by infiltrating groundwater and/or during extreme storm events. (S)

Groundwater in the area of the project site is relatively shallow, at a depth of approximately ten feet, or possibly shallower during the wet season. The floor level of the below-grade parking garage proposed on the Corporation Yard site would be at or below, at least during portions of the year, the level of the groundwater table, and infiltration and ponding of groundwater within the parking garages could occur. If the parking garages are not properly designed and constructed, this infiltrating groundwater in these underground spaces could potentially endanger people and property. In addition, subgrade parking garages beneath buildings can accumulate significant quantities of brake dust, oil, grease, and fuel drippings over time. Maintenance for parking areas includes sweeping and in some case washing down the spaces. The products of these maintenance processes can carry materials that should not be allowed into the stormwater systems.

The majority of the Corporation Yard site is not located within the 100-year flood hazard zone and no placement of housing in a flood hazard zone is proposed by the project. Therefore, the project would not result in exposing people to loss, injury or death from flooding in their homes. However, according to the most recent FEMA flood maps,²⁵ updated per the FEMA Letter of Map Revision (LOMR) dated October 25, 2006, the area of East Taylor Street and North 7th Street adjacent the project site are within a 100-year flood zone and classified Zone AO (DEPTH 1, flooding depth of 1 foot). This flood zone encroaches slightly on the Corporation Yard site along these streets. Redevelopment of the Corporation Yard site includes a full level of below-grade parking across a large portion of the site. Access to the parking areas has been proposed off of North 7th Street. If, during storm events, the potential surface water inflow was not controlled, stormwater runoff could flow into these underground parking garages, potentially endangering people and property. These are potential significant impacts and require mitigation.

Mitigation Measure HYD-4a: The portions of the structures of the proposed Corporation Yard site that may come into contact with groundwater shall be waterproofed using accepted building practices and approved by the City of San Jose Building Official. The methods used in waterproofing may include (but are not limited to) the placement of membranes or coatings (e.g. modified asphalt, urethanes, or rubber polymers) on the exterior surfaces of the below grade foundation components. In addition, each sublevel area shall be equipped with a sump

²⁵ Federal Emergency Management Agency (FEMA), 1988 (as revised to reflect LOMR dated Oct. 25, 2006). Flood Insurance Rate Map (FIRM), City of San Jose, California, Community Panel Number 060349 0019 E, December 16. Note that the map available on the FEMA interactive mapping web site had not yet been updated at the time of this writing.

pump to remove infiltrating ground water and garage wash-down water to the sanitary sewer system, and the effluent should be discharged to the sanitary sewer system under permit from the San Jose/Santa Clara Water Pollution Control Plant.

Mitigation Measure HYD-4b: All structures of the proposed Corporation Yard site shall be built so that the potential for surface water flow into the underground parking, or other underground structures, is minimized. If the potential surface water inflow is not controlled, the sump pumps, installed primarily to remove ground water infiltration and wash-down water from garage maintenance, may be inadequate. Specifically, the entrances and exits to all below-grade structures shall be protected from all surface water inflow (including floodwater associated with the 100-year flood event) either by grade control and/or berms at the entrances and exits. The surface elevation for the entrance to the underground garage shall rise to at least one foot above the highest 'top-of-curb' point adjacent the parking entrance.

Proper implementation of this two-part mitigation measure would reduce this impact to a less-than-significant level. (LTS)

As redevelopment of the City parking lot site does not include subsurface parking, nor is it adjacent a FEMA mapped 100-year flood zone, this Mitigation Measure is not required for that site.

H. HAZARDS AND HAZARDOUS MATERIALS

This section describes the potential for hazardous materials¹ and other hazards to affect human health and the environment at the San Jose Corporation Yard and paved City parking lot west of the Corporation Yard. The evaluation was based on a review of available information included with the application, review of environmental investigations reports, consultation with persons knowledgeable about the project site, a regulatory agency database search, a site reconnaissance, and a review of other published materials. Historical land uses at the Corporation Yard have included uses that have caused subsurface soil and groundwater contamination. Lead and other hazardous materials associated with automobiles may also be present in shallow surface soils at the City parking lot from former land uses. Remediation/construction workers and future site users may come into contact with hazardous materials at the Corporation Yard and City parking lot during and following project development, resulting in adverse health effects.

1. Setting

The following section describes the regulatory framework and hazardous materials setting for the project site.

a. Regulatory Framework. A myriad of laws and regulations at the federal, State, and local levels affect the management of hazardous materials. In California, the U.S. Environmental Protection Agency (U.S. EPA) has granted most enforcement authority over Federal hazardous materials regulations to the California Environmental Protection Agency (Cal/EPA). In turn, two local agencies, the San Jose Fire Department (SJFD) and Santa Clara County Department of Environmental Health (SCCDEH), have been granted authority by the State to enforce most regulations pertaining to hazardous materials, including permitting for hazardous materials storage in accordance with San Jose Municipal Code 17.68 (Ordinance 21334).

Oversight over investigation and remediation of sites affected by hazardous materials releases can be performed by State agencies, such as the Department of Toxic Substances Control (DTSC), regional agencies, such as the San Francisco Bay Regional Water Quality Control Board (Water Board), or local agencies, such as SCCDEH or the Santa Clara Valley Water District (SCVWD).²

b. Hazardous Materials Setting. The hazardous materials setting includes discussion on land use history and previous environmental investigations on the site.

(1) Land Use History. Summaries of previous land uses are provided for each of the two properties comprising the project site.

¹ The California Health and Safety Code defines a hazardous material as, "...any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety, or to the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, radioactive materials, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment." (California Health and Safety Code, Section 25501)

² SCCDEH Local Oversight Program has oversight of the Corporation Yard site. Prior to 2004, SCVWD provided oversight for many leaking underground storage tank sites, including the Corporation Yard.

Corporation Yard. A history of former land uses was completed for the Corporation Yard based on a review of historical fire insurance maps, aerial photographs, city directories, City of San Jose hazardous materials management records, and interviews with persons knowledgeable about the site.

From 1884 to 1915, the northern half of the Corporation Yard was residentially and commercially developed. The southwestern portion contained stores, restaurant, and a hotel. After 1915 and until 1950, the Corporation Yard site was developed for mixed uses including the Fire Station Engine Company No. 5 at the approximate location of Building 100 (See Figure V.H-1). The northern portion of the Corporation Yard was then developed commercially, with a box and crate manufacturing business and a paint and print shop. The central section of the site was developed as the City of San Jose Corporate Yard and City shops. The southern portion of the Corporation Yard site was commercially developed including a restaurant, hotel, and a building material manufacturer. In 1954, Buildings 100 and 300 were present at their approximate, current locations.³ By 1966, Buildings 200, 400, 500 and 600 were also present their current location (Figure V.H-1). By 1980, Building No. 300 had been partially demolished with the northeastern portion remaining.

Parking Lot. Historical uses of the parking lot site have included a Chinese movie theater (1891 to 1912) and residential and commercial uses⁴ (1913 to approximately 1950⁵). From approximately 1950⁶ to the present, the site was undeveloped and used as a parking lot.

(2) Previous Environmental Investigations. Summaries of previous environmental investigations for each of the two properties comprising the project site are described below.

Corporation Yard, Investigations from 1983 through 2006. Several environmental investigations have been completed at the Corporation Yard from approximately 1983⁷ to 2006. A summary of these investigations is provided below.

A total of seven underground storage tanks (USTs) were used by the City of San Jose for the Corporation Yard prior to 1987 (Figure V.H-1).⁸ Two of the USTs were found to be leaking (5,000-

³ Sanborn map not available for review. Wahler Associates, 1992, Remedial Investigation Report, City of San Jose, Main Service Yard, prepared for City of San Jose, February (no date).

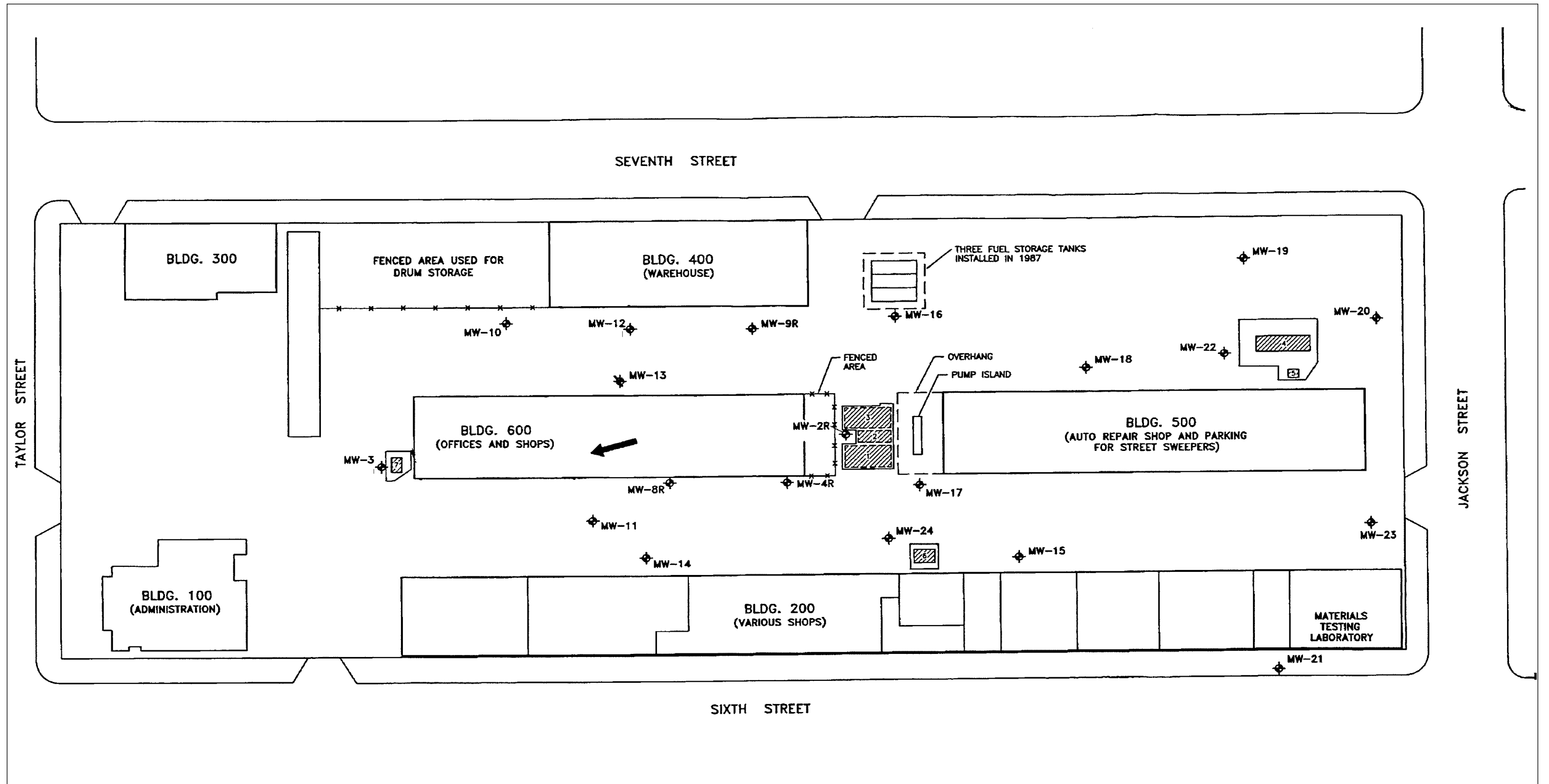
⁴ Specific uses were not identified on the Sanborn maps included in Confidential Compliance Consultants, Inc., (CCC), 2006, Phase One Environmental Site Assessment, Japan Town Project, 681 North Sixth Street, San Jose, California 95112, prepared for First Community Housing of San Jose, CA, 16 June

⁵ The Phase I Environmental Site Assessment for the Parking Lot indicated that these uses occurred to 1970; the Sanborn maps reviewed for 1950 and 1969 showed this area as vacant. CCC, 2006, op. cit.

⁶ Ibid.

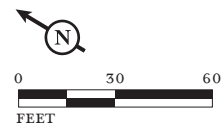
⁷ City of San Jose, 696 N. 6th Street, Detailed Review Checklist, p. 3, claim #2843. Notification of a petroleum leak at the site was reported on 25 February 1983.

⁸ These tanks included: Tank 1, 8,000-gallons, unleaded gasoline; Tank 2, 5,000-gallon diesel; Tank 3, 8,000-gallon unleaded gasoline; Tank 4, 20,000-gallon leaded gasoline; Tank 5, 1,200-gallon waste oil (also kerosene); Tank 6, 550-gallon waste oil; and Tank 7, 2,000-gallon paint thinner. Brown and Caldwell, 1991, Surveillance of Underground Storage Tank Removal, Main Service Yard, San Jose, prepared for City of San Jose, California, January.



LSA

FIGURE V.H-1



LEGEND

- EXTENT OF TANK EXCAVATION
- APPROXIMATE LOCATIONS OF FORMER TANKS AND TANK NUMBER
- MONITORING WELL AND DESIGNATION (LOCATIONS ARE APPROXIMATE)
- DIRECTION OF GROUNDWATER FLOW

FORMER UNDERGROUND STORAGE TANKS

TANK NO.	TANK SIZE (GALLONS)	CONTENTS
1	8,000	UNLEADED GASOLINE
2	5,000	DIESEL
3	8,000	LEADED GASOLINE
4	20,000	UNLEADED GASOLINE
5	1,200	WASTE OIL, KEROSENE, DIESEL
6	550	WASTE OIL
7	2,000	PAINT THINNER

Japantown Corporation Yard
Redevelopment Project EIR
Corporation Yard Site Underground
Storage Tanks and Monitoring Wells

SOURCE: EARTHTECH, 2006.

I:\WDD0701 japantown\figures\Fig_VH1.ai (8/6/07)

gallon diesel and 8,000-gallon leaded fuel) in 1983; these tanks, and an interconnected UST were taken out of service following this discovery. In 1987, three new 12,000-gallon USTs (two gasoline and one diesel) were installed at a separate location at the Corporation Yard site; these USTs are still present on-site.

Twelve groundwater monitoring wells (MW-1 through MW-12) were installed at the Corporation Yard between 1984 and 1986 in response to the two leaking USTs. In 1987, a soil and groundwater contamination investigation, migration control activities,⁹ and a remedial investigation were required by SCVWD. By 1990, all but the three newest tanks installed in 1987 had been removed.

A remedial investigation was conducted in 1991 and additional site investigation were conducted at the Corporation Yard in late 1991 with the installation of 39 soil borings and 12 additional groundwater monitoring wells (MW-13 through MW-24)¹⁰ to address additional USTs removed from the site that had also leaked (USTs 4 and 5). As part of the remedial investigation, a conduit study was completed to assess the possibility of vertical and lateral migration of contaminants at the Corporation Yard¹¹ and additional soil samples were collected in 1993.

Groundwater monitoring activities were conducted in July 1988, October-November 1989, September-November 1991, June-July 1993, April 1997, three quarterly monitoring events in 1998, one quarterly event in 2005, and two quarterly monitoring events in 2006.¹² Based on these investigations, the primary chemicals of concern (COC) associated with subsurface soil contamination at the Corporation Yard include: Total Petroleum Hydrocarbons (TPH) as gasoline (TPHg) and diesel (TPHd), benzene, toluene, ethylbenzene, and xylenes (BTEX), and lead. The primary COC for groundwater include the constituents above, plus TPH as kerosene (TPHk), methyl tert butyl ether (MTBE), naphthalene, and cyclohexane.¹³ The source areas identified associated with these COC are located near former UST 1 through 3 (between Building 500 and Building 600), former UST 4 and 5 (east of Building 500), and near the Materials Testing Lab and between Buildings 200 and 500.

A human health risk assessment and corrective action plan were prepared for the Corporation Yard in 1999, which evaluated soil data collected in 1991 and 1993, and groundwater data through 1998 for the volatile and semi-volatile COC identified above. The risk assessment included Risk Based Screening Levels (RBSLs)/Site Specific Target Limits (SSTLs)¹⁴ for possible future site residents,

⁹ Removal of 40 to 56 gallons of free product from groundwater monitoring wells at the Corporation Yard was completed in 1991. Earth Tech, 2006, Second Quarter 2006 Groundwater Monitoring Report, City of San Jose, Main Service Yard, prepared for City of San Jose Department of Environmental Services, 31 July.

¹⁰ Wahler Associates, 1992. op. cit.

¹¹ The conduit study was performed as part of the remedial investigations and concluded that wells MW-2 and MW-4 through MW-9 may have been acting as vertical conduits through which contamination from the A-1 water bearing zone could migrate through the A-2 water bearing zone, and also this could occur at pilot extraction well PE-1. These wells were subsequently destroyed in 1991 and 1992 and selected replacement wells were installed in 1993. RUST Environment & Infrastructure, 1998, First Quarter 1998 Interim Monitoring Report for City of San Jose Main Service Yard, prepared for City of San Jose, Department of Public Works, April. See Figure V.H.-1 for well locations.

¹² Earth Tech, 2006. op. cit.

¹³ Earth Tech, 1999. Human Health Risk Assessment and Corrective Action Plan for City of San Jose Main Service Yard, prepared for City of San Jose Department of Public Works, January.

¹⁴ Risk-based screening levels (RBSLs) are concentrations in soil or groundwater that would not be expected to result in excess cancer risk or other health hazards to future site residents. They are based on generic conservative

assuming the Corporation Yard would be closed and the site redeveloped for possible residential uses. Potential exposure to site residents was assumed to include direct contact with soil and volatilization of COC into indoor air. Contact with COC in groundwater was assumed to include potential exposure to volatiles in indoor air assuming the site would be developed with a subgrade parking structure or basement (similar to the proposed development). Site soil and groundwater data available at the time of the risk assessment were compared with the RBSLs/SSTLs, to assess the potential for unacceptable risk or health hazards to future site residents. Based on these comparisons, the maximum concentrations of benzene in soil and groundwater (in the absence of any future site remediation) were found to exceed the indoor air SSTLs, indicating a potential health risk to future site residents under the conditions evaluated. Other COC evaluated were below their respective RBSLs/SSTLs.¹⁵

The 1999 corrective action plan recommended that soil remediation be conducted as part of site redevelopment activities, with excavation of contaminated soil disposed of at an off-site facility. Monitored natural attenuation was also recommended for groundwater contamination, with possible use of oxygen-releasing compounds to enhance natural attenuation.¹⁶

Corporation Yard Site Closure Requirements and Status, 2007. SCCDEH has required that additional field investigations be conducted in anticipation of the scheduled redevelopment of the Corporation Yard from commercial to residential uses.¹⁷ Additional groundwater monitoring activities, well repairs, and documentation of these activities; assessment of groundwater quality and the presence of free product below Building 600; and a soil gas investigation for vapor intrusion of petroleum hydrocarbons are required. The City of San Jose and San Jose Redevelopment Agency (RDA) have entered into a cooperative agreement allowing RDA to carry forward the environmental investigation and remediation efforts related to the leaking USTs (LUSTs) on behalf of the City.¹⁸ Additional subsurface investigations have been completed at the Corporation Yard to address the SCCDEH's request and case closure will be sought for the site prior to or at the time of redevelopment.¹⁹ In obtaining case closure for LUSTs, the responsible party must demonstrate that the release does not pose a significant threat to human health and safety, the environment, and water

assumptions regarding the underlying soil and groundwater and exposure of future residents. Site-specific screening levels (SSTLs) are also concentrations in soil or groundwater that would not be expected to result in excess cancer risk or result in health hazards for future site residents, but are calculated taking into consideration site-specific data.

¹⁵ Earth Tech, 1999. op. cit.

¹⁶ Ibid.

¹⁷ County of Santa Clara, Department of Environmental Health, 2007, Letter to Mr. Napp Fukuda, City of San Jose, and Mr. Bob Staedler, Redevelopment Agency for the City of San Jose, Regarding Fuel Leak Investigation: San Jose Main Yard, 696 N. 6th Street, San Jose, California, Case No. 048-035, SCVWDID No. 07S1E05M01f. A workplan to implement the requested items was due on 31 July 2007, with the next groundwater monitoring report due 30 October 2007.

The City of San Jose requested an extension and the submitted the workplan in mid-August 2007. Additional investigation has been completed at the Site to address the SCCDEH's requirements; documentation of these field activities is not yet available. Fukuda, Napp, City of San Jose, 2007, personal communication with J. Pettijohn of Baseline, 1 and 29 August 2007.

¹⁸ Staedler, Bob, City of San Jose Redevelopment Agency, 2007, personal communication with J. Pettijohn of Baseline, 1 August.

¹⁹ Fukuda, 2007. op. cit.

resources; closure may also be granted when all significant risks posed by contamination can be managed or mitigated, and appropriate investigation and cleanup efforts have been undertaken.²⁰

It is anticipated that prior to case closure, SCCDEH will require the preparation and implementation of a revised Corrective Action Plan (CAP)²¹ by RDA/City (or undertaken by the applicant) to address soil and groundwater contamination associated with the former LUSTs and surface contamination at the Materials Testing Lab at the Corporation Yard site. The purpose of a CAP is to ensure that site remediation would protect the public health for future site users (e.g., residential, commercial, utility/landscape/maintenance workers) considering the proposed project, in accordance with local, state, and federal requirements. Verification monitoring is typically completed following implementation of a CAP to demonstrate that the approved cleanup proposed in the CAP was achieved. Following implementation of an approved CAP and verification monitoring, case closure may then be requested from SCCDEH. However, if residual soil and groundwater contamination would be left in place or the cleanup goals proposed in the CAP cannot be achieved, SCCDEH may require a Residual Risk Management Plan (RRMP) to be prepared by the City/RDA (or applicant) prior to case closure. A RRMP includes an assessment of present and future human health and environmental risks (during remediation, project construction, and project operations), site management measures including notifications, restriction, indemnifications, and worker health and safety plans, contingency options, and a participation in a groundwater monitoring program.²² Following preparation of a RRMP, case closure may then be requested from SCCDEH.

Prior to site redevelopment, the City would also remove the existing three USTs and other hazardous materials containers identified on the property, in accordance with local, state, and federal requirements.²³ If contamination is discovered following the removal of these USTs, it is anticipated that the City/RDA (or applicant) would work with SCCDEH to complete the items required by the regulatory oversight agency, as described above, in order to achieve case closure.

Parking Lot. Subsurface samples were not collected as part of the Phase I ESA. Two underground electrical utility vaults were identified on-site during the preparation of the Phase I ESA. These vaults, owned by Pacific Gas and Electric, were observed not to have staining and contain mineral oil that does not contain polychlorinated biphenyls (PCBs). The Phase I ESA recommended the collection of surface soil samples, since historical structures on the site likely contained lead-based paint.²⁴ The purpose of the sampling would be to establish the potential for health impacts to construction workers and passer-byes during excavation for future construction activities at the parking lot site.

(3) Hazardous Materials Management. Summaries of previous hazardous materials management for each of the two properties comprising the project site are described below.

²⁰ Santa Clara Valley Water District, not dated, Leaking Underground Storage Tank Oversight Program (LUSTOP), A Guide to Satisfying Regulatory Requirements and Protecting Groundwater. Reviewed on-line at <http://www.sccgov.org>.

²¹ An initial CAP was submitted in 1999, but additional sampling efforts have been required by SCCEHD, which may necessitate revising the CAP.

²² SCVWD, not dated. op. cit.

²³ Fukuda, 2007. op. cit.

²⁴ CCC, 2006. op. cit.

Corporation Yard. A 1991 Hazardous Materials Management Plan for the Materials Testing Laboratory (Figure V.H-1) and also for the Main (Corporation) Yard indicated that solvents such as trichloroethene, trichloroethane, and acetone, some of which were disposed to the floor drain, and asphalt cleaning compounds were stored and used. Barricade lanterns that contained kerosene were also stored and refilled in the vicinity of the Materials Testing Lab and possibly also the southern corner of Building 600. The environmental investigations above considered these uses in the collection and analysis of samples.

Parking Lot. No hazardous materials management records were available for review for this site. The site is operated as a paved parking lot with no hazardous materials storage identified during a June 2007 site reconnaissance. However, it is unknown when the site was paved; parked vehicles may have cause surface releases of motor vehicle fluids if the site was used for parking prior to paving of the site.

(4) Subsurface Lithology. Summaries of previous subsurface lithologies for each of the two properties comprising the project site are described below.

Corporation Yard. The Corporation Yard is covered with several inches of asphalt, and one to two feet of fill, underlain by approximately six to eight feet of silty and sandy clay. The clay layer is underlain by two to four feet of fine clayey and silty sand, which contains some fine sand lenses. The first sandy unit, at approximately nine to 14 feet below ground surface (bgs), is often referred to as the “A-1” water-bearing zone.²⁵ The A-1 zone is considered a perched groundwater zone since during the summer and drought periods, this zone contains little water.²⁶

The A-1 zone is underlain by four to six feet of silty clay and two feet of fine silty sand, which constitutes the “A-2” water-bearing zone, which is a confined water-bearing zone,²⁷ at approximately 15 to 22 feet bgs. Hydrological information suggests that the A-1 and A-2 zones are not hydraulically connected to the deeper aquifer; a continuous clay aquitard separates the A-1 and A-2 zones from the deeper aquifer.²⁸ Groundwater flow direction during the latest groundwater monitoring event was to the northwest (see Figure V.H-1).

Parking Lot. Site-specific subsurface conditions are not available for the parking lot site since Phase I ESAs do not typically include subsurface sampling. However, subsurface conditions are expected to be similar to the Corporation Yard, which is located adjacent to the parking lot. Groundwater in the vicinity of the site indicated a groundwater depth of 16 to 17 feet bgs, and a flow direction to the north-northwest;²⁹ however, there are local areas that may have perched water or that vary seasonally to as shallow as 10 feet bgs.

(5) Site Reconnaissance Observations, Corporation Yard and Parking Lot. Nine buildings were identified at the Corporation Yard within a secured fence enclosure during a June

²⁵ Wahler Associates, 1992. op. cit.

²⁶ Earth Tech, 1999. op. cit.

²⁷ Ibid.

²⁸ Wahler Associates, 1992. op. cit.

²⁹ CCC, 2006. op. cit.

2007 site reconnaissance by Baseline Environmental Consulting. The buildings were observed to have been recently vacated or in the process of vacating by the City. The Corporation Yard had seven single-story buildings, with 85,000 square feet of work space. The buildings included an administration building; storage building for gravels and other inert materials; wood shop with compressor and air pressure tank; a vehicle maintenance shop with a compressor/air pressure tank, lifts that appeared to have been disabled by removing and sealing with concrete, storage of 55-gallon drums containing vehicle fuels; and four additional shops (locked and not accessible during the site visit).³⁰

Other on-site hazardous materials storage observed included: USTs and fuel dispensers;³¹ one sand blaster, a natural gas generator on a trailer, a cylinder storage area, one transformer, and one flammable storage cabinet (locked).³² Several groundwater monitoring wells (Christy box covers) associated with the groundwater monitoring activities described above were also observed on-site. The Corporation Yard and City parking lot sites were paved at the time of the site visit. The single entrance to the parking lot was along North Sixth Street. Visual improvements at the parking lot include curbs, gutters, and underground utilities,³³ and fencing.

In Spring 2007 the City of San Jose expanded operations at its Central Service Yard on Senter Road and the uses of the Japantown Corporation Yard were transferred to the Central Service Yard. In furtherance of the Redevelopment Plan, the RDA Board approved a contract on November 6, 2007 for surface demolition activities at the project site. Hazardous materials abatement activities at the site were completed and demolition activities commenced at the site in mid-January 2008. Demolition activities are anticipated for completion in March 2008. As such, the baseline condition utilized in this EIR assumes that surface demolition has been completed and the existing buildings and aboveground hazardous materials contained in or adjacent to these buildings have been removed.

Immediate off-site land uses to the Corporation Yard included: vacant land and rail lines to the north along North 7th Street; mixed used development (primarily residential and retail) to the east; retail and commercial and cultural (church) uses to the south along North 6th Street; and commercial, light industrial (auto shop), vacant land, and residential uses to the west. A residential structure (Fuji Towers) is located to the west of the Corporation Yard site and north of the City parking lot site.

(6) Regulatory Agency Database Search, Corporation Yard and Parking Lot and Adjacent Sites. A regulatory agency database search was completed for the project site.³⁴ The Corporation Yard site is listed on regulatory agency databases of hazardous materials release sites compiled pursuant to Government Code Section 65962.5 associated with the LUSTs. The parking lot

³⁰ The interior of a paint shop, materials testing lab, electrical storage room, custodial storage room, plumbing shop, and meter shop were not available for observation during the site visit.

³¹ The fuel island area was posted with closure signage indicating removal of all fuels on 23 and 24 April 2007, in preparation of facility closure in June 2007. These USTs are planned for removal as part of the redevelopment activities proposed. Fukuda, 2007, op. cit.

³² As described in the Project Description, all aboveground hazardous materials that are still present at the Corporation Yard site will be removed from the site at the time of removal of all buildings (baseline condition) for off-site disposal/recycling.

³³ CCC, 2006. op. cit.

³⁴ Environmental Data Resources, 2007, The EDR Radius Map with GeoCheck, San Jose Corporation Yard Redevelopment, 696 N. 6th Street, San Jose, CA 95112; CCC, 2006, op. cit.

and adjacent properties (other than the Corporation Yard) are not listed on any regulatory agency databases of hazardous materials releases.

Releases from LUSTs at the Corporation Yard site are not anticipated to have affected subsurface conditions at the parking lot, based on the presumed north-northwest groundwater flow direction.³⁵ One site adjacent to the Corporation Yard, T & M Asphalt, located at 297 Taylor Street, is listed in the Cortese database; the status of this adjacent site is not known.³⁶ Fox Corporation, 330 E. Taylor Street, located to the northeast of the Corporation Yard, was listed as having a diesel spill from a UST in 1995. The Water Board closed the case in March 29, 2001.³⁷

c. Worker Health and Safety. The U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) regulates worker health and safety at the federal level. The Federal Occupational Safety and Health Act of 1970 authorizes states (including California) to establish their own safety and health programs with OSHA approval; the California Department of Industrial Relations (DIR) regulates implementation of worker health and safety in California. The DIR includes the Division of Occupational Safety and Health (DOSH), which acts to protect workers from safety hazards through its California OSHA (Cal/OSHA) program and provides consultative assistance to employers.

California standards for workers dealing with hazardous materials are contained in CCR Title 8 and include practices for all industries (General Industrial Safety Orders), and specific practices for construction, and other industries. Workers at hazardous waste sites (or working with hazardous wastes as might be encountered during excavation of contaminated soils) must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations.³⁸ Cal/OSHA enforcement units conduct on-site evaluations and issue notices of violation to enforce necessary improvements to health and safety practices.

d. Applicable Policies. The following policies from *San Jose General Plan 2020* would apply to the proposed project:

Hazardous Materials

- *Policy 1:* The City should require proper storage and disposal of hazardous materials to prevent leakage, potential explosions, fires, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal.
- *Policy 2:* The City should support State and Federal legislation, which strengthen safety requirements for the transportation of hazardous materials.
- *Policy 3:* The City should incorporate soil and groundwater contamination analysis within the environmental review process for development proposals. When contamination is present on a site, the City should report this information to the appropriate agencies that regulate the cleanup of toxic contamination.

³⁵ CCC, 2006, op. cit.

³⁶ No details were provided for the Cortese listing; the address is also indicated as operated by Taylor Automotive with no hazardous materials releases. Ibid.

³⁷ EDR, 2007, op. cit.

³⁸ Title 8, California Code of Regulations (CCR) Section 5192.

Fire Hazards

- *Policy 2:* All new development should be constructed, at a minimum, to the fire safety standards contained in the San José Building Code.
- *Policy 6:* New development should provide adequate access for emergency vehicles, particularly fire fighting equipment, as well as provide secure evacuation routes for the inhabitants of the area.
- *Policy 7:* City should regulate the storage of flammable and explosive materials and strongly encourage the proper transportation of such materials.

Soil and Geological Conditions

- *Policy 9:* Residential development proposed on property formerly used for agricultural or heavy industrial uses should incorporate adequate mitigation/remediation for soils contamination as recommended through the Environmental Review process.

Hazardous Waste Management Policies

- *Policy 6:* Transportation of hazardous waste from the point of origin to the applicable hazardous waste management facility shall be by the most direct legal route, utilizing state or instate highways whenever feasible, and shall minimize distances along residential and other non-industrial frontages to the fullest extent possible.
- *Policy 9:* Proper storage and disposal of hazardous wastes shall be required to prevent leaks, explosions, fires, or the escape of harmful gases, and to prevent materials from combining to form hazardous substances and wastes.

2. Impacts and Mitigation Measures

a. Criteria of Significance. The proposed project would have significant impacts relating to hazards and hazardous materials if it would:

- Create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment.
- Create a significant hazard to the public or environment through exposure to hazardous materials present in soils, surface water, ground water, and/or building materials as a result of historical land uses in the project vicinity.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school.
- Be located on or adjacent to a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would result in a safety hazard for people residing or working in the area.
- Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.
- Result in an increased risk of exposure to wildland or urban fire hazards
- Result in a safety hazard for people residing or working within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or public use airport.
- Result in a safety hazard for people residing or working within the vicinity of a private airstrip.

b. Less-than-Significant Impacts. Less-than-significant impacts related to hazards and hazardous materials are discussed below.

(1) Transport and Use of Hazardous Materials During Project Operations. Only minor quantities of hazardous materials would be expected to be transported to and stored following construction of the proposed project at the Corporation Yard and City parking lot sites (e.g., janitorial and building maintenance supplies, household hazardous materials).

Landscaped areas requiring the use of pesticides, herbicides, fertilizers, or fuels for landscaping equipment would be expected to be brought on-site for immediate use. No hazardous materials storage areas or industrial activities with hazardous materials use and storage are proposed under the project at either site, therefore transport of greater than incidental quantities of hazardous materials to the project area would not be expected to occur. Household hazardous materials and hazardous wastes generated by small businesses may be transported to³⁹ and disposed of at an accumulation area designated by SCCEHD under the Household Hazardous Waste Program.⁴⁰

As such, the proper storage and disposal of hazardous materials stored on-site following project operations at either site would not result in a significant hazard to the public or the environment through upset or accident conditions involving hazardous materials releases, and would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. This is a less-than-significant impact.

(2) Emit Hazardous Emissions within One-Quarter Mile of an Existing or Proposed School. One school, Grant Elementary School is located within one-quarter mile east of the proposed project at the Corporation Yard and City parking lot sites.⁴¹ The proposed project would not result in hazardous emissions or handling of significant quantities of hazardous or acutely hazardous materials within one-quarter mile of existing or proposed schools. Hazardous materials brought on-site during construction of the proposed project at either site would be managed in accordance with local, state, and federal requirements and in accordance with Mitigation Measures HAZ-2a and HAZ-2b, below. Limited quantities of hazardous materials used at either site during project operations for residential and commercial uses (e.g., janitorial supplies, household hazardous materials) would not be expected to result in hazardous materials emissions. This is a less-than-significant impact.

(3) Emergency Response and Evacuation. Plan review and approval by the City Building Division will be required for project development of the Corporation Yard and City parking lot sites. Proposed access and any internal roadways at the both sites would be required to meet State and City standards and policies regarding road width, turning radius, and emergency vehicle access, and the General Plan policies above, which would prevent potential restrictions to emergency response or evacuation. This is a less-than-significant impact.

³⁹ A maximum of 5 gallons of hazardous waste liquid or 50 pounds of hazardous waste solids may be transported per trip by the resident generator to Santa Clara County's household hazardous waste accumulation area by prior appointment. Hazardous wastes generated by small businesses may be transported to Santa Clara County's household hazardous waste accumulation area only through formal participation in the program. Information reviewed on-line at www.sccgov.org. August 16, 2007.

⁴⁰ Information reviewed on-line at <http://www.scc.gov.org>, 2 August 2007.

⁴¹ Environmental Data Resources, 2007, op. cit.

(4) Wildland Fire Hazards. The Corporation Yard and City parking lot sites are located in an urbanized area, and are not adjacent to a designated wildfire hazard area.⁴² In addition, the project development at both sites would be subject to plan review and inspection by the City Building Division, and the General Plan policies above, to ensure that the project meets all State and local Building and Fire Code requirements. The San Jose Municipal Code adopts the 1997 version of the Uniform Building Code, the 2001 version of the California Fire Code, and contains specific requirements regarding fire protection systems for buildings.⁴³ No impacts from wildland or urban fire hazards would therefore be expected from development of the project at either site. This is a less-than-significant impact.

(5) Aviation Hazards. The Corporation Yard and City parking lot sites are located within proximity to the Norman Y. Mineta San Jose International Airport (SJIA). However, these sites are located outside the land use referral boundary airport influence area for the Santa Clara County Airport Land Use Commission. The Corporation Yard and parking lot sites are also located outside the northern and southern safety zones established for SJIA. These safety zones are implemented to protect the public from potential aircraft accidents.⁴⁴ No private use airports or landing strips are located within proximity to either site.⁴⁵

However, because the high-rise structure proposed at the corporation yard site are in excess of 145 feet above ground surface, the project applicant must submit a request to the Federal Aviation Administration (FAA) for an airspace safety determination.⁴⁶ This request is required pursuant to Federal regulations and City of San Jose General Plan Transportation Policies #47 and #49. The proposed project would therefore require a Determination of No Hazard from the FAA and must comply with any design or notification requirements or other requirements regarding elevation limits as specified in the FAA No Hazard Determination, including an aviation easement to the City prior to issuance of a building permit. Compliance with the Federal regulations and applicable General Plan policies, potential aviation hazards would be a less-than-significant impact.

A No Hazard Determination is not required for construction of the proposed development at the parking lot site since proposed buildings would not be in excess of 145 feet above ground surface.

c. Significant Impacts. The project would result in two potentially significant impacts related to hazardous materials.

Impact HAZ-1: Development of the project could expose remediation/construction workers and/or the public to hazardous materials from contaminants in soil and groundwater, during and following site redevelopment activities. (S)

⁴² Association of Bay Area Governments, 2007. Wildland-Urban Interface Wildfire Threat Map for San Jose, reviewed July 2007 at <http://www.abag.ca.gov>.

⁴³ San Jose Municipal Code, Title 17, Building and Construction; Title 17.12 Part 7.

⁴⁴ Santa Clara County Airport Land Use Commission, 2006. Memorandum to Interested Parties Re: Approved amendments to Santa Clara County Land Use Plan for Areas Surrounding Santa Clara County Airports, 27 April (and map attachments).

⁴⁵ Information reviewed at <http://www.skyvector.com>, 2 August 2007.

⁴⁶ Greene, Cary, 2007. Airport Planner, City of San Jose Airport Department. Memorandum to Ron Eddow, City of San Jose Planning Department. September 19

The Corporation Yard was developed sometime after 1915 and was used for commercial and residential purposes prior to this time. Seven USTs⁴⁷ were formerly located at the Corporation Yard. Two of these tanks were found to be leaking in 1983 and were taken out of service (and removed in 1990). The remaining four tanks have also been removed from the site. Former USTs 4 and 5 were also found to have leaked at the time of removal. As a result of the leaking underground storage tanks, the Corporation Yard site is listed on hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese list)⁴⁸. Three replacement USTs (gasoline, diesel) were installed at the Corporation Yard in 1987; the dispensers associated with these tanks were identified during the site visit. These tanks are still located at the Corporation Yard.⁴⁹

Several subsurface investigations and groundwater sampling activities⁵⁰ have been completed at the Corporation Yard to characterize soil and groundwater contamination associated with the LUSTs and other surface contamination identified within proximity to the Materials Testing Lab. The primary COC associated with on-site soil and groundwater contamination include petroleum hydrocarbons and associated volatiles, lead, and some semi-volatile organic compounds. Site activities have also included the removal of free product from the selected 24 on-site groundwater monitoring wells, a conduit study, and preparation of a health risk assessment and corrective action plan in 1999. The findings of the risk assessment indicated that the maximum concentration of benzene in soil and groundwater, in the absence of any future remediation, was present at levels that could contribute to health risks to future residential site users.⁵¹ Potential health risks for future remediation/construction workers, future commercial workers, and future utility/landscape and utility workers were not evaluated as part of the risk assessment, but are possible considering the presence of subsurface soil and groundwater contamination. The corrective action plan recommended that soil remediation be conducted as part of site redevelopment activities.⁵²

The RDA is carrying forward the environmental investigation and remediation of the Corporation Yard associated with the LUSTs and surface contamination in the proximity of the Materials Testing Lab, in support of the proposed redevelopment. Additional subsurface investigations have been completed at the Corporation Yard, under the oversight of SCCDEH to further characterize the site, and case closure of the former tanks will be sought prior to or at the time of site redevelopment. Potential risks to future residential users, in addition to future remediation/construction workers,

⁴⁷ The former USTs contained diesel, motor oil, leaded and unleaded gasoline, waste oil, kerosene, and paint thinner.

⁴⁸ Environmental Data Resources, 2007, op. cit. The Cortese list is a compilation of hazardous waste and substances release sites designated by the State Water Resources Control Board under the Leaking Underground Storage Tank program and list of solid waste disposal facilities from which there is a migration of hazardous waste; the California Integrated Waste Management Board list of solid waste disposal facilities or landfills from which there is known migration of hazardous waste; and DTSC's Cal-sites list of potential or confirmed state hazardous substances release properties. The Corporation Yard is listed on the Cortese list due to the leaking underground storage tanks.

⁴⁹ The City plans to remove these USTs as part of the proposed redevelopment. Removal of these three existing tanks is considered as part of the proposed project. Closure of the leaking USTs, formerly located at the Corporation Yard, is also considered part of the proposed project.

⁵⁰ The most recent groundwater monitoring was completed for the second quarter of 2006.

⁵¹ Earth Tech, 1999, op. cit. Details regarding the proposed project were not available during preparation of the 1999 risk assessment; the assessment was therefore limited to possible future residential users following redevelopment of the Corporation Yard site.

⁵² Ibid.

future commercial workers, and future utility/landscape and utility workers are expected to be evaluated by SCCDEH prior to case closure of the leaking tanks.

Historical uses of the City parking lot have included a Chinese movie theater, residential and commercial uses prior to 1950, and a parking lot since approximately 1970 to the present. The date of paving of the parking lot is unknown. Subsurface samples have not been collected and analyzed at this location. The Phase I ESA recommended the collection of surface soil samples for lead, based on historical structures that may have been painted with lead-based paint, considering the proposed residential development.⁵³ This purpose of this recommended sampling would be to assess the potential for health impacts to construction workers during excavation activities. Exposure of construction workers or future residents to lead in soil could result in adverse health effects, depending on the duration, extent of exposure, and site development. Lead is State-recognized carcinogen (causes cancer) and reproductive toxicant (causes birth defects or other reproductive harm).⁵⁴ Future construction workers and site residents could also be exposed to petroleum hydrocarbons and other metals if releases from vehicles occurred prior to paving of the site. Exposure to petroleum hydrocarbons and metals could result in adverse health effects, depending on the specific contaminant released and duration of exposure.

Mitigation Measure HAZ-1a: Trained workers, in accordance with local, state, and federal regulations, shall remove the three existing USTs and associated pipelines and fuel dispensers from the Corporation Yard site prior to site redevelopment activities. Closure of these USTs by the local regulatory agency (Fire Department, SCCDEH, as applicable), shall be obtained prior to or at the initiation of site redevelopment activities. If contamination is found associated with these USTs, the City/RDA (or applicant) shall ensure completion of all items required for closure by the regulatory oversight agency, which may include preparation and implementation of a CAP, verification monitoring, preparation of a RRMP (if residual contamination is left in place), or other required documentation or investigations.

If excavation activities are required to address on-site contamination (prior to case closure), the CAP shall include an assessment of air impacts associated with excavation activities, any applicable local dust or noise standards which may be exceeded by the excavation activities, transportation impacts from the removal or remediation activities, and risk of public upset should there be an accident at the site, or as otherwise required by the regulatory oversight agency. This mitigation measure does not apply to the City parking lot site as it does not include USTs.

Mitigation Measure HAZ-1b: Prior to approval for any grading or construction permits at each of the Corporation Yard and City parking lot sites, the contractor(s) for the applicable site shall prepare procedures to be undertaken in the event that previously unreported contamination or subsurface hazards are discovered during redevelopment activities (e.g., identified by odor or visual staining), including a contingency plan for sampling of unknown materials, and shall designate personnel responsible for implementation of these procedures. The procedures shall

⁵³ CCC, 2006. op. cit.

⁵⁴ Cal/EPA, Office of Environmental Health Hazard Assessment, Safe Drinking Water and Toxic Enforcement Act of 1986, 2007, Chemicals Known to the State to Cause Cancer or Reproductive Toxicity, 1 June.

be submitted by the contractor(s) with the application for a grading permit(s) from the City of San Jose Department of Public Works.

Mitigation Measure HAZ-1c: Prior to development activities at the parking lot site, a minimum of four surface soil samples shall be collected below the existing site paving by a qualified environmental professional (e.g., Professional Geologist, Professional Engineer) and analyzed for lead and other metals (EPA Method 6000/7000 series), Total Petroleum Hydrocarbons as gasoline, diesel, and motor oil (EPA Method 3630/8015M), fuel-related volatile organics and oxygenates (EPA Method 8260), and polynuclear aromatic hydrocarbons (EPA Method 8270) by a California-certified laboratory. The results of the samples shall be compared to Water Board Environmental Screening Levels (ESLs)⁵⁵ for future residential and commercial receptors and construction workers. Documentation of the sampling and comparisons of site data to ESLs shall be provided to the City/RDA and SCCEHD prior to issuance of a Planned Development Permit. If site soils contain contaminants above the ESLs for residential, commercial, and/or construction workers, any required additional site characterization, site remediation, or other required activities shall be completed by the responsible party under the direction of a regulatory oversight agency prior to site development.

This mitigation measure does not apply to the Corporation Yard site, which has undergone separate subsurface investigations with regulatory oversight.

Mitigation Measure HAZ-1d: The applicant or City/RDA shall ensure that groundwater monitoring wells associated with the LUSTs at the Corporation Yard are properly abandoned (or retained) as directed by the oversight agency, SCCDEH. All wells requested to be abandoned by SCCDEH shall be done so under a valid permit obtained by SCVWD.

This mitigation measure does not apply to the City parking lot site as it does not contain groundwater monitoring wells.

Implementation of this four-part measure would reduce this impact to a less-than-significant level. (LTS)

Impact HAZ-2: Improper use or transport of hazardous materials during construction activities could result in releases affecting construction workers and the general public. (S)

Construction activities proposed by the project at the Corporation Yard and City parking lot sites would require the use and transport of hazardous materials (e.g., fuels, lubricants, paints, adhesives). In addition, construction vehicles would be used on-site that could accidentally release hazardous materials, such as oils, grease, or fuels. It is likely that the contractor(s) would store these hazardous materials and vehicles during the duration of construction activities. Accidental releases of hazardous

⁵⁵ Environmental Screening Levels (ESLs) are concentrations of chemicals in soil that are not anticipated to cause adverse health effects to site users or environmental degradation (including leaching to groundwater from soil contamination). They have been developed by the San Francisco Water Board for residential, commercial, and construction workers scenarios. A concentration of a chemical in soil above the ESL does not necessarily mean that adverse health effects are occurring (or will occur) but that additional investigation is warranted. ESLs are similar to RBSLs and SSTLs, described above.

materials could impact soil and/or groundwater quality, or could result in adverse health effects to construction workers, the public, and the environment.

Mitigation Measure HAZ-2a: The contractor(s) shall designate storage areas at each of the Corporation Yard and the City parking lot sites that are suitable for material delivery, storage, and waste collection. These locations must be as far away from catch basins, gutters, drainage courses, and water bodies as possible. All hazardous materials and wastes used or generated during project site redevelopment activities shall be labeled and stored in accordance with applicable local, state, and federal regulations, and General Plan policies for Hazardous Materials and Fire Hazards. In addition, an accurate up-to-date inventory, including Material Safety Data Sheets, shall be maintained on-site to assist emergency response personnel in the event of a hazardous materials incident.

All maintenance and fueling of vehicles and equipment at the Corporation Yard and parking lot sites shall be performed in a designated, bermed area, or over a drip pan that will not allow run-off of spills. Vehicles and equipment shall be regularly checked and have leaks repaired promptly at an off-site location. Secondary containment shall be used to catch leaks or spills any time that vehicle or equipment fluids are dispensed, changed, or poured.

Mitigation Measure HAZ-2b: The contractor(s) redeveloping each of the Corporation Yard and parking lot sites shall prepare emergency procedures including notification procedures in the event of spills or other on-site hazardous materials releases, evacuation procedures, spill containment procedures, and required personal protective equipment, as appropriate, in responding to the emergency. Use, storage, disposal, and transport of hazardous materials during construction activities at both sites shall be performed in accordance with existing local, state, and federal hazardous materials regulations. These emergency procedures shall be prepared by the contractor(s) and submitted to the City/RDA prior to earthworking activities.

Implementation of this two-part mitigation measure would reduce this impact to a less-than-significant level (LTS).

I. CULTURAL AND PALEONTOLOGICAL RESOURCES

This section evaluates potential impacts that may occur to cultural and paleontological resources as a result of project implementation. Cultural resources are sites, buildings, structures, objects, and districts that may have traditional or historical significance. Paleontological resources are the fossilized remains of prehistoric plant and animal life.

1. Introduction

The project area is located in northern Santa Clara Valley, several miles south of the San Francisco Bay. It is situated on a generally level alluvial floodplain just over 0.5 miles east of the Guadalupe River and approximately 1.0 mile west of Coyote Creek. Geologically, the project area is underlain by Holocene age alluvial sediments that were deposited after initial prehistoric human occupation of the region, likely within the past few thousand years.

The project site includes two areas, the Corporation Yard bounded by Jackson, East Taylor, North 6th, and North 7th streets, and the surface parking lot on North 6th Street. The Corporation Yard site is improved with seven single-story buildings, consisting of one administration office and six shop/warehouse/storage structures. The total building area is approximately 85,000 square feet. The remainder of the site consists of paved areas. Several street trees are also planted around the perimeter of the site.

In Spring 2007 the City of San Jose expanded operations at its Central Service Yard on Senter Road and the uses of the Japantown Corporation Yard were transferred to the Central Service Yard. In furtherance of the Redevelopment Plan, the City of San Jose Redevelopment Agency (RDA) is pursuing surface demolition activities at the project site. As such, the baseline condition utilized in this EIR assumes that surface demolition has been completed and the existing buildings have been removed.

2. Setting

This section describes the following topics with respect to the project area and its vicinity: (1) known archaeological resources and previously conducted studies; (2) prehistoric archaeological setting and sensitivity; (3) historical archaeological setting and sensitivity; (4) historical architectural setting; (5) paleontological setting; and (6) the regulatory context for cultural and paleontological resources.

a. Known Archaeological Resources. In June 2007, the Anthropological Studies Center at Sonoma State University (ASC) conducted a records search for the project area at the Northwest Information Center (NWIC) of the California Historical Resources Information System. NWIC records show that one cultural resources study has been conducted which included the project area.¹ This study involved a literature review, archaeological and architectural field surveys, and data evaluations. As both areas of the project site are paved, Banet et al.'s study was unable to conduct an effective field inspection for prehistoric and historical cultural resources within the project area. No archaeological resources have been recorded within the project area. Several studies have been conducted and three prehistoric archaeological sites recorded within one mile of the project area.

¹ Banet, Angela M., Melody E. Tannam, Donna M. Garaventa, and Colin I. Busby, 1993. *Cultural Resources Assessment, The Japantown Redevelopment Project, City of San Jose, Santa Clara County, California*. Basin Research Associates, Inc. San Leandro, California.

Tables V.I-1 and V.I-2 list the studies and resources identified during the records search. The three prehistoric archaeological sites recorded within one mile of the project area are SCL-317/H, SCL-419, and SCL-605; each is described below.

- SCL-317/H is located approximately 0.4 miles southwest of the project area. The prehistoric component of this site consists of skeletal remains of as many as 19 individuals and a midden deposit containing burnt clay, fire-cracked rock, two pestle fragments, a biface, and lithic debitage.²
- SCL-419 is a buried site located 0.5 miles southwest of the project area. The site consists of a midden deposit containing Franciscan chert debitage and scrapers, a bone awl, groundstone fragments, fire-cracked rock, faunal remains (elk and deer), and one hearth feature.³
- SCL-605 is located on the west bank of the Guadalupe River approximately 0.9 miles west of the project area. The site consists of a midden deposit containing fire-cracked rock, shell, and groundstone fragments.⁴

b. Prehistoric Archaeological Setting and Sensitivity. This section provides (1) an overview of the prehistory and ethnography of the project area; (2) documentation of Native American contacts and concerns about potential prehistoric archaeological remains; and (3) an assessment of the project area's subsurface prehistoric archaeological sensitivity.

(1) Prehistoric and Ethnographic Overview. People have lived in the Santa Clara Valley for several thousand years, but until recently there have been few efforts to create a local cultural sequence. The first cultural sequence developed for central California was formulated in the Sacramento–San Joaquin Delta area in the 1930s by archaeologists from the Sacramento Junior College.^{5,6} The focus was on large cemetery mounds, which led to a three-part scheme—Early, Middle, and Late horizons—based on changes in kinds and quantities of abundant grave goods and burial positions. The scheme was augmented by Beardsley to include the San Francisco Bay Area and Marin coast, resulting in the Central California Taxonomic System (CCTS).^{7,8} Later Fredrickson

² Brock, S.L., J.C. Bard, D.M. Garaventa, P.M. Ogrey, and M.E. Tannam, 1986. *Burials 4-7 and Other Human Remains from the Jefferson School Site (CA-SCL-317/H), City of San Jose, Santa Clara County, California*. On file (S-8127), California Historical Resources Information System, Northwest Information Center, Rohnert Park, California.

³ Cartier, R., 1980. Archaeological Site Record for CA-SCL-419. On file California Historical Resources Information System, Northwest Information Center, Rohnert Park, California.

⁴ Cartier, R., 1986. Archaeological Site Record for CA-SCL-605 (Regent Site). On file California Historical Resources Information System, Northwest Information Center, Rohnert Park, California.

⁵ Lillard, Jeremiah B., Robert F. Heizer, and Franklin Fenenga, 1939. An Introduction to the Archaeology of Central California. *Sacramento Junior College, Department of Anthropology Bulletin 2*. Sacramento.

⁶ Lillard, Jeremiah B., and W.K. Purves, 1936. The Archaeology of the Deer Creek–Cosumnes Area, Sacramento County, California. *Sacramento Junior College, Department of Anthropology Bulletin 1*. Sacramento.

⁷ Beardsley, Richard K., 1948. Cultural Sequences in Central California Archaeology. *American Antiquity* 14(1):1-28.

⁸ Beardsley, Richard K., 1954. *Temporal and Areal Relationships in Central California Archaeology*. Reports of the University of California Archaeological Survey, Nos. 24 and 25. Berkeley, California.

Table V.I-1: Cultural Resources Investigations for the Project Area and Vicinity

CHRIS Report No.	Date	Author(s)	Title
S-5905	1983	Basin Research Associates	Archaeological Resources of Downtown San Jose. A Preliminary Planning Summary of Prehistoric and Historic Sites in the Central Business District.
S-7712	1985	Basin Research Associates	A Cultural Resources Assessment of the Proposed City of San Jose Enterprise Zone, Santa Clara County, California.
S-8005	1986	Basin Research Associates	A Cultural Resources Assessment of Saint James Park Master Plan, City of San Jose, Santa Clara County, California.
S-13192	1991	Basin Research Associates	Cultural Resources Assessment for the Jackson-Taylor Residential Strategy EIR, City of San Jose, Santa Clara County, California.
S-14966	1993	Basin Research Associates	Cultural Resources Monitoring Japantown Parking Lot, 575 North Sixth Street, City of San Jose, Santa Clara County, California.
S-14886	1993	Basin Research Associates	Cultural Resources Assessment. The Japantown Redevelopment Project, City of San Jose, Santa Clara County, California.
S-25680	1999	Basin Research Associates	Historic Properties Survey Report. Vasona Corridor Light Rail Project, Santa Clara County, California.
S-23080	1999	Basin Research Associates	South Bay Water Recycling Program – Cultural Resources Program, Subcontract No. 728106.3024. Monitoring Closure Report – Phase 1.
S-25328	2002	Pacific Legacy, Inc.	Archaeological Investigations for the 101 Younger Street, San Jose Wireless Communications Site, CA 2044F.
S-27063	2002	Archaeological Resources Management	Archaeological Mitigation Program for the Ryland Park Trenching Project.
	2002	California Department of Transportation, District 4, Oakland	Excavation of the Woolen Mills Chinatown (CA-SCL-807H), San Jose.
	2004	Carey & Co. Inc.	San Jose Japantown Historic Context and Reconnaissance Survey, San Jose, California.
	2006	Carey & Co. Inc.	San Jose Japantown Historic Context and Survey Phase II, San Jose, California.

Source: Anthropological Studies Center at Sonoma State University. 2007

Table V.I-2: Documented Cultural Resources in the Project Vicinity

CHRIS Site ID. Number	Association	Type	Location
CA-SCL-317/H	Prehistoric/ historic-era	The Jefferson School Site (State Land Mark No. 433) includes discontinuous prehistoric midden and burials.	Southwest portion of block bounded by North First, Hobson, San Pedro and George streets. Contains seven known burials with 19 individuals, although may also include Asian, Hispanic and Native American individuals. This site is reportedly the location of <i>El Pueblo de San Jose de Guadalupe</i> founded on or near the site, 29 November 1777.
CA-SCL-377H	Historic-era	First Unitarian Church	160 N. 3rd St. San Jose
CA-SCL-390	Historic-era	Peralta Adobe	184 West St. John St., San Jose
CA-SCL-419	Prehistoric	Buried site	441 N. 1st Street. Extent unknown.
CA-SCL-466H	Historic-era	St. James Square Historic District	Area bounded by N. 1st and 3rd streets, between E. St. James and E. St. John's streets, San Jose.
CA-SCL-605	Prehistoric	Regent Site Midden	Cnr. Regent St. and University Ave, San Jose.
CA-SCL-742H/ P-43-001102	Historic-era	San Jose Nihonmachi (Japantown) and Heintzenville Chinatown	Approximately between Fifth and Seventh streets, and Jackson and Taylor streets, San Jose. CA-SCL-742H refers to 18 x 12 ft. feature at 575 N. Sixth Street, which included plain porcelain Japanese Sake bottles, glass bottles, and plain and decorated porcelain tableware.
CA-SCL-743H	Historic-era	Village Court	Area bounded on west by Village Court, and on east by Guadalupe River. The site consists of numerous historic refuse deposits dating from early to mid 20th Century.
CA-SCL-744H	Historic-era	Hedding/Regent Site	Site located between Hedding, University, and Regent streets, and the Guadalupe River. Historic-era refuse deposit dating from early to mid-20th Century.
CA-SCL-799H	Historic-era	Hedding Street Bridge Site	Site located between Spring Street and Guadalupe Parkway on Hedding Street adjacent to the west bank of the Guadalupe River. Historic-era refuse deposits dating from pre-1880s to the 1960s and 1970s, with majority of items dated between the 1880s and 1930s.
CA-SCL-807H	Historic-era	Woolen Mills Chinatown	Intersection of Taylor Street and Guadalupe Parkway. Historic-era deposits and structures related to the Woolen Mills Chinatown occupation.
	Historic-era	Kogura Building (605 N. 6th Street)	Intersection of Sixth and Jackson streets. Single story, masonry commercial/retain building.
P-43-001300	Historic-era	Calpak San Jose Plant	Multi-property historic district consisting of six San Jose Calpak plants. Site is located on Sunol between San Carlos and Auzeais and on Jackson between Seventh and Ninth streets. The Jackson Street site includes Plants 4 and 39 (the Pickle Factory and Vinegar Factory), located between N. 7th and 8th on both sides of Jackson Street, and between N. 8th and 9th between Jackson and Empire streets. Evaluated 23 March, 1998 by Glory Ann Laffey.

Source: Anthropological Studies Center at Sonoma State University. 2007

revised the CCTS, proposing a more flexible system that looked at behavior and day-to-day subsistence activities in addition to ceremonial practices.^{9,10} The system, which focused on the North and East Bay, identified three periods (Paleoindian, Archaic, Emergent) that encompass the entire time span of human occupation of the region based on the prevalent traits of those periods. Additionally, it introduces the *pattern* as “a way of life shared by a number of different peoples residing in a particular geographic space.”¹¹ For the known archaeological record in the Bay Area and Delta at the time, the Windmill, Berkeley, and Augustine patterns were defined.¹² Because these schemes were not developed for the Santa Clara Valley, future refinement addressing local complexity is necessary.¹³

The Paleoindian period (circa 13,000 to 8000 B.P. [years before present]) was a time of major environmental change and rapidly rising sea level. People are believed to have lived in mobile groups that left only meager archaeological remains. Only a handful of Paleoindian archaeological sites have been identified in northern California, the closest to the project area being CA-SCR-177, in Scotts Valley north of Santa Cruz. In the southern Santa Clara Valley, SCL-178, a deeply buried site containing handstones, burnt bone, and shell, dates to at least 9000 B.P.¹⁴ Generally arid climatic conditions prevailed during the Lower Archaic period (8000 to 5000 B.P.). Artifacts typical of this period include milling slabs and handstones, wide-stem projectile points, and cobble core tools. The significant increase in the number of known archaeological sites dating to the Middle Archaic period (5000 to 2500 B.P.) may be due to a more sedentary population, or may be a by-product of landscape evolution. At Santa Clara Valley sites SCL-65 and -178, a transition from handstones and milling slabs to mortars and pestles at this time is an early indication of the use of acorns for food.¹⁵ In the Delta area, the Early period of the CCTS coincides with the Middle Archaic period, as any earlier deposits are likely deeply buried in the valley floor.

While the Windmill pattern was present in the Delta during the Early period (4000 to 2500 B.P.), traits associated it were absent in the Bay Area, initially suggesting late occupation on the bay. In the south Bay Area, however, a distinct contemporaneous culture was identified at the University Village site (SMA-77) on San Francisquito Creek. Termed the Early Bay culture, this archaeological assemblage was defined by flexed burials, frequent use of red pigment (cinnabar), and numerous bone

⁹ Fredrickson, David A., 1973. *Early Cultures of the North Coast Ranges*. Doctoral dissertation, Department of Anthropology, University of California, Davis.

¹⁰ Fredrickson, David A., 1974. Cultural Diversity in Early Central California: A View from the North Coast Ranges. *Journal of California Anthropology* 1(1):41-53.

¹¹ Fredrickson, 1973, op. cit., p. 40.

¹² Fredrickson, 1974, op. cit.

¹³ Hylkema, Mark G., 2007, pp. 29-30. *Santa Clara Valley Prehistory. Archaeological Investigation at CA-SCL-690, the Tamien Station Site, San Jose, California*. Center for Archaeological Research at Davis Publication Number 15, University of California, Davis, California.

¹⁴ Fitzgerald, Richard T., Terry L. Jones, and Adella Schroth, 2005, pp. 428-430. Ancient Long Distance Trade in Western North America: New AMS Radiocarbon dates from Southern California. *Journal of Archaeological Science* 32:423-434.

¹⁵ Hylkema, 2007, op. cit., p. 27.

implements, a trend which continued throughout the Middle-period Berkeley pattern.¹⁶

The Middle period (2500 to 1250 B.P.) is marked by the development of massive shellmounds characteristic of the Berkeley pattern on the bay. This pattern indicates intensive use of the tidal marsh ecosystem and increased focus on acorns. Burial practices are characterized by random interment and positioning in residential areas.¹⁷ During the Middle period, a different culture had developed in the San Joaquin Valley: the Meganos tradition. The Meganos tradition, which may have been a seasonally mobile group remnant of the Windmiller pattern, later appeared in the southeast Bay Area.¹⁸ The tradition is identified by the presence of ventrally and dorsally extended and flexed burials in non-midden cemeteries, and large shield-shaped abalone (*Haliotis*) pendants. Near San Jose this tradition has been identified at sites SCL-327 and SCL-478.¹⁹ Significant social changes during the transition from the Middle to Late periods are indicated by a dramatic increase in the number of grave goods. Investigations at site SCL-690, the Tamien Station site located approximately 3 miles south of the project area, documented over 100 burials from this transitional period, 76 percent of which were associated with *Olivella* beads and 22 percent with *Haliotis* pendants.²⁰

The social transformations of the Middle/Late-period transition continued during the Late period (1250 B.P. to Historic period). The Augustine pattern of this period is characterized by large “flower-pot” mortars and later hopper mortars; tubular, polished stone tobacco pipes; and small obsidian Stockton serrated points that mark the introduction of the bow and arrow.²¹ *Haliotis* banjo pendants were introduced during this period and have been associated with the Kuksu cult, which continued up to the Historic period. At site SCL-38, located east of Coyote Creek, an elaborate socio-political hierarchy is suggested by a cemetery organized by gender, age, and wealth, with large numbers of shaped shell beads associated with only a few individuals.²²

Disruption of indigenous lifeways by non-native groups began with the establishment of two missions in the South Bay starting in the late 1770s. Missionization not only decimated local populations, but also relocated native peoples from throughout north-central California into the San Jose area. Thus, by the time the first anthropologists interviewed native people in the Santa Clara Valley there was little reliable ethnographic information on the aboriginal inhabitants of the project area and vicinity.

The project area falls within the territory of the Costanoan linguistic group, whose lands extended from Monterey Bay to San Francisco Bay. This group is part of the Utian language family and is

¹⁶ Gerow, B.A., and R.W. Force, 1968. *An Analysis of the University Village Complex: with a Reappraisal of Central California Archaeology*. Stanford University Press, Palo Alto.

¹⁷ Hylkema, 2007, op. cit., p. 245.

¹⁸ Bennyhoff, James A., 1994, pp. 7-13. A Delta Intrusion to the Bay in the Late Middle Period in Central California. In *Toward a New Taxonomic Framework for Central California Archaeology*, edited by Richard E. Hughes, pp. 7-13. Contributions of the University of California Archaeological Research Facility 52, Berkeley, California.

¹⁹ Hylkema, 2007, op. cit., p. 411.

²⁰ Hylkema, 2007, op. cit., p. 416.

²¹ Hylkema, Mark G., 2002, pp. 247-250. Tidal Marsh, Oak Woodlands, and Cultural Florescence in the Southern San Francisco Bay Region. In *Catalysts to Complexity, Late Holocene Societies of the California Coast*, edited by Jon M. Erlandson and Terry L. Jones, pp. 233-262. Perspectives in California Archaeology, volume 6. Cotsen Institute of Archaeology, University of California, Los Angeles.

²² Hylkema, 2007, op. cit., p. 415.

comprised of eight distinct dialects thought to represent separate ethnic groups. The Tamien (Tamyen) ethnic group occupied the area surrounding the project area.²³ Today, descendants of this group identify themselves as Ohlone, a preferred name for the Costanoan in this area. Ethnographic information indicates that the Ohlone were comprised of numerous tribelets, which are small, independent clusters of family groups with a central village headed by a single chief. Tribelets cooperated in ceremonial activities, resource procurement, and conflict resolution. Both the tribelet and the associated central village that occupied the project area are referred to as Tamien.²⁴ While the population of the Ohlone at the time of contact is impossible to determine due to impacts from the earliest contact with European explorers, it has been estimated to have ranged between 7,000²⁵ to 10,000²⁶ people. By 1832, this number had dropped to only 2,000 due to disease and other effects of missionization.

At the time of contact, the Ohlone practiced a seasonal hunting and collecting lifestyle, often husbanding plant and animal resources for a better harvest. They used numerous vegetal materials, including acorns, a variety of seeds and bulbs, and tule reeds from which skirts and boats were constructed. Deer, elk, rabbits, quail, and other game were hunted. A variety of shellfish, including mussel, abalone, and clam, were harvested in addition to several species of fish, sea lion, sea otter, and harbor seal.²⁷ The Ohlone traded with neighboring groups, importing pinyon nuts while exporting *Olivella* and *Haliotis* shells, hematite (cinnabar), and salt.²⁸

(3) Native American Contacts. On July 12, 2007, the Native American Heritage Commission (NAHC) responded to a Sacred Lands File records search request by the ASC. The NAHC stated that the search of the Sacred Lands File “failed to indicate the presence of Native American cultural resources in the immediate project area,” and provided a list of Native American community contacts for the project area. Andrew Galvan, Ohlone Indian Tribal representative, and Rosemary Cambra, Muwekma Ohlone Indian Tribe representative, were advised of, and invited to attend, geoarchaeological testing of the project area on July 18, 2007. Although both were unable to attend, Mr. Galvan expressed interest in attending subsequent archaeological investigations within the project area.

(4) Prehistoric Archaeological Sensitivity. Geoarchaeological investigations of the project area were conducted on July 18, 2007. The purpose of this work was to assess the likelihood that the

²³ Levy, Richard, 1978. Costanoan. In *California*, edited by R.F. Heizer, pp. 485-495. Handbook of North American Indians, volume 8, W. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

²⁴ Milliken, Randall, 2007, p. 55. Ethnohistory of the Ohlone People. In *Santa Clara Valley Prehistory. Archaeological Investigation at CA-SCL-690, the Tamien Station Site, San Jose, California*, by Mark Hylkema, pp. 47-60. Center for Archaeological Research at Davis Publication Number 15, University of California, Davis, California.

²⁵ Kroeber, Alfred L., 1925. *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin No. 78, Washington, D.C.

²⁶ Levy, op. cit.

²⁷ Baumhoff, Martin A., 1978, p. 17. Environmental Background. In *California*, edited by R.F. Heizer. Handbook of North American Indians, volume 8, W. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

²⁸ Levy, op. cit., p. 488.

location contains a substantial, buried prehistoric archaeological site. No prehistoric archaeological resources were identified.²⁹

Fieldwork consisted of collecting soil samples to depths that may be affected by Project construction. Nine 1-3/4-inch-diameter continuous core soil samples were bored to depths of 16 to 26 feet below surface, using a truck-mounted geoprobe. The borings were placed throughout the project area to gain a representative sample of the underlying geology. Soil samples were collected for lab analysis and radiocarbon dating.

The investigation documented three prominent buried soils (paleosols) underlying the project area, all of which represent former surfaces available for human occupation. The first was an intact paleosol covered by historic materials identified at 2 feet below surface. A well-developed, laterally extensive paleosol was identified at a depth of 14 feet below surface in each soil core. Radiocarbon dates indicate that the parent material for this paleosol was deposited sometime after 13,000 cal (calibrated) B.P. and remained stable at the surface for a significant, yet variable, time period. This paleosol was buried by alluvial deposits in the northern portion of the Project area around 11,000 cal B.P., yet remained at the surface until at least 6,500 cal B.P. in the southern portion. The third paleosol was identified at approximately 24 feet below surface in one core. Radiocarbon dates indicate that this surface was buried around 13,250 cal B.P. This paleosol was exposed during the very earliest documented period of human occupation of California. It has a low sensitivity for archaeological materials. It is highly unlikely that any archaeological materials underlie this paleosol.

The project area is moderately to highly sensitive for buried prehistoric archaeological materials directly underlying the historic deposits, and from a depth of 13 to 16 feet below surface. Deposits beneath this level have a low sensitivity for prehistoric archaeological materials.

Potential Prehistoric Archaeological Property Types. Research on the prehistory and recent geologic evolution of the project area and surrounding region has allowed prediction of the types of prehistoric archaeological remains that may be present in the project area. These categories of potential archaeological features and sites, known as property types, would have been created by the series of events and processes described in the prehistoric overview and archaeological sensitivity discussions.

Archaeological property types that may be present in the project area are divided into two primary types that represent a range of activities and features (Table V.I-3).

c. Historical Archaeological Setting and Sensitivity. This section provides (1) an overview of the project area and its vicinity during the historic era; and (2) an assessment of the project area's historic-era archaeological sensitivity.

²⁹ Kaijankoski, Philip, 2007. *Preliminary Prehistoric Site Screening for the Heinlenville/San Jose Corporation Yard Archaeological Project, San Jose, California*. Anthropological Studies Center, Rohnert Park, California. Prepared for the City of San Jose, San Jose, California.

Table V.I-3 Prehistoric Archaeological Property Types

Property Type Category	Property Type/Associated Artifact/Features
Non-Residential	Lithic Scatters Single or multiple human burials Isolated artifacts and/or features
Residential	Village or Camp, with some or all of the following: culturally darkened soil (midden development); lithic debitage and finished tools of flaked stone, ground stone, and bone; remains of food processing and consumption (shell, bone, floral remains, charcoal, fire-cracked rock, baked clay); and human burials

Source: Anthropological Studies Center at Sonoma State University. 2007

(1) Historic-Era Overview.³⁰ The Santa Clara Valley was first investigated by Europeans in the late 1760s. The reports of several exploratory parties, particularly that of Juan Bautista de Anza and Father Pedro Font in 1776, resulted in the establishment in 1777 of Mission Santa Clara and Pueblo San Jose de Guadalupe in the vicinity of what is now San Jose.³¹ The project area is located to the north and east of the Pueblo's original location. One of the settlement's economic mainstays was raising herds of cattle for the hide and tallow trade. Thus, the project area may have been in use during the Spanish and Mexican periods for pasturing cattle.

The Gold Rush and subsequent economic and population expansion of the San Francisco Bay area resulted in periods of explosive growth in the Santa Clara Valley. The fertile, well-watered valley became a center for agricultural production, particularly wheat, orchards, strawberries, and dairying. The growth of agriculture in the valley was assisted by the development of a railroad link to San Francisco in 1864 and the completion of the transcontinental railroad in 1869. The fruit growing, drying, and canning industries began to gain ground in the 1860s, and by 1880 Santa Clara County was the preeminent California county in terms of the value of its orchard products. Orchards, canneries, and packing houses became some of the major employers for San Jose's workers.^{32,33}

Amongst these workers were significant numbers of Chinese immigrants. The Chinese had first come to California in large numbers during the Gold Rush. Most came from the Kwangtung or Guangdong province of China, driven to immigrate by droughts, floods, and social upheaval. The majority came from impoverished, rural backgrounds. They planned to send money home and ultimately return to their villages with wealth gained from working in *Gum San* or Gold Mountain.³⁴ Chinese immigrants

³⁰ This section was adapted from Anthropological Studies Center's *Historic Context and Archaeological Survey Report: Heinlenville-Corporation Yard Project, San Jose, California* (2007).

³¹ Beck, Warren A. and Ynez D. Haase, 1974, p. 17. *Historical Atlas of California*. University of Oklahoma Press, Norman.

³² Allen, Rebecca, R. Scott Baxter, Anmarie Medin, Julia G. Costello, and Connie Young Yu, 2002, p. 9. *Excavations of the Woolen Mills Chinatown (CA-SCL-807H), San Jose*. Past Forward, Inc., Richmond, California, California Department of Transportation, Sacramento, and Foothill Resources, Ltd., Mokelumne Hill, California. Prepared for the California Department of Transportation, District 4, Oakland.

³³ Chan, Sucheng, 1986, p. 227. *This Bittersweet Soil. The Chinese in California Agriculture, 1860-1910*. University of California Press, Berkeley and Los Angeles, California.

³⁴ Young Yu, Connie, 1991, p. 4. *Chinatown San Jose, USA*. Third edition. History San Jose.

to the Pacific Coast were generally from the Sze Yup (mostly from Toisan), Heungsan (later known as Chungsan), and Sam Yup districts of Kwangtung province. Stepping off the boat in ports such as San Francisco, they were met by representatives from their *hui quin* or district association who would guide them into employment opportunities. Once immigrants arrived in America, “Where they came from, their villages, their dialect, their district determined where they would live and work.”³⁵ Immigrants quickly transferred clan kinship and loyalties from home into family and district associations and tongs which were to become such important organizing institutions within American Chinatowns.

From the 1860s to the 1880s, Chinese workers came in large numbers to the Santa Clara Valley seeking work in orchards, strawberry fields, farms, mining, and manufacturing, and as domestic help.^{36,37} The Chinese population in the Santa Clara Valley grew rapidly, increasing from a county population of 22 in 1860 to 2,723 in 1890.³⁸ The actual population at any one time however, was likely to vary considerably. Since many Chinese were itinerant workers finding seasonal employment in the construction or agricultural industries, it is likely that Santa Clara’s population was frequently much higher during the summer growing season. The majority of these workers were men, either single or with wives and families waiting in China for their return. They were an attractive workforce for farmers and developers, as they not only worked for significantly smaller wages than their Euro-American counterparts, but also had the reputation of dependability, adeptness, and efficiency.³⁹

The first Chinatown in San Jose developed at the intersection of Market and San Fernando streets by the late 1860s. When this first settlement was destroyed by fire in 1870, the Chinese community relocated to Vine Street, adjacent to the Guadalupe River. The 1870 Census revealed that this Chinatown was the home of over 500 Chinese, including several families with young children, and 75 female prostitutes. By 1872, however, the Vine Street Chinese community had returned to its original central location on Market Street. This renewed Chinatown on Market Street contained an array of shops and services, and served as an important civic and social center for Chinese workers in the Santa Clara Valley. San Jose residents from the 1870s remembered that on weekends Chinese employed on Alviso strawberry farms came into Chinatown to socialize and pick up supplies.⁴⁰

Chinese immigrants had faced prejudice and hostility since their first arrival in California during the Gold Rush. Exacerbated by widespread economic depression in the 1870s, labor and political agitators stirred public feeling against Chinese workers and Chinese immigration. Organizations such as the Anti-Coolie Association and the Supreme Order of the Caucasians lobbied for boycotts of Chinese labor. However, the Chinese workers’ reputation for cheapness and dependability put them in good stead, and they continued to find employment with West Coast manufacturers and farmers who

³⁵ Ibid.

³⁶ Chan, Sucheng, 1986, p. 129. *This Bittersweet Soil. The Chinese in California Agriculture, 1860-1910*. University of California Press, Berkeley and Los Angeles, California.

³⁷ Young Yu, op. cit., pp. 7-8.

³⁸ Lukes, Timothy J., and Gary Y. Okihiro, 1985. *Japanese Legacy. Farming and Community Life in California’s Santa Clara Valley*. Local History Studies vol. 13. California History Center, Cupertino, California. United States 1890 Census referenced in this text.

³⁹ Daniels, Roger, 1988, p. 19. *Asian America. Chinese and Japanese in the United States since 1850*. University of Washington Press, Seattle and London.

⁴⁰ Young Yu, op. cit., p. 23.

needed their low-priced labor to compete with East Coast counterparts. Heightened public emotions, however, led to numerous riots and attacks on Chinatowns throughout the American West, including Denver, Tacoma, Eureka, Chico, and Truckee.⁴¹ In 1882, the U.S. Government passed the Chinese Exclusion Act, which prohibited immigration of Chinese laborers and prevented those already in the country from easily returning after visits home.

San Jose proved to be no exception to the rising tide of anti-Chinese sentiment. Incidents of public abuse and even stoning became commonplace, encouraging San Jose's Chinese residents to stick closely to the security of Chinatown. Many of San Jose's most prominent businesses boasted that they only employed "first class white labor."⁴² However, the anti-coolie movement's pressure to only hire white labor made little impact on Santa Clara County farmers, who not only could not afford to do without low-cost Chinese labor, but had often also developed close working relationships with their long-term Chinese employees. Plans in the early 1880s by the City of San Jose to modernize the town led to calls to remove the Market Street Chinatown from its prominent downtown location. However, on May 4, 1887, an arsonist-lit fire completely destroyed the quarter. The following day the *San Jose Daily Herald* announced that "Chinatown is dead. It is dead forever."⁴³ Reports of Chinatown's demise, however, were much exaggerated; within 10 days prominent Chinese merchants, working with local business man John Heinlen were already making plans for a new Chinatown on Heinlen's land at 5th and Taylor streets. In addition, some of the displaced Market Street community moved to the vicinity of the San Jose Woolen Mills factory, which employed large numbers of Chinese. The Woolen Mills Chinatown, buoyed by employment opportunities in nearby factories and canneries, survived until 1902 when it was destroyed by fire.⁴⁴

John Heinlen was a German immigrant who established himself in San Jose as a farmer and businessman. His actions assisting the Chinese provoked immense public outrage. At a time when those whites who supported the Chinese were seen as race-traitors, Heinlen's actions seemed inexplicable to many.⁴⁵ An intensely private man, neither he nor his family ever expressed the reason behind his steady support for San Jose's Chinese. Despite public meetings, lawsuits and threats, in mid-1887 Heinlen retained prominent local architect Theodore Lenzen to design what he and the Chinese merchants intended to be a permanent home for San Jose's Chinese population. Aware of the history of fires in San Jose's Chinatowns, and seeking to avoid furnishing the public with further ammunition, Heinlen and his Chinese collaborators specified that the new Chinatown was to be built in brick, and supplied with both piped water and sewers.

The plans outlined six blocks of structures, some two-story, with restaurants and stores lining Cleveland Street, and dwellings and tenements along the secondary Clay, Dupont, and Kearney streets (named after streets in San Francisco's Chinatown). Rents were set for each of these buildings according to their size and use, with Heinlen paying the necessary property taxes. An array of Sanborn Company fire insurance maps provide detailed information on the physical configuration and

⁴¹ Ibid, p. 13.

⁴² Ibid, pp. 25, 27.

⁴³ Ibid, p. 30. Newspaper cited in this text.

⁴⁴ Allen et al., op. cit., pp. 9-11.

⁴⁵ Young Yu, op. cit., p. 13.

development of the settlement.⁴⁶ The streets were unpaved, but lined with wooden boardwalks, and a water tank and artesian well on 7th Street supplied water. Tenants of the new buildings included general merchandize stores, butchers, tongs, and district associations. Families lived in the back or above their stores, while headquarters of district associations, such as the Sze Yup and Yeung Wo, housed many of the bachelor workers.⁴⁷ In order to ensure both security and privacy for the residents, Heinlen requested that the new Chinatown be surrounded by a high wooden fence topped with barbed wire. Gates in the fence were locked each night, and the area patrolled by a white guard hired by Chinese community leaders. Chinese workers also constructed a large temple for the five deities, the Ng Shing Gung on Cleveland near East Taylor Street, to serve all districts and dialects represented in the town. For the Chinese community of San Jose, it was a promising new start at a time when anti-Chinese laws and regulations were curtailing the options of other Chinese immigrants throughout the U.S.

The North 6th Street Chinatown (called Heinlenville and *San-Doy-Say Tong Yun Fow* by its Chinese residents) quickly became the center for Chinese life in San Jose. It contained not only a temple, but also a variety of merchants, butchers, barbers, traditional doctors, and medicinal herb shops. Chinese farmers and workers were regular visitors for supplies, social contact, and entertainment. The town also became home to numerous families as merchants sent for their wives and children in China. Children attended local American schools and also a Chinese language school set up in the temple. The community flourished despite continued political and public harassment, including the federal Geary Act in 1892 that required all Chinese laborers to file for a certificate of registration – the so-called “chak chee” or photo passport which had to be carried everywhere – or face deportation.⁴⁸ The 6th Street Chinatown gradually expanded into the vacant land to the south of its original buildings, intermingling with the surrounding Japanese settlement that had begun establishing itself in the 1890s. Relations between the two communities were cordial, even if there was little active socializing.

Despite its early success, the 6th Street Chinese community began to dwindle during the 1920s. Young Chinese-Americans who had grown up in the Chinatown saw their future in business or education rather than the traditional agricultural base of the community. Filipino workers were beginning to flood into the Santa Clara Valley, filling the place left by the aging Chinese farm workforce. The Depression had a severe effect on the John Heinlen Company, which had remained the 6th Street Chinatown’s landlord even after John Heinlen’s death in 1903. Suffering from the effects of a collapsing rental market, the Company declared bankruptcy in 1931. The Chinatown land was sold to cover the Company debts, and the buildings began to be razed the same year; many residents moved to 6th Street, traditionally part of Japantown.⁴⁹

The advent of WW II severely impacted this neighborhood when almost its entire Japanese community was removed to internment camps. The repeal of the Chinese Exclusion Act in 1943 and changing social attitudes removed much of the impetus for Chinese-Americans to gather in Chinatowns for protection and support, and the community began to slowly disperse. In 1949, the Ng

⁴⁶ Sanborn Map Company, 1887, 1889, 1891, 1897, 1901, 1911, 1915, 1929, 1932, 1939, 1950, and 1969. Fire Insurance Map for San Jose, California. Pelham, New York.

⁴⁷ Young Yu, op. cit., pp. 39-40.

⁴⁸ Ibid, p. 45.

⁴⁹ Ibid, p. 108.

Shing Gung temple, the last symbol of the 6th Street Chinatown, was demolished. The block bounded by East Taylor, Jackson, North 6th, and North 7th streets was gradually taken over by the City of San Jose for use as a corporation yard, and the remains of Chinatown were buried under asphalt and buildings.

(2) Historic-Era Archaeological Sensitivity. Heinlerville and the adjacent Japantown development form the major, long-term historic use of the project area. It is unclear whether the project area was occupied by structures or activities such as market gardens, etc., before the construction of Heinlerville, or in the vacant lots that persisted in the project area historically bounded by Clay, 7th, 6th, and Jackson streets before the extension of Japantown in the early 1900s. Heinlerville was constructed as an architect-designed, planned community in 1887 by John Heinlen. This community was composed of blocks of one- and two-story brick buildings planned for dwellings, stores, restaurants and storehouses.⁵⁰ According to successive Sanborn maps of the project area, none of the Heinlerville buildings, or subsequent structures that existed within the project area, included basements or significant sub-surface structures (e.g., wells) that might have physically disturbed archaeological materials relating to pre-1887 occupation of the area. With the exception of various small-scale modifications relating principally to backyard areas and vacant areas, the physical configuration of Heinlerville remained relatively constant throughout its history until its demolition from the 1930s.⁵¹

A more organic settlement of both Japanese and Chinese ethnic dwellings and stores developed, particularly from the early 1900s, in the vacant area of the project area bounded by Clay, North 6th North 7th, and Jackson Streets, to the south of the planned Heinlerville development. Within this area several structures designated as being occupied by auto shops from at least 1911 on Clay and Cleveland Streets may have included sub-surface fuel tanks.⁵² The City of San Jose acquired The John Heinlen Company holdings within the project area in 1931, and began the demolition of the existing structures and conversion of the area into a corporation yard for city services over a period of four decades.⁵³

The map data indicate that the Corporation Yard buildings were all single-story constructions built on concrete slab floors. For this reason, the preservation of archaeological deposits beneath these slab floors is expected to be relatively good due to the lack of previous documented ground disturbance to any significant depth (e.g., no basements are associated with these buildings). The remainder of the project area, including the City parking lot across North 6th Street from the Corporation Yard, is asphalt-paved, which has served to protect possible underlying archaeological deposits. Plans of the locations of utilities installed from the 1930s to the present day in the project area are incomplete. However, analysis of the plans together with field inspections indicates that, despite the presence of utility corridors and underground fuel tanks, relatively large portions of the project area (including potentially archaeological sensitive areas such as the Cleveland Street Ng Shing Gung Temple, and backyard areas) have been subject to relatively little impact.

⁵⁰ Ibid, p. 39.

⁵¹ Sanborn Map Company, 1887, 1889, 1891, 1897, 1901, 1911, 1915, 1929, 1932, and 1939. Fire Insurance Map for San Jose, California. Pelham, New York.

⁵² Ibid, map dates 1911, 1915, 1929, 1932, and 1939.

⁵³ Ibid, map dates 1932, 1939, 1950, and 1969.

Potential Historic-Era Property Types. By researching the history of the project area we can predict the types of archaeological remains that may be present and, therefore, the possible project impact on these potential significant archaeological resources. These categories of potential archaeological features and sites, known as property types, would have been created by the series of historic-era events and processes described in the historical overview.

Archaeological property types that may be present on the project area represent a wide range of activities and features (Table V.I-4).

Community Contacts. A meeting was held between representatives of the City of San Jose Redevelopment Agency, project archaeologists, Connie Young Yu (San Jose Chinese Historical and Cultural Project) Rod Lum (Japantown Community Congress and San Jose Chinese Historical and Cultural Project), and Steve Fugita (Japanese American Museum of San Jose) on July 17, 2007. This meeting included discussions of the planned approach to the investigation and treatment of archaeological resources during the project. The community representatives emphasized the great cultural sensitivity of the project area to the San Jose Chinese-American and Japanese-American communities, and their desire for the respectful treatment of associated archaeological remains and for continued community involvement in the project area's development. A memorandum from the Japantown Congress presented at the meeting contains the organizations' priorities for the project area:

Our goals are that the archaeological features be properly recovered and that discovered artifacts be made available for curation and display. Furthermore, any information and conclusions from work on this site shall be made available to scholars, historical/cultural organizations, and the public to further elaborate upon the story of the Chinese-and Japanese-Americans in this area.

Historic Era Archaeological Sensitivity Summary. The project area has a high level of historic-era archaeological sensitivity due to several factors:

- The project area represents a substantial portion of Heinlenville, a historically cohesive and ethnically integrated community. As opposed to the study of sites occupied by a single dwelling, store or activity, the project area offers a relatively rare opportunity to conduct a neighborhood-level study of long-term community development.
- The project area represents a long-term occupation by ethnic Japanese and Chinese communities. Sites associated with these groups have significant archaeological research value, and elsewhere have been found eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR).
- A high level of documentation exists (including sources such as the Sanborn Company maps, U.S. Censuses, newspaper articles, and oral histories) that provide information on both the configuration of the formally-built environment, and the social development and configuration of the Chinese and Japanese communities. This level of documentation allows for sophisticated and complex archaeological inquiry.
- The archaeological potential of the project area is enhanced by the apparently minimal level of sub-surface disturbance of potential archaeological remains. Disturbance appears to have been limited to several relatively narrow utility corridors and underground fuel tanks. Contemporary buildings on the site have been built on concrete slabs resulting in minimal sub-surface disturbance.

Table V.I-4: Historic-era Archaeological Property Types

Property Type Category	Property Type
Industrial (factory, workshop)	Industrial building foundation/remains Industrial process remains Raw material, by-product or waste accumulation
Service/Mercantile/ (hotel, boardinghouse, general store, laundry, butcher shop)	Commercial building foundation/remains Sheet artifact concentration Specialized activity feature (e.g., boiler base, roasting oven) Artifact or by-product cache
Social (temple, theatre, family/social organization office)	Social building foundation/remains Sheet artifact concentration Specialized activity feature
Residential (house, tenement)	Private residential building foundation/remains Sheet artifact concentration Artifact cache Activity area, yard, garden
Infrastructure/public space (protective structures, open space)	Fence, guard station Sheet artifact concentration Artifact cache Specialized activity feature or area

Source: Anthropological Studies Center at Sonoma State University. 2007

- The San Jose Chinese-American and Japanese-American communities consider the project area an important location in their history, and have expressed their desire to see the archaeological resources treated appropriately.

d. Historical Architectural Setting. Carey & Co. prepared a historic context and conducted an intensive survey to document the historical significance of individual buildings in San Jose's Japantown (included in Appendix E).⁵⁴ The study areas for Carey & Co.'s research, San Jose Japantown, consists of all of the properties between North 1st and North 10th Streets to the west and east and Taylor and Empire Streets to the north and south. Within this area, there are 86 resources that are significant for their role in the city's Japanese-American history, for their connection to historically important people, and/or for their architectural distinction. As a group they appear eligible for listing as a NRHP and CRHR historic district and/or a Traditional Cultural Property, as well as a City of San Jose historic district. Additionally, other special resources may be individually significant and eligible for official designation as San Jose landmarks and/or separate listing in the NRHP and CRHR.

Nine of the 86 San Jose Japantown resources identified as historically significant are adjacent to the project area. These nine buildings are on the west side of North 6th Street between East Taylor and Jackson streets (see Figure V.I-1 and Photo 1). The Carey & Co. study found that all nine structures appear to be eligible for the NRHP as contributors to a NRHP- and CRHR-eligible district, as well as contributors to a district eligible for local listing. Each of the nine buildings is briefly described below, based on the descriptions provided in Carey & Co. (2006).

⁵⁴ Carey & Company, 2006. *San Jose Japantown Historic Context and Survey Phase II, San Jose, California*. October 10, 2006. Carey & Company, San Francisco, California.



Photo 1: View southwest of building on west side of North 6th Street.

Building 8 – 605 North 6th Street (APN 249-39-024). This single-story masonry commercial/retail building is rectangular in plan, has a flat roof and a stepped parapet, and is clad in stucco. The building is in good condition, but lies empty. The Santa Clara County Assessor lists the construction date as 1940, and it housed several Japanese businesses before and after WW II. Despite the assessor date of 1940, Sanborn Maps indicate that the building may date to as early as 1888. Inspections following the Loma Prieta earthquake in 1989 indicated that this building is an unreinforced concrete building, similar if not identical to the buildings of Heinlenville, the Chinatown constructed in 1888 on the northern two thirds of the Corporation Yard. Therefore, this building may be the only extant structure of San Jose's numerous Chinatowns, which may render it potentially individually eligible for the National or California registers; as such, the building would benefit from additional research to clarify this potential eligibility. However, such research is not necessary for the purposes of this analysis, since the buildings is already eligible as a contributor to the district. According to prior surveys, this building has been designated as a structure of merit and has been recorded on the State of California Historic Resources Inventory form. This building received an overall rating of 67.62 in the City of San Jose Evaluation Sheet, suggesting that it may qualify as a city landmark.



LSA

LEGEND

- BUILDING 8 - 605 NORTH 6TH ST (APN 249-39-024)
- BUILDING 9 - 615-21 NORTH 6TH ST (APN 249-39-040)
- BUILDING 10 - 625 NORTH 6TH ST (APN 249-39-022)
- BUILDING 11 - 635 NORTH 6TH ST (APN 249-39-042)
- BUILDING 12 - 639 NORTH 6TH ST (APN 249-39-019)

- BUILDING 13 - 651 NORTH 6TH ST (APN 249-39-016)
- BUILDING 14 - 655 NORTH 6TH ST (APN 249-39-015)
- BUILDING 15 - 657 NORTH 6TH ST (APN 249-39-014)
- BUILDING 16 - 665 NORTH 6TH ST (APN 249-39-012)

PROJECT SITE



FIGURE V.I-1

*Japantown Corporation Yard
Redevelopment Project EIR
Adjacent Historic Resources*

Building 9 – 615-21 North 6th Street (APN 249-39-040). This two-story commercial/retail building is rectangular in plan and has a gable roof concealed by a parapet. The primary (east) facade faces North 6th Street and is clad in stucco, but the other facades are obscured by surrounding buildings. This building has been maintained well and is in excellent condition. According to the Santa Clara County Assessor, this building was constructed in 1954. The building did not exist before World War II, but it demonstrates how Japantown not only retained the geographical continuity of its pre-war history, but also grew and thrived in the post-war period. This building scored a total of 71.98 points by Carey & Co. on the City of San Jose Historical Evaluation Sheet, which appears to make it eligible as a City Landmark.

Building 10 – 625 North 6th Street (APN 249-39-022). This two-story commercial building is rectangular in plan, has a gable roof clad in asphalt shingles, and is clad in horizontal wood siding with brick veneer present at the facade on the first floor. The building is in good condition. Records at the Santa Clara County Assessor show that the building was originally constructed in 1889, with alterations made in 1920 and 1950. This building is the oldest surviving structure in Japantown and its architecture is highly distinctive and rare in the city of San Jose. It housed for decades a Chinese restaurant that served as an important social center for both the local Chinese and Japanese communities. This building scored 100.72 on the City of San Jose Historic Evaluation Sheet, confirming the building's City Landmark status. It is also considered individually eligible for the CRHR in addition to its eligibility as a contributor to the San Jose Japantown Historic District.

Building 11 – 635 North 6th Street (APN 249-39-042). This one-story community building is rectangular in plan, has a gable roof clad in asphalt shingles, and is constructed of concrete block and clad in stucco. The condition of the building is excellent. According to the Santa Clara County Assessor, this building was constructed in 1960. The history of the building has strong continuity due to serving as a Filipino community center since its construction, and also reflecting the ethnic diversity of the neighborhood since the late 19th century. This building scored a total of 47.92 points by Carey & Co. on the City of San Jose Historical Evaluation Sheet, which appears to make it eligible as a Structure of Merit.

Building 12 – 639 North 6th Street (APN 249-39-019). This two-story religious building has a rectangular plan and a flat roof, and the exterior walls of the building consist of parged concrete. Recent fire damage has rendered the building vacant and undistinguished. San Jose building permits reveal that this building was constructed in 1948. A score of 62.65 on the City of San Jose Historic Evaluation Sheet confirms that this building qualifies as a structure of merit and contributing structure.

Building 13 – 651 North 6th Street (APN 249-39-016). This two-story religious building is rectangular in plan, has a flat roof, is made of poured concrete, and is clad in stucco. The building is in excellent condition, and San Jose permits show that it was constructed in 1955. It stands out on this block as the most stylized example of modern architecture in the post-war period. A church founded by the African-American community in the postwar period, it stands as a reflection of the mass migration of African-Americans to California during WW II and their tendency to settle in largely abandoned Japantowns. This building scored a total of 80 points by Carey & Co. on the City of San Jose Historical Evaluation Sheet, which appears to make it eligible as a Candidate City Landmark. Because of the building's relationship to the history of African-Americans in San Jose, it is also

considered an individual candidate for the CRHR in addition to its eligibility as a contributor to the San Jose Japantown Historic District.

Building 14 – 655 North 6th Street (APN 249-39-015). This one-story commercial building is rectangular in plan, has a flat roof, and is clad in stucco. The building is in excellent condition. According to Santa Clara County Assessor records, the building was constructed in 1953. Originally built by the African-American community, it reflects patterns of mass migration of African-Americans to California during WW II, their not infrequent settlement in abandoned Japantowns, and the cultural diversity that has been a hallmark of the neighborhood since the late 19th century. This building scored a total of 64.08 points by Carey & Co. on the City of San Jose Historical Evaluation Sheet, which appears to make it eligible as Structure of Merit.

Building 15 – 657 North 6th Street (APN 249-39-014). This one-story commercial building is rectangular in plan, has a flat roof with a hipped section at the rear, and is clad in stucco with horizontal wood siding on portions of the front facade. The building is in fair condition and, according to the Santa Clara County Assessor, was constructed in 1949. This building scored a total of 35.1 points by Carey & Co. on the City of San Jose Historical Evaluation Sheet, which appears to make it eligible as a Structure of Merit.

Building 16 – 665 North 6th Street (APN 249-39-012). This two-story commercial building is rectangular in plan, has a flat roof, and is clad in brick. Apart from some broken windows and faded signs, the building is in good condition. San Jose building permits show that it was constructed in 1929. The building is the second oldest structure on the street and, apart from the Japanese internment period of World War II, it has always been owned and occupied by people in the Japanese community. Its brick architecture is unique on this street and unusual for the city of San Jose more generally. A score of 93.66 on the City of San Jose Historic Evaluation Sheet suggests that this structure qualifies as a Candidate City Landmark. Due to its historical association and architectural merits, this building is considered an individual candidate for the CRHR in addition to its eligibility as a contributor to the San Jose Japantown Historic District.

Traditional Cultural Property. In consultation with the City, Carey & Co. addressed the question of whether Japantown should be considered, and nominated to the National and California registers as, a Traditional Cultural Property (TCP) instead of solely as a historic district. Typically, a historic district has a clear boundary delineated to achieve the greatest concentration of historical significance within the most logical geographic space. This significance can take many forms, but typically relies on the physical elements of the place that were present at a certain period in history. A TCP, while it still must have an actual physical location, relies more on ongoing uses important to the maintenance of the cultural identity of the associated group. The physical elements are secondary to how the place continues to be historically significant for its association with important cultural values, beliefs, customs, or activities. Essentially, a TCP is like a living historic property with a period of significance that extends to the present day, as long as its associated activities are still being practiced by a living community and are important to maintaining the group's cultural identity. Examples of such activities in Japantown may include celebrations such as the annual Obon Festival; regular meetings of an Aikido club; or daily tofu production in a local shop that has been family-run for multiple generations.

Because so many historical buildings remain in Japantown, and because an area nominated as a TCP still must satisfy one or more of the National Register criteria in order to be considered significant, the 2006 Carey & Co. survey treated the Japantown area as a standard historic district, and no official action has been taken to designate the area a TCP.

e. Paleontological Setting and Sensitivity. An overview of the paleontological setting and sensitivity are presented below.

(1) Paleontological Setting. The project area is underlain by Holocene (present to 10,000 years old) alluvial deposits. In proximity to the project area there are also levee deposits, stream terrace deposits, alluvial fan deposits, and basin deposits. All of these deposits are Holocene in age.⁵⁵ Underlying the Holocene sediments at an unknown depth are Pleistocene sediments. The Franciscan Assemblage forms the bedrock of the area. These geological formations, from youngest to oldest, are described below.

Soils. The project area contains an urban soil complex, which is generally heavily altered or mixed during construction activities.⁵⁶

Flood plain deposits (Holocene, present to 10,000 years old). These sediments are gray sandy to silty clay, with local lenses of silt and fine gravel. These deposits directly underlie the project area and are not sensitive for significant paleontological resources.

Alluvial deposits (Pleistocene, 10,000 to 1.5 million years old). Underlying the Holocene flood plain deposits at an unknown depth are Pleistocene alluvial deposits, which are sensitive or significant paleontological resources.^{57,58}

Franciscan Assemblage (65 to 144 million years old). The Franciscan Assemblage is a formation of various igneous and sedimentary rocks formed in the Cretaceous period, and forms the deepest geological formation of the project area. It is buried under hundreds of feet of sediments. It contains radiolarian fossils in its chert layers, and can contain marine invertebrate fossils and trace fossils in other sedimentary layers.^{59,60,61,62} It is not known for containing vertebrate fossils.^{63,64}

⁵⁵ Wentworth, Carl M., Clark Blake, Robert J. McLaughlin, and Russell W. Graymer, 1999. *Preliminary Map of the San Jose 30 x 60-minute Quadrangle, California*. U.S. Geological Survey, Open-File Report 98-795.

⁵⁶ Welch, Lawrence E., 1981. *Soil Survey of Alameda County, California, Western Part*. United States Department of Agriculture, Soil Conservation Service.

⁵⁷ Savage, D.E., 1951. *Late Cenozoic Vertebrates of the San Francisco Bay Region*. University of California Bulletin of the Department of Geological Science 28 (10): 215-314.

⁵⁸ Stirton, R.A., 1951. *Cenozoic Mammal Remains from the San Francisco Bay Region*. University of California Bulletin of the Department of Geological Science 24, Berkeley.

⁵⁹ Armstrong, C.F. and Kathy Gallagher, 1977. Fossils from the Franciscan Assemblage Alcatraz Island. *California Geology*, Vol. 30, pp. 134-135.

⁶⁰ Little et al., op. cit.

⁶¹ Miller III, William, 1989. Paleontology of Franciscan Flysch at Point Saint George, Northern California.

Geologic Evolution of the Northernmost Coast Ranges and Western Klamath Mountains, California. Field Trip Guidebook T308. pp. 47-52.

A fossil locality search request was submitted to the University of California Museum of Paleontology (UCMP), Berkeley, on June 29, 2007. On Monday, August 20, 2007, Dr. Patricia Holroyd responded by email and stated that a search of the UCMP database yielded no fossil localities in or adjacent to the project area, but five fossil localities (UCMP reference numbers V5634, V4916, V70196, V5723, and V5312) within 5 miles of the project area.

(2) Paleontological Sensitivity. The project area is underlain by Holocene flood plain deposits. These deposits may be underlain by Pleistocene sediments at a depth as little as 10 feet below the surface. In the summer of 2005 mammoth bones were also reported to be exposed in the bank of the Guadalupe River north of the San Jose Municipal Airport approximately 10.5 feet below the elevation of the adjacent flood plain.⁶⁵ The presence of mammoth bones in the area introduces the possibility of Pleistocene aged sediments located at an indeterminate depth, though possibly as shallow as 10 feet, below the surface. Such Pleistocene sediments may contain significant paleontological resources. It is also possible, however, that the mammoth bones were reworked into younger sediments.⁶⁶

3. Regulatory Context. The section below briefly discusses laws, codes, and regulations applicable to cultural resource in the City of San Jose.

a. California Environmental Quality Act (CEQA). CEQA applies to all discretionary projects undertaken or subject to approval by the state's public agencies (California Code of Regulations [CCR] Title 14(3) §15002(i)). CEQA states that it is the policy of the State of California to "take all action necessary to provide the people of this state with... historic environmental qualities...and preserve for future generations examples of the major periods of California history" (Public Resources Code [PRC] §21001(b), (c)). Under the provisions of CEQA, "A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (CCR Title 14(3) §15064.5(b)).

CEQA §15064.5(a) defines a "historical resource" as a resource which meets one or more of the following criteria:

- Listed in, or eligible for listing in, the CRHR;
- Listed in a local register of historical resources (as defined at PRC §5020.1(k));
- Identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g); or
- Determined to be a historical resource by a project's lead agency (CCR Title 14(3) §15064.5(a)).

⁶² Schlocker, Julius, 1974. *Geology of the San Francisco North quadrangle, California*. U.S. Geological Survey Professional Paper 782.

⁶³ Armstrong and Gallagher, op. cit.

⁶⁴ Camp, C.L., 1942. Ichthyosaur Rostra from Central California. *Journal of Paleontology*, 16(3), pp. 362-371.

⁶⁵ Personal communication, July 2007. Dr. David Anderson, Geology Department, San Jose State University, in July 2007.

⁶⁶ Ibid.

A historical resource consists of “Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California...Generally, a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing in the California Register of Historical Resources” (CCR Title 14(3) §15064.5(a)(3)).

CEQA requires that historical resources and unique archaeological resources be taken into consideration during the CEQA planning process (CCR Title 14(3) §15064.5; PRC §21083.2). If feasible, adverse effects to the significance of historical resources must be avoided, or the effects mitigated (CCR Title 14(3) §15064.5(b)(4)). The significance of an historical resource is impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for the CRHR. If there is a substantial adverse change in the significance of a historical resource, the preparation of an environmental impact report may be required (CCR Title 14(3) §15065(a)).

If the cultural resource in question is an archaeological site, CEQA (CCR Title 14(3) §15064.5(c)(1)) requires that the lead agency first determine if the site is a historical resource as defined in CCR Title 14(3) §15064.5(a). If the site qualifies as a historical resource, potential adverse impacts must be considered in the same manner as a historical resource.⁶⁷ If the archaeological site does not qualify as a historical resource but does qualify as a unique archaeological site, then the archaeological site is treated in accordance with PRC §21083.2 (CCR Title 14(3) §15069.5(c)(3)). In practice, most archaeological sites that meet the definition of a unique archaeological resource will also meet the definition of a historical resource (Bass, Herson, and Bogdan 1999:105). CEQA defines a “unique archaeological resource” as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC §21083.2(g)).

If an impact to a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) §15126.4 (a)(1)). Mitigation of significant impacts must lessen or eliminate the physical impact that the project will have on the resource. Generally, the use of drawings, photographs, and/or displays does not mitigate the physical impact on the environment caused by demolition or destruction of a historical resource. However, CEQA requires that all feasible mitigation be undertaken even if it does not mitigate impacts to a less than significant level.⁶⁸

⁶⁷ California Office of Historic Preservation, 2001, p. 8. *California Environmental Quality Act (CEQA) and Historical Resources*. Technical Assistance Series No. 1. California Department of Parks and Recreation, Sacramento.

⁶⁸ California Office of Historic Preservation, op. cit., p. 9.

(1) California Register of Historical Resources (CRHR). The CRHR is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The CRHR helps government agencies identify and evaluate California's historical resources, and indicates which properties are to be protected, to the extent prudent and feasible, from substantial adverse change (PRC §5024.1(a)). Any resource listed in, or eligible for listing in, the CRHR is to be considered during the CEQA process.

A cultural resource is evaluated under four CRHR criteria to determine its historical significance. A resource must be significant in accordance with one or more of the following criteria:

1. Is associated with events that have made a significant contribution to the broad pattern of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, the CRHR requires that sufficient time must have passed to allow a "scholarly perspective on the events or individuals associated with the resource." Fifty years is used as a general estimate of the time needed to understand the historical importance of a resource (CCR Title 14(11.5) §4852 (d)(2)).

The CRHR also requires a resource to possess integrity, which is the ability of a resource to convey its historical significance. Integrity is evaluated with regard to the aspects of location, design, setting, materials, workmanship, feeling, and association.

Resources that are significant, meet the age guidelines, and possess integrity will generally be considered eligible for listing in the CRHR.

b. Senate Bill 18. In 2004, sections of California's Government Code and Public Resources Code were amended to address the potential environmental impact of projects on California Native American Cultural Places. These changes were prompted by passage of Senate Bill 18 (SB 18). The new regulations apply to all General/Specific Plan updates and amendments proposed on or after March 1, 2005. SB 18 requires planning agencies to consult with California Native American tribes during the preparation, updating, or amendment of General/Specific Plans. The purpose of the consultation is to identify and preserve specified places, features, and objects located within the city's or the county's jurisdiction that have a unique and significant meaning to California Native Americans. The City is currently undertaking compliance with the requirements of SB 18. Cultural resource consultation letters were sent to the various tribal bands on September 6, 2007. The City had not received any responses at the time of publication of this Draft EIR.

c. Human Remains. Human remains are protected from unauthorized disturbance by PRC §5097.98 and HSC §7050.5 and §7051. The CEQA Guidelines further describe the process by which prehistoric Native American remains shall be treated (CCR Title 14(3) §15065.4(e)(1-2)), which requires that excavation cease if remains are discovered. If the County Coroner determines that the

remains are those of a Native American, the Native American Heritage Commission is asked to identify the individual's Most Likely Descendent (MLD). The MLD consults with the landowner in order to arrange for the appropriate final disposition of the remains.

d. San Jose 2020 General Plan Policies. San Jose's General Plan reaffirms the City's commitment to preserve its cultural heritage. The following policies from the Historic, Archaeological and Cultural Resources sub-section of the Aesthetic, Cultural and Recreational Resources Element of the General Plan.

- **Aesthetic, Cultural and Recreational Resources**

- o Historic, Archaeological and Cultural Resources Policy 5: New development in proximity to designated historic landmark structures and sites should be designed to be compatible with the character of the designated historic resources. In particular, development proposals located within the Areas of Historic Sensitivity designation should be reviewed for such design sensitivity.
- o Historic, Archaeological and Cultural Resources Policy 8: For proposed development sites which have been identified as archaeologically sensitive, the City should require investigation during the planning process in order to determine whether valuable archaeological remains may be affected by the project and should also require that appropriate mitigation measures be incorporated into the project design.
- o Historic, Archaeological and Cultural Resources Policy 9: Recognizing that Native American burials may be encountered at unexpected locations, the City should impose a requirement on all development permits and tentative subdivision maps that upon discovery of such burials during construction, development activity will cease until professional archaeological examination and reburial in an appropriate manner is accomplished.

e. Local Programs. The City of San Jose is a "Certified Local Government" which qualifies its historic preservation program for technical and financial assistance from the California Office of Historic Preservation. The City's Historic Preservation Ordinance (Municipal Code Chapter 13.48), adopted in 1975, authorizes San Jose to maintain an inventory of historic resources, establish a historic landmarks commission, preserve historic properties using a landmark designation process, require historic preservation permits for additions or alterations to designated City Landmarks or buildings within City Historic Districts, and provide financial incentives through the Historic Property Contracts program.^{69,70} According to the City of San Jose's Historic Preservation Ordinance (Chapter 13.48 of the Municipal Code), a resource qualifies as a City Landmark if it has "special historical, architectural, cultural, aesthetic or engineering interest or value of an historical nature" and is one of the following resource types:

- An individual structure or portion thereof;
- An integrated group of structures on a single lot;
- A site, or portion thereof; or
- Any combination thereof (Section 13.48.020.C).

The ordinance defines the term "historical, architectural, cultural, aesthetic, or engineering interest or value of an historical nature" as deriving from, based on, or related to any of the following factors:

⁶⁹ San Jose Department of City Planning and Building, 1995. *What is Historic Preservation?*

⁷⁰ San Jose Department of Planning, Building and Code Enforcement, 2000a. *Incentives for Ownership of a Designated City Landmark.*

- Identification or association with persons, eras, or events that have contributed to local, regional, state or national history, heritage, or culture in a distinctive, significant, or important way;
- Identification as, or association with, a distinctive, significant, or important work or vestige:
 - a. Of an architectural style, design, or method of construction;
 - b. Of a master architect, builder, artist, or craftsman;
 - c. Of high artistic merit;
 - d. The totality of which comprises a distinctive, significant, or important work or vestige whose component parts may lack the same attributes;
 - e. That has yielded or is substantially likely to yield information of value about history, architecture, engineering, culture or aesthetics, or that provides for existing and future generations an example of the physical surroundings in which past generations lived or worked; or
 - f. That the construction materials or engineering methods used in the proposed landmark are unusual or significant or uniquely effective.

The factor of age alone does not necessarily confer a special historical, architectural, cultural, aesthetic or engineering significance, value, or interest upon a structure or site, but it may have such effect if a more distinctive, significant, or important example thereof no longer exists (Section 13.48.020.A).

The ordinance also defines a district as “a geographically definable area of urban or rural character, possessing a significant concentration or continuity of site, building, structures or objects unified by past events or aesthetically by plan or physical development” (Section 13.48.020.B).

Although the definitions listed are the most important determinants in evaluating the historical value of San Jose resources, the City of San Jose also has a numerical tally system that must be used in identifying potential historic resources. The “Historic Evaluation Sheet” requires resources to be rated according to visual quality/design; history/association; environment/context; integrity; reversibility; interior quality and conditions; and NRHP/CRHR status. These tally sheets were used by Carey & Co. to rate individual buildings in San Jose Japantown.

Based upon the criteria of the City of San Jose Historic Preservation Ordinance, the San Jose Historic Landmarks Commission has established a quantitative process by which historical resources are evaluated for significance. The numerical evaluation system has the following categories of significance:

<u>Candidate City Landmark (CCL):</u>	67-134 points
<u>Structure of Merit (SM) and/or Contributing Structure (CS):</u>	33-66 points
<u>Non-Significant (NS)/Non-Contributing (NCS):</u>	0-32

According to the City of San Jose’s *Guide to Historic Reports*, a City Landmark is “a significant historic resource having the potential for landmark designation as defined in the Historic Preservation Ordinance. Preservation of this resource is essential.” The preservation of Structures of Merit “should

be a high priority.” The list of historically significant resources in San Jose is called the “Historic Inventory List.”

For CEQA purposes, the City has considered designated City Landmarks, structures scoring 67 points and above (Candidate City Landmark) as well as cultural resources listed on, or eligible for, the California Register of Historic Resources as a threshold of significance. Structures scoring lower than 67 points may have historical importance, but for the purposes of CEQA are not automatically considered historically significant. In particular, Structures of Merit are typically properties that, while currently ineligible for the CRHR, may become eligible in the future through advancing age, through inclusion in a newly identified historic district, or through additional historical research.

f. Paleontological Resources. Paleontological resources are the fossilized remains of plants and animals and associated deposits. The Society of Vertebrate Paleontology has identified vertebrate fossils, their taphonomic and associated environmental indicators, and fossiliferous deposits as significant nonrenewable paleontological resources. Botanical and invertebrate fossils and assemblages may also be considered significant resources.⁷¹

CEQA requires that a determination be made as to whether a project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature.⁷² If an impact is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) §15126.4 (a)(1)).

4. Impacts and Mitigation Measures

Implementation of the proposed project has the potential to impact cultural and paleontological resources. This section contains impact significance criteria, an assessment of the potential impacts of the proposed project, and mitigation measures to reduce the severity of potentially significant impacts. The impacts and mitigation for the built environment (historic buildings) are based on analysis by Carey & Company,⁷³ while the impacts and mitigation for archaeology are based on analysis by the Anthropological Studies Center.⁷⁴

a. Criteria of Significance. Significance thresholds based on the *CEQA Guidelines* for cultural resources are presented below, followed by a description of the evaluation criteria and process used for possibly significant historic properties.

The proposed project would have a significant effect on cultural resources if it would:

- Result in the physical demolition, destruction, relocation, or alteration of a historical resource that is eligible for listing on the CRHR, listed in a local register of historical resources (as defined at PRC §5020.1(k)), identified as significant in a historical resource survey meeting the require-

⁷¹ Society for Vertebrate Paleontology, 1995. *Conformable Impact Mitigation Guidelines*. *Society for Vertebrate Paleontology News Bulletin* 163: January.

⁷² CEQA Appendix G(v)(c).

⁷³ Carey & Company, 2007. *San José Corporation Yard and 675 North Sixth Street: Proposed Project Impact Assessment*. Carey & Company, San Francisco, California. September 7, 2007.

⁷⁴ Anthropological Studies Center, 2007. *Historic Context and Archaeological Survey Report: Heinlenville-Corporation Yard Project, San Jose, California*. Anthropological Studies Center, Sonoma State University, Rohnert Park, California.

ments of PRC §5024.1(g), or determined to be a historical resource by the City of San Jose (CCR Title 14(3) §15064.5(a));

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

b. Less-than-Significant Cultural Resource Impacts. The following provides a discussion of the less-than-significant cultural resource impacts of the proposed project.

No official action has been taken to designate the Japantown area as a TCP. However, Japantown has an established and long standing role in the maintenance of the customs, traditions, and values of the Japanese-American community in San Jose. As such, events are frequently held to celebrate the history and cultural significance of Japantown, and such events are integral to maintaining the associative value of the buildings that comprise the Japantown Historic District. Some of the major events, ongoing activities, and organizations in Japantown include:

- *Nikkei Matsuri*, the annual spring Japantown arts and crafts festival featuring artists, ethnic foods, craft demonstrations, dancing, and music;
- *Obon/Bazaar*, the annual festival affiliated with San Jose Buddhist Church Betsuin featuring ethnic foods, cultural exhibits, and demonstrations;
- *Aki Matsuri*, the annual fall Japantown arts and crafts festival;
- *Spirit of Japantown Festival*, an October festival organized by the Japantown Community Congress of San Jose, which uses festival profits to support the historical and cultural preservation of Japantown;
- *Contemporary Asian Theater Scene*, a local non-profit dedicated to presenting Asian Pacific American arts in Silicon Valley; and
- *Certified Farmers' Market*, open every Sunday.

The City and the project applicant acknowledge the vitality and cultural importance of Japantown, and community representatives have actively participated in defining project objectives. Several aspects of the project strengthen its relationship to Japantown and integrate proposed uses with existing community activities. Some of these project aspects include:

- *Amenity space*. The project would include 10,000 to 20,000 square feet of community amenity space that would be used for a Taiko practice area, as well as flexible space for theater productions, exhibitions, and art displays.
- *Japantown Neighborhood Business District Overlay*. The project is located in the Japantown Neighborhood Business District Overlay, which implements the City's Neighborhood Business District Program (NBDP). The goal of the NBDP is to preserve, enhance, and revitalize older San Jose commercial areas that serve neighborhoods. The NBDP achieves this goal through the coordination of public and private improvements, such as streetscape beautification, façade upgrades, business development, and promotional events. Any new development within this area must conform to the overlay land use designation.

- *Community Involvement.* The Japantown community was actively involved in interviewing project design teams, and emphasized project integration with existing community uses.

The project would introduce new land uses in and adjacent to the Japantown Historic District that have not existed in those locations for over 50 years. This new land use would change the immediate architectural setting of a portion of Japantown. The project would not, however, result in a diminishment of those qualities that may qualify the Japantown Historic District as a TCP. Those community events, activities, and traditions that make Japantown special would persist and, in fact, be complemented by the project.

c. Significant Cultural Resource Impacts and Mitigation Measures. Significant impacts are evaluated below, and mitigation measures are recommended to reduce impact severity. For the purposes of the discussion in Impact CULT-2 below, the term “significant archaeological resource” refers to both unique archaeological resources and historical resources that are archaeological in nature.

Impact CULT-1: Construction-related excavation may result in significant impacts to human remains. (S)

Native American remains have been found throughout San Jose, both individually and in formal cemeteries. Although there is no evidence that human remains are present in the project area, archaeological research elsewhere in the Santa Clara Valley indicates that the possibility of discovering isolated burials cannot be discounted. In addition, geoarchaeological fieldwork indicates a moderate-to-high sensitivity for prehistoric archaeological deposits at a depth of 13 to 16 feet below the project area’s surface, where a former potential occupation surface is buried. Human burials may be associated with these possible archaeological deposits. It is also possible that undocumented burials from the historic era may be present in the project area. If human remains are present, they may be disturbed by site clearance, excavation, and construction. Disturbance of human remains would constitute a significant impact.

To reduce the severity of this impact, the following mitigation measure shall be implemented.

Mitigation Measure CULT-1: If human remains are discovered during archaeological investigations or construction on the Corporation Yard site and/or the City parking lot site, any such remains shall be treated in accordance with the requirements of CCR Title 14(3) §15064.5(e), which has particular procedures that apply to the discovery of remains of Native American origin. These procedures are provided below.

- (1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
 - (A) The coroner of the County must be contacted to determine that no investigation of the cause of death is required, and
 - (B) If the coroner determines the remains to be Native American:

1. The coroner shall contact the Native American Heritage Commission within 24 hours.
 2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
 3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC §5097.98, or
- (2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
- (A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission;
 - (B) The descendent identified fails to make a recommendation; or
 - (C) The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Compliance with the requirements of CCR Title 14(3) §15064.5(e) shall be coordinated with the Native American community contacts already established for this project. If, following the fulfillment of the notification requirements described above, human remains are discovered that are determined to not be of Native American origin, then the City shall consult with the appropriate descendent community regarding means for treating or disposing of the human remains, and any associated items, with appropriate dignity.

Implementing the following mitigation measure would reduce potential impacts to human remains to a less-than-significant level. This reduction would be achieved by ensuring that any remains are treated appropriately according to State of California guidelines, as well as in a manner that takes into account the proper treatment of human remains in accordance with the wishes of the descendant community.

Impact CULT-2: Construction-related excavation (including site remediation) may result in impacts to significant archaeological resources. (S)

No archaeological resources are known to be present in either the Corporation Yard site or the City parking lot site. This is partly due to the paved condition of the property, which precluded inventory. Historical research and geoarchaeological fieldwork indicate that both sites are extremely sensitive for archaeological remains that may constitute historical resources or unique archaeological resources

under CEQA. Construction and site remediation activities may effect a substantial adverse change in the significance of such resources by altering the characteristics that make them significant archaeological resources, thereby resulting in a significant impact.

To reduce the severity of this impact, the following three-part mitigation measure shall be implemented. The necessity of each subsequent mitigation measure shall be determined by the results of preceding measures.

Mitigation Measure CULT-2a: Research conducted by the Anthropological Studies Center has established that it is likely that the project area, including construction on both the Corporation Yard and City parking lot sites, may contain significant archaeological resources associated with historic-era Japanese and Chinese settlement.⁷⁵ To identify these resources in the field, an appropriate Testing Strategy is necessary to specify the appropriate investigative methods and approaches. If resources are identified, they will require evaluation to determine if they qualify as significant archaeological resources. The evaluation shall be conducted through the application of the principles contained in the Archaeological Research Design (described below).

To achieve the steps outlined above, the Director of Planning (or their designated representative) shall require that an Archaeological Research Design, Testing, and Evaluation Plan (ARDTEP), currently in preparation,⁷⁶ be implemented prior to project construction. The ARDTEP will guide fieldwork and help to determine if identified archaeological remains constitute significant archaeological resources. The ARDTEP is being prepared by professionals who meet the Secretary of the Interior's Professional Qualifications Standards in historical archaeology, prehistoric archaeology, and history (36 CFR Part 61, Appendix A).

The *research design* component of the document will contain the following major sections:

- Introduction and Purpose
- Project Location and Description
- Regulatory Context
- Methods and Sources
- Holocene Landscape Evolution
- Prehistory and Ethnography
- History
- Previous Archaeological Research
 - Prehistoric Archaeology
 - Historical Archaeology
- Archaeological Research Design
- Geoarchaeology
- Archival and Oral History Research
 - Block Histories by Address

⁷⁵ Anthropological Studies Center, 2007. *Historic Context and Archaeological Survey Report: Heintzenville-Corporation Yard Project, San Jose, California*. Anthropological Studies Center, Sonoma State University, Rohnert Park, California.

⁷⁶ Anthropological Studies Center, 2007. *Archaeological Research Design, Testing, and Evaluation Plan: Heintzenville/San Jose Corporation Yard Archaeological Project*. Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for The Redevelopment Agency, City of San José, California.

Research Context: Prehistoric Archaeology
Research Themes and Issues
Data Requirements
Property Types: Prehistoric Archaeology
Archaeological Sensitivity: Prehistoric
Research Context: Historical Archaeology
Research Themes and Issues
Data Requirements
Property Types: Historical Archaeology
Archaeological Sensitivity: Historical Archaeology.

The *testing strategy* component of the document will contain the following major sections:

Introduction and Purpose
Test Areas and their Potential Significance
Fieldwork Methods
Hazardous Materials, Health, and Safety
Treatment of Human Remains and Burial Goods
Public Involvement
Laboratory Work
Laboratory Methods
Archaeological Evaluation Plan: Evaluation Procedures and Criteria
Integrity
Infield Evaluation
Post-field Evaluation
Reporting and Dissemination of Results
Public Outreach
Curation

The ARDTEP shall be subject to review and approval by the Director of Planning (or their designated representative) in consultation with the City of San Jose Historic Preservation Officer. On approval, the Planning Director (or their designated representative) shall require that the terms of the ARDTEP be carried out by professionals who meet the Secretary of the Interior's Professional Qualifications Standards in historical archaeology, prehistoric archaeology, and history (36 CFR Part 61, Appendix A). The ARDTEP will be used to inform the City's decision regarding project design, and will be carried out prior to project construction.

Following implementation of the ARDTEP, the project archaeologist shall submit a report (the content of which is specified in the ARDTEP) of his/her findings to the Planning Department. If the project archaeologist, in consultation with the Planning Department, determines that significant archaeological resources are present, and that such resources may be impacted by the project, then the Planning Department shall require the preparation and implementation of an Archaeological Treatment Plan to mitigate project impacts. The Plan may include archaeological data recovery, archaeological monitoring, and/or public interpretation of important remains. The Archaeological Treatment Plan is described below in Mitigation Measure CULT-2b.

Mitigation Measure CULT-2b: Unavoidable project impacts on significant archaeological resources shall be treated according to the requirements of an Archaeological Treatment Plan (ATP). The Director of Planning (or their designated representative) shall review, authorize, and require the implementation of the ATP, which shall be prepared by professionals who meet

the Secretary of the Interior's Professional Qualifications Standards in historical archaeology, prehistoric archaeology, and history (36 CFR Part 61, Appendix A), and who will work in consultation with the City and the appropriate descendent communities. The ATP shall specify the treatment of previously identified significant archaeological resources, as well as the treatment of property types that may be uncovered during additional archaeological excavation.

Depending on the nature of the resources and project impacts, the ATP may include requirements for any or all of the following: additional archaeological identification efforts, data recovery (scientific excavation), laboratory analysis, preparation of technical and interpretive reports, *in situ* preservation of remains, archaeological monitoring during construction, and the preparation of feasible public outreach products. Treatment, including archaeological data recovery, shall be limited to significant archaeological resources that may be adversely impacted by the project.

The ATP shall contain the following sections, as appropriate to the resources under consideration:

Introduction and Purpose
Project Description
Impact Locations
Historic Resources
Data Recovery Plan: Field Methods
Site Security Measures
Laboratory Methods
Artifact Discard and De-accession Policy
Final Reporting and Dissemination of Results
Curation
Public Interpretation Plan
Archaeological Monitoring Plan.

After the City has approved the project design and the ATP has been implemented, the City, in consultation with the project archaeologist, may determine that it is necessary to prepare an Archaeological Monitoring Plan. This decision will be based on information about field conditions collected during the Archaeological Monitoring Plan's implementation, and will specifically address the likelihood that undiscovered, significant archaeological resources may be present in the project area and may be impacted by project activities. The decision shall be made by the Director of Planning (or their designated representative).

Mitigation Measure CULT-2c: The purpose of the Archaeological Monitoring Plan (AMP) will be to ensure that significant archaeological resources discovered during construction are identified, evaluated, and appropriately treated. The City will review, authorize, and require the implementation of the AMP. The AMP shall be reviewed, authorized, and its implementation required by the Director of Planning (or their designated representative). The AMP shall include the following requirements:

- Construction monitoring shall be undertaken by an individual who meets the Secretary of the Interior's Professional Qualifications Standards in historical archaeology and/or prehistoric archaeology (36 CFR Part 61, Appendix A), as appropriate in relation to the anticipated resources. A Native American cultural monitor shall be present if previous archaeological excavations indicate that Native American archaeological deposits may be

discovered. The cultural monitor's function shall be to advise the project archaeologist and the City regarding the respectful treatment of any prehistoric archaeological remains that are uncovered.

- The City, in consultation with the project archaeologist, shall determine which project activities and/or which portions of the project area will be archaeologically monitored. This information will be included in the AMP. In most cases, all soil-disturbing activities in sensitive portions of the project area—such as demolition, foundation removal, excavation, grading, utilities installation, and foundation work—will require archaeological monitoring. The project archaeologist shall have the authority to redirect construction personnel and equipment while discoveries are being assessed. The monitoring and project archaeologists would make every effort to ensure that evaluation and treatment of remains is carried out with as little disruption as possible. If it is necessary to suspend construction for more than one working day, the project archaeologist shall consult with the City to assess the appropriate course of action.

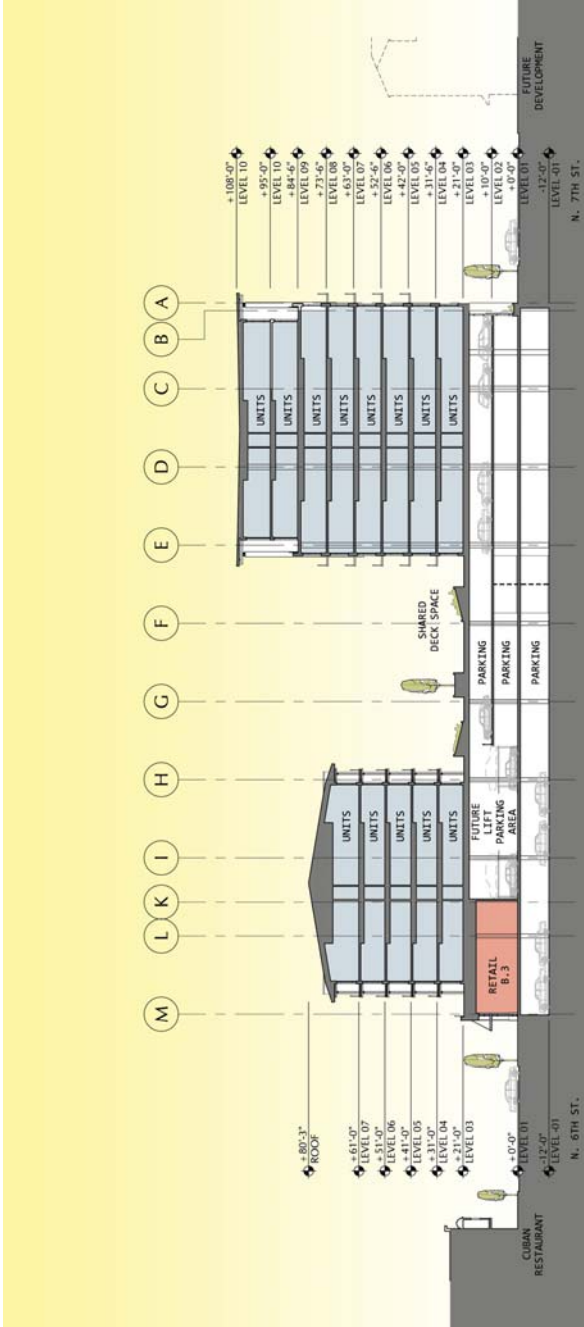
During construction monitoring, if the project archaeologist and the City determine that the finds in question represent significant archaeological resources, and that these resources may be adversely impacted by the project, then the City shall require the implementation of the appropriate portions of the Archaeological Treatment Plan to mitigate project effects on significant resources. These efforts may include archaeological data recovery and public interpretation of important remains.

Implementing Mitigation Measures CULT-2a, -2b, and -2c, as warranted, would reduce the project's impacts to significant archaeological resources to a less-than-significant level. This reduction would be achieved by preserving the values for which the resources are important through a systematic program of identification, evaluation, or treatment, as well as reporting for the public benefit. (LTS)

Impact CULT-3: New construction may result in significant impacts to the integrity of setting and feeling of the San Jose Japantown Historic District. (S)

Redevelopment of the Corporation Yard site entails construction of approximately four buildings ranging in height from six to 14 stories. As shown, on Figure V.I-2, these buildings would be markedly taller than the nine existing structures across North 6th Street, although the intent is for the buildings to be stepped back from the street. Presumably, they will also be of markedly different design. Implementation of the Corporation Yard portion of the project may have a significant adverse impact on the integrity of setting and feeling of the nine contributors to the San Jose Japantown Historic District along North 6th Street. Redevelopment of the City parking lot site would also change the immediate setting of the San Jose Japantown Historic District; however, this change would not result in a significant impact in and of itself because the existing six-story apartment building at the corner of East Taylor and North 6th streets has already altered the setting of adjoining parcels in the same block.

To reduce the severity of this potential impact, the following two-part mitigation measure shall be implemented to the extent feasible to ensure that the new buildings do not clash with or overwhelm the existing historical buildings.



LSA

FIGURE V.I-2

NOTE: ILLUSTRATIVE AS TO NUMBER OF BUILDINGS, BUILDING LOCATIONS AND ORIENTATION, MASSING, ALIGNMENT OF STREETS AND ACCESS DRIVES, LOCATION AND CONFIGURATION OF OPEN SPACE, LOCATION OF DRIVEWAYS AND LOADING ACCESS, INTERNAL BUILDING CONFIGURATION, AND CONFIGURATION OF USES WITHIN BUILDINGS.

*Japantown Corporation Yard
Redevelopment Project EIR
Conceptual Building Elevations in
Proximity to Historic Structures*



NOT TO SCALE

Mitigation Measure CULT-3a: The proposed project shall have regular commercial ground-floor entries along the following portions of North 6th Street: (1) that portion of the project area directly across from Buildings 8 through 12 (i.e., within the Corporation Yard site); and (2) that portion of the project area adjacent to Building 16 (i.e., the City parking lot site).

While of varying scales and designs, the nine contributing buildings along the west side of North 6th Street, although interrupted by vacant parcels and surface parking lots, create a pedestrian-scaled rhythm of ground floor entries and storefronts. Buildings 13 through 16 will be across North 6th Street from a proposed public open space; Buildings 8 through 12, however, will be across the street from proposed buildings. These proposed buildings, along with the proposed structure immediately adjacent to Building 16, shall maintain and extend the scaled rhythm established by the contributing buildings along North 6th Street. The project should not “wall off” this portion of North 6th Street with an undifferentiated, continuous façade. Nor shall the buildings of this portion of the project be set so far back from the street that North 6th Street fails to feel like a commercial-lined street. Building to the property line on North 6th Street from Jackson Street to approximately Building 12 (APN 249-39-012) is desirable.

Mitigation Measure CULT-3b: The proposed project shall employ setbacks and horizontal façade elements to reflect the scale of the San Jose Japantown Historic District along the following portions of North 6th Street: (1) that portion of the project area directly across from Buildings 8 through 12 (i.e., the Corporation Yard site); and (2) that portion of the project area adjacent to Building 16 (i.e., the City parking lot site). This mitigation measure shall not be construed to require specific building materials or design elements.

Maximum building heights fronting North 6th Street in proximity to Buildings 8 through 12 and Building 16 shall be mid-rise in order to be compatible with the mid-rise scale of the greater Japantown area and the low-rise scale of the identified Japantown Historic District. Proposed buildings on the Corporation Yard site directly across North 6th Street from Buildings 8 through 12, along with the proposed structure immediately adjacent to Building 16 on the City parking lot site, shall incorporate horizontal façade elements to distinguish the first story or two from the stories above. The third through sixth stories on buildings proposed across North 6th Street from Buildings 8 through 12 shall be set back substantially (10 to 15 feet) from second stories. Such elements will prevent the taller proposed buildings from overwhelming the contributing one- and two-story buildings on the west side of North 6th Street.

A two-part review process would be used to ensure that proposed designs meet the objectives of Mitigation Measures CULT-3a and 3b. First, conceptual elevations and architectural standards for the proposed development shall be subject to City Council approval, following community input at the Planning Department zoning stage. Then, final elevations will be subject to the approval of the Director of Planning, following community input at the Planned Development Permit stage.

Figures III-5a, 5b, and 5c depict the initial designs for the proposed development to inform the public of the early design ideas, but these are conceptual at this time and do not necessarily reflect the final outcome of the review and approval steps described above.

Implementing Mitigation Measures CULT-3a and -3b would reduce the project's impact to the San Jose Japantown Historic District's integrity of setting and feeling to a less-than-significant level. This reduction would be achieved by designing new construction that is sympathetic to the district's existing architectural context and historical qualities, and ensuring the implementation of such designs through public input and a City review and approval process. (LTS)

Impact CULT-4: New construction may result in significant impacts to the integrity of design, materials, and workmanship of the San Jose Japantown Historic District. (S)

Buildings 8 through 16 on North 6th Street, across from the Corporation Yard site and adjacent to the City parking lot site, are eligible for the National and California registers as contributors to the San Jose Japantown Historic District. As described in Section V.E. Noise, vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. Activities associated with project construction have the potential to adversely impact each building's integrity of design, materials, and workmanship through project-related vibration damage to character-defining features.

As described in Section V.E. Noise, typical groundborne vibration levels measured at a distance of 50 feet from heavy construction equipment in full operation, such as bulldozers or other heavy tracked equipment, range up to approximately 94 VdB. This is below the 96 VdB damage threshold for historic or fragile buildings. However, groundborne vibration-producing construction-related activities could occur as close as within 10 feet of Building 16 during redevelopment of the City surface parking lot site. In addition, given the proximity of proposed construction, construction-related machinery and materials could come into contact with Building 16 if they are not used and stored appropriately. Redevelopment of buildings on the Corporation Yard site would be greater than 50 feet from historic or fragile buildings; however, redevelopment could require utility construction to occur within the right of way of North 6th Street and, thus, possibly less than 50 feet from nearby sensitive structures across North 6th Street.

Implementation of Mitigation Measure NOI-2a and 2b (preparation of vibration impacts assessment to determine potential construction related groundborne vibration for both the redevelopment of City parking lot and the Corporation Yard site) may demonstrate that vibration levels would be below the damage threshold level. The project sponsor could consider redesigning the project such that heavy construction does not occur within 50 feet of Building 16. However, if such a redesign is not feasible, and if the vibration impact assessment determines that vibration levels would be in excess of the damage threshold, implementation of the following mitigation would reduce these potential groundborne vibration impacts on sensitive receptors to less than significant levels.

Mitigation Measure CULT-4a: Should the implementation of Mitigation Measure NOI-2a and -2b demonstrate that construction-related vibration levels may be in excess of the damage threshold, a qualified geologist or other professional with expertise in ground vibration and its effect on existing structures shall determine the likelihood that such vibration would damage any of the contributing buildings of the San Jose Japantown Historic District (Building 16, in particular). If such damage is likely, the qualified professional shall develop specifications regarding the restriction and monitoring of construction activities that shall be incorporated into

the contract. Project modifications recommended by the qualified professional shall be made prior to project construction to reduce vibrations to below damage threshold levels.

Construction-related vibration levels in the vicinity of Buildings 8-16 shall be monitored during initial construction. If construction-related vibration exceeds threshold levels, then, prior to the commencement of construction within 50 feet of any of the San Jose Japantown Historic District contributing buildings (including development of the lot adjacent to Building 16 and subsurface utility construction in North 6th Street), an architect specializing in historic architecture⁷⁷ and a registered structural engineer⁷⁸ shall undertake an existing condition study of those contributing buildings at risk (in particular, Building 16). The purpose of the study would be to establish the baseline condition of at-risk buildings, prior to construction that may exceed vibration thresholds, by identifying the location and extent of any visible exterior surface cracks, spalls, or structural deficiencies. The documentation shall consist of written descriptions and photographs, and shall specifically address those physical characteristics of the resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register and the local register. The documentation would be reviewed and approved by the City of San Jose's Historic Preservation Officer.

Following the baseline condition assessment, the architect and structural engineer shall monitor groundborne vibration levels during construction and report any changes to existing condition of the at-risk buildings, including, but not limited to, expansion of existing cracks, new spalls, or other exterior deterioration. Monitoring reports shall be submitted to the City of San Jose's Historic Preservation Officer, who shall also establish the frequency of monitoring and reporting. The structural engineer shall consult with the architect if any problems with character-defining features of a contributing building are discovered. If, in the opinion of the structural engineer in consultation with the architect, substantial adverse changes to the character-defining features of the contributing buildings are found during construction (and can be reasonably attributed to the effects from construction activities), the monitoring team shall immediately inform the project sponsor or sponsor's designated representative responsible for construction activities. The monitoring team shall also provide recommendations for preventive and/or corrective measures, and such measures shall be followed by the project sponsor. The preventive/corrective measures may include (1) halting construction in situations where construction activities would imminently endanger historical buildings; (2) redesigning the project to avoid certain activities that would pose future risks to historical buildings; and (3) repairing any construction-related damage such that the character-defining features of any affected buildings are restored to their pre-project condition. The monitoring teams recommendations shall be reviewed by the City of San Jose's Historic Preservation Officer for feasibility and appropriateness, but preventive measures shall be implemented in a timely manner to avoid additional potential damage.

Mitigation Measure CULT-4b: The monitoring architect (described above) shall establish a training program for construction personnel to emphasize the importance of protecting the

⁷⁷ The architect shall meet the qualifications for historic architecture contained in the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation, Professional Qualifications Standards* (36 CFR Part 61, Appendix A).

⁷⁸ The structural engineer shall have a minimum of five years of experience in the rehabilitation and restoration of historic buildings.

historical buildings in the vicinity of the project area. This program shall include information on recognizing historic fabric and materials, and directions on how to exercise care when working around and operating equipment near historical buildings, including the proper storage of materials. The program shall also include information on ways to minimize vibrations from demolition and construction, as well as ways to monitor and report any potential damage to historical buildings from such vibration. A provision for establishing this training program shall be incorporated into the contract, and the contract provisions would be reviewed and approved by the City of San Jose's Historic Preservation Officer.

If vibration impact assessments required by Mitigation Measures NOI-2a and 2b determine that vibration impacts to contributory buildings would be in excess of 96 VdB, then implementing Mitigation Measures CULT-4a and -4b would reduce the project's impacts to the San Jose Japantown Historic District's integrity of design, materials, and workmanship to a less-than-significant level. This reduction would be achieved by taking feasible steps to identify, prevent, or repair project-related damage to the contributing buildings of the San Jose Japantown Historic District. (LTS)

Impact CULT-5: New construction may result in inadvertent damage to paleontological resources. (S)

The project area is underlain by Holocene alluvial deposits. These deposits may be underlain by Pleistocene sediments at a depth as little as 10 feet below the surface. In the summer of 2005, mammoth bones were reported to be exposed in the bank of the Guadalupe River north of the San Jose Municipal Airport approximately 10.5 feet below the elevation of the adjacent flood plain. The presence of mammoth bones in a similar geological context introduces the possibility of Pleistocene-aged sediments occurring at an indeterminate depth in the project area, though possibly as shallow as 10 feet below the surface. Therefore, there is a possibility of encountering and inadvertently damaging paleontological resources during project construction.

To reduce the severity of this impact, the following mitigation measure shall be implemented.

Mitigation Measure CULT-5: If paleontological resources are encountered during project subsurface construction on the Corporation Yard and/or City parking lot sites, the all work within 25 feet of the discovery shall be redirected and a qualified paleontologist contacted to evaluate the finds and make recommendations. If the exposed geological formation is found to contain significant paleontological resources, such resources shall be avoided by project activities, if feasible. If project activities cannot avoid the paleontological resources, the resources shall be evaluated for their significance. If the resources are found to be significant, adverse effects shall be mitigated. Mitigation may include, but is not limited to, monitoring, data recovery and analysis, and accessioning⁷⁹ of all fossil material to a paleontological repository. A final report documenting the methods, findings, and recommendations of the consulting paleontologist shall be prepared and submitted to the paleontological repository.

Implementing Mitigation Measure CULT-5 would reduce potential impacts to paleontological resources to a less-than-significant level. This reduction would be achieved by recovering and documenting the scientific value possessed by significant paleontological resources. (LTS)

⁷⁹ Accessioning is the process by which specimens are added to a scientific collection, which includes the recording of data associated with the specimen.

J. BIOLOGICAL RESOURCES

This section describes existing biological resources in the project area, the regulatory context for addressing biological resource issues on the site, and evaluates potential impacts to biological resources that could result from implementation of the proposed project. Mitigation measures are also recommended to avoid or minimize potential significant impacts.

1. Setting

This section describes the existing vegetation and urban wildlife in and around the project site. The discussion includes: vegetation and habitats; wildlife values; potential wetlands; ordinance-size trees; sensitive communities; and special-status species. It begins with a brief summary of methods used and background materials relied upon.

a. Methods. To determine which special-status plant and animal species could occur on or in vicinity of the project site, the California Natural Diversity Database (CNDDDB)¹ was searched for records of special-status species and sensitive communities within 5 miles of the project site. The California Native Plant Society's (CNPS)² online database of special-status plants was also searched for special-status plant and sensitive plant community records in the San Jose East and San Jose West 7.5 minute U.S. Geological Survey quadrangles. Based on results of these database searches, a list of special-status plant and wildlife species that are known to occur in the general San Jose area were compiled.

LSA staff botanist/arborist Tim Milliken and wildlife biologist Dan Sidle conducted a reconnaissance-level survey on July 3, 2007. The site visit consisted of traversing the site while recording information on the vegetation and wildlife present, and searching for evidence of special-status species or habitats that could support them. Plants and wildlife species observed during the survey were recorded in field notes.

Plant taxonomy and nomenclature follows *The Jepson Manual*.³ Nomenclature for common amphibians and reptiles conforms to Crother et al.,⁴ while nomenclature for mammals conforms to Baker et al.⁵ Scientific names for bird species are not provided in the text since common names of birds are standardized in the American Ornithologists' Union (AOU) *Check-list of North American Birds*⁶ and supplements.

¹ California Natural Diversity Database (CNDDDB), 2007. Special-status species occurrences within the San Jose West and San Jose East 7.5-minute USGS quadrangles. Wildlife and Habitat Data Analysis Branch, California Department of Fish and Game, Sacramento.

² California Native Plant Society (CNPS), 2007. Inventory of Rare and Endangered Plants (online edition v. 6-05d 9-28-05). California Native Plant Society, Sacramento. <http://www.cnps.org/inventory>.

³ Hickman, J.C., ed., 1993. *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley. 1400 pp.

⁴ Crother, B.I. et al., 2000. Scientific and Standard English Names of Amphibians and Reptiles of North American North of Mexico, with Comments Regarding Confidence in our Understanding. Herpetological Circular 29:1–82.

⁵ Baker, R.J., L.C. Bradley, R.D. Bradley, J.W. Dragoo, M.D. Engstrom, R.S. Hoffmann, C.A. Jones, F. Reid, D.W. Rice, and C. Jones. 2003. *Revised Checklist of North American Mammals North of Mexico, 2003*. Museum of Texas Tech University. Occasional Papers 229.

⁶ American Ornithologists' Union, 1998. A.O.U. *Checklist of North American Birds*, Seventh Edition. American Ornithologists' Union, Washington, D.C.

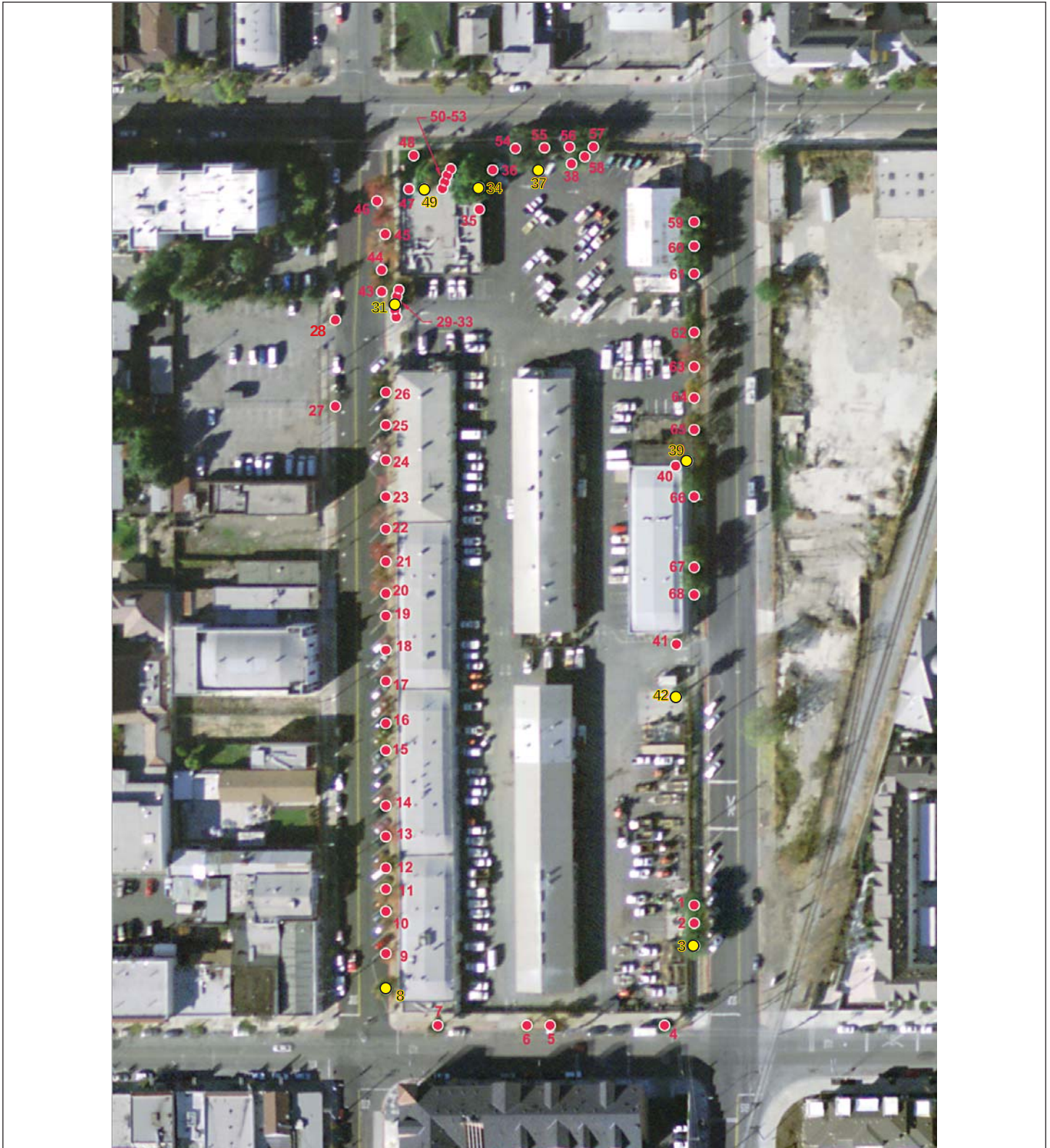
b. Existing Conditions. Approximately 5.23 acres of the total 5.78-acre Project site is bounded by Taylor Street on the north, 7th Street on the east, Jackson Street on the south, 6th Street on the west. The remaining 0.55-acre of the Project site is a City surface parking lot located across 6th Street to the west. Landscaped trees and shrubs have been planted along the sidewalks of the four bordering streets, along the boundary of the parking lot, and around the office building on the corner of Taylor and 6th Streets. Most of the site is unvegetated and consists of asphalt pavement, concrete surfaces, or gravel parking lots.

(1) Vegetation and Habitats. Most of the site is developed and unvegetated except for ornamental trees and shrubs. A tree survey conducted by LSA botanist/arborist Tim Milliken on July 3, 2007 (included in Appendix F) compiled data on a total of 68 trees in the project area, 8 of which are ordinance-sized trees (Figure V.J-1). The results from the tree survey are summarized below in a separate discussion of ordinance-sized trees and a copy of the detailed Arborist Report is provided in Appendix F. Ornamental trees observed near the on-site buildings or along the sidewalks surrounding the project site consist of 13 different species including tree-of-heaven (*Ailanthus altissima*), yellowwood (*Afrocarpus falcatus*), European white birch (*Betula pendula*), bottle brush (*Callistemon* sp.), raywood ash (*Fraxinus oxycarpa*), Australian willow (*Geijera parviflora*), juniper (*Juniperus* sp.), Sweet gum (*Liquidambar styraciflua*), Japanese cherry (*Prunus serrulata*), evergreen pear (*Pyrus kawakamii*), coast live oak seedlings (*Quercus agrifolia*), Japanese elm (*Ulmus japonica*), and California fan palm (*Washingtonia filifera*).

Several trees and shrubs are located off-site north of the boundary of the 6th Street City parking lot site. The vegetation associated with this lot consists of redwood (*Sequoia sempervirens*), pine (*Pinus* sp.), Peruvian pepper tree (*Schinus molle*), southern magnolia (*Magnolia grandiflora*), firethorn (*Pyracantha coccinea*), sweet orange (*Citrus sinensis*), Callery pear (*Pyrus calleryana*), and star jasmine (*Jasminum multiflorum*).

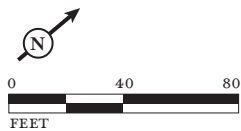
Parts of the outer periphery of the project site have been landscaped with ornamental shrubs and plants. A strip of ornamental shrubs consisting of mostly Japanese cheesewood (*Pittosporum tobira*), and pineapple-guava (*Feijoa sellowiana*) has been planted between one of the site's buildings and the sidewalk on 6th Street. An ornamental flowering vine, crossvine (*Bignonia capriolata*), is growing along portions of the chain-link fence on Taylor Street and 7th Street. The area around the existing structure on the corner of 6th and Taylor Streets is landscaped with a turf lawn, star jasmine, lily of the Nile (*Agapanthus africanus*), geranium (*Pelargonium* sp.), and English ivy (*Hedera helix*).

Besides the landscaped trees and shrubs, the only vegetation observed in the project area is ruderal vegetation growing in pavement cracks, areas of soil associated with the sidewalk planting strip, and one strip of soil associated with an out-building. Ruderal vegetation observed in these areas consists of: pigweed (*Amaranthus* sp.), cheeseweed (*Malva parviflora*), rescue grass (*Bromus catharticus*), foxtail barley (*Hordeum murinum*), storksbill (*Erodium botrys*), fennel (*Foeniculum vulgare*), tree-of-heaven seedlings, Japanese elm seedlings, California fan palm seedlings, coyote brush seedlings (*Baccharis pilularis*), horseweed (*Conyza canadensis*), large spurge (*Chamaesyce maculata*), common knotweed (*Polygonum arenastrum*), false brome (*Brachypodium distachyon*), dandelion, prickly lettuce (*Lactuca seriola*), cudweed (*Gnaphalium luteo-album*), bur clover (*Medicago polymorpha*), bristly ox-tongue (*Picris echoides*), rose clover (*Trifolium hirtum*), annual beard grass (*Polypogon monspeliensis*), bull thistle (*Cirsium vulgare*), and shortpod mustard (*Hirschfeldia incana*).



LSA

FIGURE V.J-1



- 7 ● TREES
- 3 ● ORDINANCE-SIZED TREES

*Japantown Corporation Yard
Redevelopment Project EIR
Tree Survey Map*

(2) **Wildlife Values.** Wildlife species that occur on the site are typical of urban areas and have adapted well to human-modified landscapes. Bird species observed during the field reconnaissance survey consist of the following: European starling, house finch, house sparrow, mourning dove, Anna's hummingbird, northern mockingbird, and rock pigeon. Active house sparrow nests were observed under the eaves of some of the buildings. House sparrows are an introduced, non-native bird of which their nests are not protected under the Migratory Bird Treaty Act. Additionally, American crow and killdeer were observed immediately east of the project site on the opposite side of 7th Street. No mammal, amphibian or reptile species were observed during the site visit. With the exception of the ornamental trees and shrubs planted for landscaping, the developed portions of the site provide little habitat for native wildlife.

(3) **Potential Jurisdictional Wetlands or Waters of the U.S.** No potential jurisdictional wetlands or non-wetland waters of the United States were observed in the project area during the reconnaissance survey.

(4) **Ordinance-Size Trees.** A tree survey was conducted in the project area on July 3, 2007 (included as Appendix F).⁷ A total of 68 trees are located in the project area, and eight of these are ordinance-sized trees (Figure V.J-1 and Tables V.J-1 and V.J-2). An ordinance-size tree is one that is equal to or greater than 18 inches in diameter (56-inch circumference) at 24 inches above the natural grade. Results from the tree survey indicate that 8 ordinance-size trees occur on the site, and include 12 different species including two yellowwood (trees #34, and 49), one tree-of-heaven (tree #39), one bottle brush (tree #31), two Australian willow (trees #3, and 8), one Japanese elm (tree #37), and one California fan palm (tree #42). All of these ordinance-sized trees are non-native species or non-local native species. The exact location of development on the site is not known at this time, as such it is assumed that all of these ordinance-size trees could be removed during project construction. A copy of the detailed Arborist Report is provided in Appendix F.

(5) **Sensitive Terrestrial Natural Communities.** The CNDDDB reports three sensitive habitats in the general San Jose area: serpentine bunchgrass, northern coastal salt marsh, and north central coast drainage Sacramento sucker/roach river. None of these sensitive communities occur within or adjacent to the project area.

(6) **Special-Status Species.** For the purpose of this EIR, special-status species are defined as follows:

- Species that are listed, formally proposed, or designated as candidates for listing as threatened or endangered under the Federal Endangered Species Act.
- Species that are listed, or designated as candidates for listing, as rare, threatened, or endangered under the California Endangered Species Act.
- Plant species on List 1A, List 1B, and List 2 in the CNPS *Inventory of Rare and Endangered Vascular Plants of California*.⁸
- Wildlife species listed by CDFG as Species of Special Concern, or as Fully Protected species.

⁷ Ibid.

⁸ CNPS 2007, op. cit.

Table V.J-1: Ordinance-size Trees at the Project Site

Tree Number	Common Name	Scientific Name	Diameter of Circumference Range (inches) (Number of Stems)	Total Diameter of Circumference (inches)	Native
3	Australian willow	<i>Geijera parviflora</i>	18 (1)	18	No
31	Bottle brush	<i>Callestemon sp.</i>	8-10 (2)	18	No
34	Yellowwood	<i>Afrocarpus falcatus</i>	15 (2)	30	No
37	Japanese elm	<i>Ulmus japonica</i>	20 (1)	20	No
39	Tree of Heaven	<i>Ailanthus altissima</i>	6-10 (5)	39	No
42	California fan palm	<i>Washingtonia filifera</i>	26 (1)	26	Yes ^a
49	Yellowwood	<i>Afrocarpus falcatus</i>	12-15 (2)	27	No
68	Australian willow	<i>Geijera parviflora</i>	18 (1)	18	No

^a Tree native to California, but not to this region.

Notes: The City of San Jose Tree Removal Controls Ordinance (San Jose Civil Code, Sections 13.32.010 to 13.32.100) defines ordinance-sized trees as trees that are greater than or equal to 56 inches in circumference (18 inches in diameter) at 2 feet (24 inches) above natural grade slope. Refer to Figure V.J-1 for the location of each tree.

Source: LSA Associates, Inc., 2007.

Table V.J-2: Trees Smaller than Ordinance Size at the Project Site

Tree Number	Common Name (Species name)	Diameter of Circumference Range (inches) (Number of Stems)	Total Diameter of Circumference (inches)	Native
1	Australian willow (<i>Geijera parviflora</i>)	15	15	No
2	Australian willow (<i>Geijera parviflora</i>)	14	14	No
4	Sweet gum (<i>Liquidambar styraciflua</i>)	17	17	No
5	Sweet gum (<i>Liquidambar styraciflua</i>)	11	11	No
6	Sweet gum (<i>Liquidambar styraciflua</i>)	8	8	No
7	Sweet gum (<i>Liquidambar styraciflua</i>)	12	12	No
8	Sweet gum (<i>Liquidambar styraciflua</i>)	13	13	No
9	Sweet gum (<i>Liquidambar styraciflua</i>)	9	9	No
10	Sweet gum (<i>Liquidambar styraciflua</i>)	10	10	No
11	Sweet gum (<i>Liquidambar styraciflua</i>)	12	12	No
12	Sweet gum (<i>Liquidambar styraciflua</i>)	12	12	No
13	Sweet gum (<i>Liquidambar styraciflua</i>)	14	14	No
14	Sweet gum (<i>Liquidambar styraciflua</i>)	10	10	No
15	Sweet gum (<i>Liquidambar styraciflua</i>)	12	12	No
16	Sweet gum (<i>Liquidambar styraciflua</i>)	9	9	No
17	Sweet gum (<i>Liquidambar styraciflua</i>)	8	8	No
18	Sweet gum (<i>Liquidambar styraciflua</i>)	9	9	No
19	Sweet gum (<i>Liquidambar styraciflua</i>)	6	6	No
20	Sweet gum (<i>Liquidambar styraciflua</i>)	12	12	No
21	Sweet gum (<i>Liquidambar styraciflua</i>)	12	12	No
22	Sweet gum (<i>Liquidambar styraciflua</i>)	10	10	No
23	Sweet gum (<i>Liquidambar styraciflua</i>)	8	8	No
24	Sweet gum (<i>Liquidambar styraciflua</i>)	12	12	No
25	Sweet gum (<i>Liquidambar styraciflua</i>)	8	8	No
26	Sweet gum (<i>Liquidambar styraciflua</i>)	12	12	No
27	Japanese cherry (<i>Prunus serrulata</i>)	8	8	No
28	Japanese cherry (<i>Prunus serrulata</i>)	5	5	No

Table V.J-2 *Continued*

Tree Number	Common Name (Species name)	Diameter of Circumference Range (inches) (Number of Stems)	Total Diameter of Circumference (inches)	Native
29	Bottle brush (<i>Callistemon sp.</i>)	12	12	No
30	Bottle brush (<i>Callistemon sp.</i>)	6	6	No
32	Bottle brush (<i>Callistemon sp.</i>)	6	6	No
33	Bottle brush (<i>Callistemon sp.</i>)	8	8	No
35	Yellowwood (<i>Afrocarpus falcatus</i>)	16	16	No
36	Evergreen pear (<i>Pyrus kawakamii</i>)	8	8	No
38	Japanese elm (<i>Ulmus japonica</i>)	6-9 (2)	15	No
40	Tree of heaven (<i>Ailanthus altissima</i>)	12	12	No
41	Juniper (<i>Juniperus sp.</i>)	5	5	No
42	California fan palm (<i>Washingtonia filifera</i>)	26	26	No
43	Sweet gum (<i>Liquidambar styraciflua</i>)	10	10	No
44	Sweet gum (<i>Liquidambar styraciflua</i>)	16	16	No
45	Sweet gum (<i>Liquidambar styraciflua</i>)	11	11	No
46	Sweet gum (<i>Liquidambar styraciflua</i>)	16	16	No
47	Juniper (<i>Juniperus sp.</i>)	6	6	No
48	Raywood ash (<i>Fraxinus oxycarpa</i>)	5	5	No
50	European white birch (<i>Betula pendula</i>)	10	10	No
51	European white birch (<i>Betula pendula</i>)	7	7	No
52	European white birch (<i>Betula pendula</i>)	10	10	No
53	European white birch (<i>Betula pendula</i>)	8	8	No
54	Australian willow (<i>Geijera parviflora</i>)	12	12	No
55	Australian willow (<i>Geijera parviflora</i>)	14	14	No
56	Australian willow (<i>Geijera parviflora</i>)	12	12	No
57	Australian willow (<i>Geijera parviflora</i>)	14	14	No
58	Tree of heaven (<i>Ailanthus altissima</i>)	8	8	No
59	Australian willow (<i>Geijera parviflora</i>)	17	17	No
60	Australian willow (<i>Geijera parviflora</i>)	11	11	No
61	Australian willow (<i>Geijera parviflora</i>)	15	15	No
62	Sweet gum (<i>Liquidambar styraciflua</i>)	16	16	No
63	Sweet gum (<i>Liquidambar styraciflua</i>)	17	17	No
64	Sweet gum (<i>Liquidambar styraciflua</i>)	14	14	No
65	Sweet gum (<i>Liquidambar styraciflua</i>)	14	14	No
66	Australian willow (<i>Geijera parviflora</i>)	16	16	No
67	Australian willow (<i>Geijera parviflora</i>)	14	14	No

Notes: The City of San Jose Tree Removal Controls Ordinance (San Jose Civil Code, Sections 13.32.010 to 13.32.100) defines ordinance-sized trees as trees that are greater than or equal to 56 inches in circumference (17.83 inches in diameter) at 2 feet (24 inches) above natural grade slope. Refer to Figure V.J-1 for the location of each tree.

Source: LSA Associates, Inc., 2007.

- Species that meet the definition of rare, threatened, or endangered under Section 15380 of the *CEQA Guidelines*.
- Plants or wildlife considered to be a taxon of special concern by local agencies.

Plants. A list was compiled of 15 special-status plant species that potentially occur in the vicinity of the project area (Table V.J-3). None of these plants are expected to occur in the project area because no habitat is present. The site is primarily paved and landscaped, with a few patches of ruderal plants along the sidewalks and in the cracks of paved or gravel surfaces.

Wildlife. A list of special-status wildlife species was compiled based on a CNDDDB⁹ record search, the site reconnaissance survey conducted by LSA in 2007, and LSA biologists' knowledge of the wildlife species in the region. Table V.J-4 summarizes the species' protective status, general habitat requirements, and potential for occurrence. The site is within the historical range of the California tiger salamander (*Ambystoma californiense*), but no current records of this species exist in the vicinity of the site and no suitable aquatic breeding habitat or upland habitat occurs on the site or vicinity. The closest known occurrence of California tiger salamander is a record from 1992 that is approximately 4 miles southeast of the project site. This species typically occurs in vernal pools. No suitable vernal pools occur onsite. None of the remaining special-status wildlife species are expected to occur on the site due to a lack of suitable habitat. The absence of suitable habitat, such as open grasslands, small mammal burrows, wetlands or creeks, rocky crevices, and other habitats, precludes the occurrence of Bay checkerspot butterfly (*Euphydryas editha bayensis*), San Joaquin kit fox (*Vulpes macrotis mutica*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), greater western mastiff bat (*Eumops perotis californicus*), and western pond turtle (*Clemmys marmorata*). No habitat for these listed species exists on the project site and there are no current records of these species in the vicinity.

The Cooper's hawk may occur in urban areas and has been observed in the vicinity of the site. This species could be affected by the proposed project and is discussed briefly below.

Special-Status Birds. The site lacks suitable nesting habitat and extremely limited foraging habitat for all but one special-status bird species known from the vicinity: Cooper's hawk. Cooper's hawks will nest in urban areas in tall, exotic trees similar to those present on the project site. In these areas, rock pigeons are typically the staple source of food. The closest known CNDDDB occurrence of Cooper's hawk is a record from 2003 that is located approximately 4 miles away near the intersection of Bascom and Hamilton Avenues. The habitat there consists of ornamental trees such as coast redwood, pine, and birch trees in a commercial parking lot surrounded by a mix of residential and commercial properties. Most of the trees on the project site are not large, but some of them could provide nesting habitat for Cooper's hawks. In addition, barn owls, which do not have special legal status, have been known to nest in large palm trees and abandoned buildings. No nest structures were seen in any of the trees, although the trees onsite do provide suitable nest sites for Cooper's hawk and other bird species, which are known to nest in urban landscapes throughout California. The only bird nests observed were non-native house sparrow nests that were present along the eaves of the buildings. Although burrowing owls have been recorded at San Jose International Airport and at other locations in the City, they are not expected to occur on the site due to its location within a heavily urbanized area and complete absence of suitable burrows or open foraging habitat.

⁹ California Department of Fish and Game (CDFG), 2007. Natural Diversity Data Base (CNDDDB): Special-status Species Occurrences Within 5 miles of the Project Site. Natural Resources Division, Sacramento, California.

Table V.J-3: Special-Status Plant Species in the Project Vicinity

Species	Status ^a	Habitat/Blooming Period	Potential For Occurrence On Project Site
Big scale balsamroot <i>Balsamorhiza macrolepis</i>	-/-/1B	Valley and foothill grassland and cismontane woodland. Sometimes on serpentine. 35-1000 meters. March-June	<u>None</u> . Suitable habitat not present.
Congdon's tarplant <i>Centromadia parryi</i> ssp. <i>congdonii</i> [<i>Hemizonia parryi</i> ssp. <i>congdonii</i>]	-/-/1B	In valley and foothill grassland on alkaline soils, sometimes described as heavy white clay. 1-230 meters. June-(November)	<u>None</u> . Suitable habitat not present.
Robust spineflower <i>Chorizanthe robusta</i> var. <i>robusta</i>	FE/-/1B	Sandy terraces and bluffs or in loose sand in cismontane woodland, coastal dunes, and coastal scrub. 3-120 meters. April-September	<u>None</u> . Suitable habitat not present.
Mt. Hamilton thistle <i>Cirsium fontinale</i> var. <i>campylon</i>	-/-/1B	Cismontane woodland, chaparral, and valley and foothill grassland. In seasonal and perennial drainages on serpentine. 95-890 meters. (February)-October	<u>None</u> . Suitable habitat not present.
San Francisco collinsia <i>Collinsia multicolor</i>	-/-/1B	Closed-cone coniferous forest, coastal scrub. On decomposed shale (mudstone) mixed with humus. 30-250 meters. March-May	<u>None</u> . Suitable habitat not present.
Santa Clara Valley dudleya <i>Dudleya setchellii</i>	FE/-/1B	Valley and foothill grassland and cismontane woodland. Endemic to serpentine of Santa Clara County. On rocky serpentine outcrops and on rocks within grassland or woodland. 80-335 meters. April-June	<u>None</u> . Suitable habitat not present.
Fragrant fritillary <i>Fritillaria liliacea</i>	-/-/1B	Coastal scrub, valley and foothill grassland, and coastal prairie. Often on serpentine. Various soils reported though usually clay. 3-410 meters. February-April.	<u>None</u> . Suitable habitat not present.
Loma Prieta hoita <i>Hoita strobilinia</i>	-/-/1B	On mesic, serpentine sites within chaparral, cismontane woodland, and riparian woodland habitats. 30-600 meters. May-October	<u>None</u> . Suitable habitat not present.
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE/-/1B	In vernal pools, swales, and low depressions, in open grassy areas within valley and foothill grassland and cismontane woodland. Extirpated from most of its range. 1-445 meters. March-June	<u>None</u> . Suitable habitat not present.
Arcuate bush mallow <i>Malacothamnus arcuatus</i>	-/-/1B	Chaparral in gravelly alluvium. 80-355 meters. April-September	<u>None</u> . Suitable habitat not present.
Hall's bush mallow <i>Malacothamnus hallii</i>	-/-/1B	Chaparral. Some populations on serpentine. 10-550 meters. May-September	<u>None</u> . Suitable habitat not present.
Hairless popcorn flower <i>Plagiobothrys glaber</i>	-/-/1A	Coastal salt marshes and alkaline meadows. 5-180 meters. March-May	<u>None</u> . Suitable habitat not present.
Rayless ragwort <i>Senecio aphanactis</i>	-/-/2	Drying alkaline flats in cismontane woodland and coastal scrub. 20-575 meters. January-April	<u>None</u> . Suitable habitat not present.
Metcalf canyon jewel-flower <i>Streptanthus albidus</i> ssp. <i>albidus</i>	FE/-/1B	Valley and foothill grassland in relatively open areas in dry grassy meadows on serpentine soils and on serpentine balds. Endemic to Santa Clara County. 45-245 meters. April-July	<u>None</u> . Suitable habitat not present.
Caper-fruited tropidocarpum <i>Tropidocarpum capparideum</i>	-/-/1B	Valley and foothill grassland in alkaline hills. 0-455 meters. March-April	<u>None</u> . Suitable habitat not present.

^a Status Codes (Federal/State/CNPS)

Federal

FE = Federally-listed as endangered

FT = Federally-listed as threatened

State

ST = State-listed as threatened

SR = State-listed as rare

CNPS (California Native Plant Society) List

1A = Presumed extinct in California

1B = Rare, threatened or endangered in California and elsewhere.

2 = Rare, threatened or endangered in California but common elsewhere.

Source: LSA Associates, Inc., 2007.

Table V.J-4: Special-Status Wildlife Species in the Project Vicinity

Species	Status ^a	Habitat	Potential for Occurrence On Project Site
Cooper's hawk (nesting) <i>Accipiter cooperi</i>	-/-/CSC	Woodlands and riparian areas. Usually nests in dense live oak or riparian stands.	Possibly occurs onsite. May forage onsite and could nest in trees onsite.

^a Status Codes (Federal/State/CDFG)

FE = Federally-listed as endangered.

FT = Federally-listed as threatened.

ST = State-listed as threatened.

CSC = California Species of Special Concern.

Source: LSA Associates, Inc., 2007.

c. Regulatory Context. The regulatory context for biological resources on and around the project site is discussed below.

(1) Federal Endangered Species Act. The federal Endangered Species Act (FESA) protects listed species from harm or “take” which is broadly defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Take can also include habitat modification or degradation that results in death or injury to a listed species. An activity can be defined as “take” even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under FESA if they occur on federal lands or if the project requires a federal action, such as a Section 404 fill permit.

The United States Fish and Wildlife Service (USFWS) has jurisdiction over federally-listed threatened and endangered wildlife and plant species under the FESA. The USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under the FESA, but which may become listed in the near future and are often included in their review of a project.

(2) California Endangered Species Act. The California Endangered Species Act (CESA) prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with the CESA, California Department of Fish and Game (CDFG) has jurisdiction over state-listed species. Additionally, the CDFG maintains a list of California Species of Special Concern, defined as species that appear to be vulnerable to extinction because of declining populations, limited ranges, and/or continuing threats.

(3) California Environmental Quality Act (CEQA). Section 15380(b) of the *CEQA Guidelines* provides that a species not listed on the federal or state lists of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in FESA and CESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in the *CEQA Guidelines* primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFG.

(4) City of San Jose 2020 General Plan. The City’s General Plan includes the following policies related to species of concern and urban trees.

Species of Concern Policies

- *Policy 2:* Habitat areas that support Species of Concern should be retained to the greatest extent feasible.

Urban Forest Policies

- *Policy 1:* The City should continue to support volunteer urban forestry programs that encourage the participation of interested citizens in tree planting and maintenance in neighborhoods and parks.
- *Policy 2:* Development projects should include the preservation of ordinance-sized, and other significant trees. Any adverse affect on the health and longevity of native oaks, ordinance sized or other significant trees should be avoided through appropriate design measures and construction practices. When tree preservation is not feasible, the project should include appropriate tree replacement. In support of these policies the City should:

- o Continue to implement the Heritage Tree program and the Tree Removal Ordinance.
- o Consider the adoption of Tree Protection Standards and Tree Removal Mitigation Guidelines.
- *Policy 3:* The City encourages the maintenance of mature trees on public and private property as an integral part of the 6th Street, associated with urban forest. Prior to allowing the removal of any mature tree, all reasonable measures which can effectively preserve the tree should be pursued.
- *Policy 4:* In order to realize the goal of providing street trees along all residential streets, the City should:
 - o Continue to update, as necessary, the master plan for street trees which identifies approved species.
 - o Require the planting and maintenance of street trees as a condition of development.
 - o Continue the program for management and conservation of street trees which catalogs street tree stock replacement and rejuvenation needs.
- *Policy 5:* The City should encourage the selection of trees appropriate for a particular urban site. Tree placement should consider energy saving values, nearby powerlines, and root characteristics.
- *Policy 6:* Trees used for new plantings in urban areas should be selected primarily from species with low water requirements.
- *Policy 7:* Where appropriate, trees that benefit urban wildlife species by providing food or cover should be incorporated in urban plantings.

(5) City of San Jose Tree Removal Controls. The City of San Jose Tree Removal Controls Ordinance¹⁰ is intended to protect all trees having a trunk that measure 56 inches or more in circumference (18 inches in diameter) at the height of 24 inches above natural grade slope. A multiple-trunk tree is considered a single tree and the measurement of the tree is the sum of the circumference of all the trunks at 2 feet above natural grade slope. The ordinance protects both native and non-native tree species.

(6) Other Statutes, Codes, and Policies. The federal Migratory Bird Treaty Act¹¹ prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Most native bird species are covered by this Act.

(7) California Native Plant Society. The California Native Plant Society (CNPS), a non-governmental conservation organization, has developed lists of plant species of concern in California.¹² Vascular plants included on these lists are defined as follows:

- List 1A Plants considered extinct.
- List 1B Plants rare, threatened, or endangered in California and elsewhere.
- List 2 Plants rare, threatened, or endangered in California but more common elsewhere.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing on List 1B or List 2 are, in general, considered to meet CEQA's Section 15380 criteria and adverse effects to these species are considered "significant."

¹⁰ San Jose Municipal Code, Sections 13.32.010 to 13.32.100.

¹¹ 16 U.S.C., Sec. 703, Supp. I, 1989.

¹² California Native Plant Society. (CNPS). 2004. Inventory of Rare and Endangered Plants. On-line version 6.3, January 16, 2004. <http://www.northcoast.com/~cnps/cgi-bin/cnps/sensinv.cgi>.

2. Impacts and Mitigation Measures

This section analyzes impacts to biological resources that may result from implementation of the proposed project, and identifies mitigation measures, as necessary.

a. Criteria of Significance. The proposed project would have a significant impact on biological resources if it would:

- 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, regulations or by the CDFG or USFWS;
- Conflict with the provisions of approved local, regional, or State policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- 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 CDFG or USFWS; or
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

b. Less-than-Significant Biological Resources Impacts. The loss of approximately 128 non-ordinance sized ornamental trees and shrubs is considered less than significant. These trees and shrubs would be replaced at a ratio of approximately 1:1 per the City's typical replacement ratios on the project site and in the project area. The site provides very limited habitat for plants and wildlife, especially special-status species. Common wildlife species that are adapted to urban environments will continue to use the site after construction of the project. Additionally, there is no riparian habitat, other sensitive natural community, established wildlife corridor, or native wildlife nursery on the project site.

c. Significant Biological Resources Impacts. This section describes potential impacts to biological resources that are likely to occur within the project site. Two such impacts are set forth below.

Impact BIO-1: Construction of the proposed project could result in the removal of ordinance-size trees. (S)

A total of eight ordinance-sized trees occur on the Corporation Yard site and could be removed or damaged during construction.

Mitigation Measure BIO-1: Loss of ordinance size trees will be mitigated by implementation of landscaping plans approved by the City of San Jose, in conformance with the City of San Jose Landscape and Irrigation Guidelines and City of San Jose Planning Department specifications. For private projects, the City of San Jose requires tree replacement for those trees greater than 18 inches in diameter with 24-inch box trees at a ratio of 4:1 (trees planted to trees removed). The project applicant shall submit a landscape plan at the development permit stage illustrating the details by which these trees will be replaced and maintained. (LTS)

This mitigation measure does not apply to the City parking lot site as redevelopment of this site would not require the removal of ordinance sized trees.

Impact BIO-2: Construction activities may disturb nesting Cooper's hawks and other native birds. (S)

The trees on or immediately adjacent to both the Corporation Yard site and the City parking lot site provide potential nesting habitat for Cooper's hawk as well as other native birds whose nests are protected under the California Fish and Game Code. The proposed project could disturb nesting birds on the site if they are present. Removal of trees and construction activities adjacent to preserved trees could disturb nesting pairs causing nest abandonment, loss of young, or reduced nesting success.

Mitigation Measure BIO-2: All work on trees proposed for removal or pruning as part of redevelopment of the Corporation Yard site and the City parking lot site should occur during the non-breeding season (August 1 to February 28) in the year prior to the start of grading if feasible. If tree pruning or removal cannot occur in the non-breeding season, then a preconstruction survey for active bird nests shall be conducted.

Surveys to determine the presence of active raptor and bird nests on or adjacent to the construction area shall be conducted by a qualified biologist no more than 30 days prior to the initiation of construction-related activities, including removal of existing vegetation or facilities. Results from the survey shall be submitted to the Environmental Principal Planner in the Department of Planning, Building and Code Enforcement. If native birds are observed nesting on or within 100 feet from the site, exclusion zones shall be established around all active nests. The size of the exclusion zone shall be determined based on consultation with the CDFG, which typically requires a zone of 50 to 300 feet around the nest, depending on the bird species. Active Cooper's hawk nests within urban areas would likely require a 100-foot exclusion zone. No activity shall be allowed inside the exclusion zone until a qualified biologist has determined that the young have successfully fledged from the nest or that the nest is no longer active. (LTS)

K. VISUAL RESOURCES

This section addresses the subject of aesthetics and visual quality. It includes a description of existing visual conditions and an evaluation of the potential aesthetic effects of the proposed project. The visual analysis is based on field observations of the project site and surroundings in addition to review of the following materials: conceptual project site plan; aerial and ground-level photographs of the project area; topographic data, and public planning documents.

1. Setting

This setting section for visual resources addresses regional and local context, views of the project site and its vicinity, as well as view corridors in the vicinity, and relevant policies.

a. Regional and Local Landscape Context. The proposed project site is situated approximately 20 miles southeast of the San Francisco Bay in the City of San Jose, which is characterized by large-scale urban development. The surrounding Santa Clara Valley is surrounded by grassy hills interspersed with trees; the hillsides gradually become steeper and densely wooded. The northern extension of the Santa Cruz Mountains encloses the Valley to the southwest and contains peaks up to 3,000 feet in elevation. The Diablo Mountain Range forms the eastern Valley boundary and reaches a summit elevation of almost 4,000 feet. The natural landscape of the surrounding mountains forms a distant scenic backdrop for the City's urban development. However, the majority of the area surrounding the project site contains multiple-story urban development that forms a visual boundary between the neighboring cities and distant mountains.

b. Existing Project Site Visual Context. The project site is located in an urbanized area of San Jose, immediately north of the Downtown. The project vicinity is visually characterized by the City's former Corporation Yard and adjacent surface parking lot. As of September 2007, the Corporation Yard site includes seven single-story buildings, consisting of one administration office and six shop/warehouse/storage structures. A fueling station is located at the approximate center of the site. The remainder of the site is paved and street trees are located along its perimeter. Current access to the site is provided by a driveway on North 6th Street and North 7th Street. The smaller of the two sites is currently developed as a surface parking lot and was previously used as a parking area for City employees working at the Corporation Yard. Both sites are currently vacant.

Figure V.K-1 illustrates the locations from which photos of the site were taken. Figures V.K-2a through V.K-2d present photographs of views from, within, and of the project site. Photos 1, 2, 3, and 4 show the existing visual context of the Corporation Yard site, as seen from surrounding viewpoints. Section V.A, Land Use provides additional photos of the project site.

c. Baseline Project Site Visual Context. As discussed in Section V.A, Land Use, prior to development of the proposed project, in furtherance of the Japantown Redevelopment Plan, the project site will undergo surface demolition including removal of site structures. Thus, for the purposes of this EIR, baseline conditions are considered to be the conditions on the site *after* surface demolition occurs. However, this section includes photographs depicting the existing site conditions as of September 2007, which includes the site improvements noted above. Surface demolition and remediation of the site will change the visual quality of the site concurrent with the change in land use from industrial to cleared, vacant land.

d. Project Site Visibility. The project site is generally flat and is visible from public areas directly surrounding the site, such as the sidewalks and roadways along Taylor Street, North 7th Street, Jackson Street, and North 6th Street. However, the built up urban setting surrounding the project site limits off-site views of the site. Unobstructed views of the project site are generally only possible from elevated view points.

e. Public View Corridors and Viewpoints. The project site is bordered by four public view corridors: Taylor Street, North 7th Street, Jackson Street, and North 6th Street. Each of the four public view corridors is described below.

(1) Taylor Street. Taylor Street generally extends from US 101 southwest under State Route 87 (SR 87), and through Downtown San Jose where it terminates at The Alameda (SR 82). Taylor Street forms the northern boundary of the project site. North of the project site, Taylor Street is visually characterized by a variety of uses including: two- to three-story condominium/townhome complexes, an automotive repair shop, two-story apartment complexes, a single-family residence, and a vacant lot. Street trees are intermittently planted along the sidewalk areas. As motorists and pedestrians travel east on Taylor Street, the Diablo Mountain Range is visible in the distance. Photo 5 depicts the existing view north towards Taylor Street, from within the project site.

(2) North 7th Street. North 7th Street generally extends from I-880 southeast to S. San Fernando Street where it terminates at San Jose State University. North 7th Street forms the eastern boundary of the project site. East of the project site, North 7th Street is a generally flat, vacant lot recently cleared for a future development of approximately 145 residential units and 12,000 square feet of office or retail space. This building will be approximately 5 stories in height, or 65 feet from the finished grade. North and south of the vacant lot North 7th Street is visually characterized by new two- and three-story townhome and condominium complexes. The pedestrian environment is characterized by wide, landscaped sidewalks. Photo 4 is a view of the project site as seen from North 7th Street. Photo 6 depicts the existing view east across North 7th Street, from within the project site.

(3) Jackson Street. Jackson Street generally extends from Watson Park (immediately west of and adjacent to US 101) west to North 1st Street. Jackson Street forms the southern boundary of the project site. South of and directly across from the project site is a four-story retail/condominium complex. East of this complex is a two-to three-story condominium complex. To the west, Jackson Street is characterized by one- and two-story retail, restaurant, and commercial establishments which reflect the architecture and visual character associated with the Japantown neighborhood. As motorists and pedestrians travel east on Jackson Street, the Diablo Mountain Range is visible in the distance. Photo 7 depicts the existing view south across Jackson Street, from within the project site.

(4) North 6th Street. North 6th Street generally extends from just north of E. Hedding Street southeast to E. San Fernando Street where it terminates at San Jose State University. North 6th Street forms the western boundary of the project site. West of the project site, North 6th Street is visually characterized by a variety of uses which primarily exhibit the architecture and visual character reflective of the Japantown neighborhood. These uses include the six-story Fuji Towers senior-assisted living complex, the City's surface parking lot (part of the project site), a church, and various commercial and restaurant establishments (including some that are currently vacant). Photo 8 depicts the existing view of the apartment complex looking northwest of the site, across North 6th Street.



Photo 1: View of Corporation Yard site, looking northeast from the intersection of Jackson Street and North 6th Street



Photo 2: View of Corporation Yard site, looking east from the intersection of Jackson Street and North 6th Street

LSA

FIGURES V.K-2a

*Japantown Corporation Yard
Redevelopment Project EIR
Views of and from the Project Site*



Photo 3: View of Corporation Yard site, looking southwest from North 7th Street



Photo 4: View of Corporation Yard site, looking west from the intersection of North 7th Street and Taylor Street

LSA

FIGURES V.K-2b

*Japantown Corporation Yard
Redevelopment Project EIR
Views of and from the Project Site*



Photo 5: View north from within the Corporation Yard site



Photo 6: View east from within the Corporation Yard site

LSA

FIGURES V.K-2c

*Japantown Corporation Yard
Redevelopment Project EIR
Views of and from the Project Site*



Photo 7: View south from within the Corporation Yard site



Photo 8: View west from within the Corporation Yard site

LSA

FIGURES V.K-2d

*Japantown Corporation Yard
Redevelopment Project EIR
Views of and from the Project Site*

f. Urban Throughways. All State and Interstate Highways within the City are designated as Urban Throughways (which are considered scenic routes) in the San Jose General Plan Scenic Routes and Trails Diagram. An Urban Throughway is defined as the actual right-of-way of the scenic route, the shoulders, and any adjacent public improvements which accompany such a route.

SR 87 is the only Scenic Urban Throughway within 1 mile of the project site. SR 87 runs in a north-south direction, approximately 0.8 miles west of the project site. The project site generally blends with surrounding development, and it is not directly visible from SR 87.

g. San Jose 2020 General Plan. The City of San Jose 2020 General Plan provides policies which address aesthetic quality related to both the natural and the built environment. The General Plan aims to retain and encourage diversity and individual expression in the built environment, while encouraging quality new construction. Policies relevant to the proposed project include:

- *Urban Design Policy 2:* Private development should include adequate landscaped areas.
- *Urban Design Policy 6:* Proposed structures adjacent to existing residential areas should be architecturally designed and sited to protect the privacy of the existing residences.
- *Urban Design Policy 8:* Design solutions should be considered in the development review process which addresses security, aesthetics, and public safety.
- *Urban Design Policy 22:* Design guidelines adopted by the City Council should be followed in the design of development projects.

h. Design Guidelines. Applicable City of San Jose design guidelines which govern siting and design elements on the project site are discussed below.

(1) Residential Design Guidelines. The City's Residential Design Guidelines are intended to shape the future of housing in San Jose, and are based upon a classification system including design elements, context, and building type. The Guidelines address how new residential development must relate to its surrounding and internal organization of new developments. The Guidelines also provide guidance for specific housing types, including mixed use development, which is applicable to the proposed project. The Mixed Use Guidelines provide direction for pedestrian orientation; mix of uses; building setbacks, orientation, relationship to the street, vertical and horizontal design; parking configuration, and the location of residential open space.

Recent additions to the Residential Design Guidelines include guidelines for Transit Oriented Development (Chapter 25a) and Mid- and High-Rise Residential Development (Chapter 26). These new guidelines are applicable to the proposed project and address unique design conditions created by such developments.

Transit-oriented development (TOD) consists of high-density, multi-family housing and mixed-use development designed to encourage accessible, active, pedestrian-oriented areas within walking distance of transit. The Transit Oriented Development Guidelines provide guidance on: development of primary TOD design analysis; contribution to TOD design principles; neighborhood compatibility; mixed-use high density developments; location of ground-floor retail; private, common, and open space areas; pedestrian and bicycle access and streetscapes; and vehicular and bicycle parking.

The Mid- and High-Rise Residential Development Guidelines provide guidance on: the design of existing, infill, green, and historic buildings; preservation of view corridors; ground-floor building uses; setbacks; building orientation, height, massing, scale, materials, facades and entries; location of service areas, sustainable design; and the provision of private and common open space areas.

(2) Jackson-Taylor Residential Strategy Design Guidelines. The Jackson-Taylor Residential Strategy sets forth supplemental design guidelines tailored to the conditions of the Jackson-Taylor area. The guidelines aim to implement the most important urban design principles of the land use shown on the Jackson-Taylor Residential Strategy Land Use Plan, while remaining flexible enough to provide opportunities for new, innovative site plans and building designs. Within the Mixed Use designation, which is applicable to development on the Corporation Yard site, the design guidelines provide design direction for building density/intensity and types of use; architectural design criteria; specific residential, retail, office, and industrial design criteria; parking location; as well as specific design criteria applicable to development of the Corporation Yard site, referred to as the “Japantown Complex.” The guidelines also provide direction on the location and siting of parks, open space and public facilities; community center uses; and streets and parking.

2. Impacts and Mitigation Measures

The following section discusses potential impacts related to the visual and aesthetic qualities that could result from the implementation of the proposed project. The section begins with the criteria of significance, establishing the thresholds to determine whether an impact is significant. The latter part of this section evaluates impacts and recommends mitigation measures, if required.

a. Significance Criteria. Implementation of the proposed project would have significant impacts on visual and aesthetic quality if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially degrade the existing visual character or quality of the site and its surroundings;
- Substantially damage a scenic resource, including but not limited to, trees and historic buildings;
- Result in the substantial disruption or blocking of existing views or public opportunities to view scenic resources; or
- Introduce new development which would substantially detract from the integrity, character, and/or aesthetic environment of a neighborhood.

b. Less-than-Significant Visual Resources Impacts. Less than significant impacts of the proposed project are discussed below.

(1) Effect on Scenic Vistas or Disruption of Existing Views. As described above, the site and its vicinity offer predominantly urban views of other urban scenes (i.e., buildings, landscaping, roadways), although scenic vistas from surrounding roadways may include views of the distant mountains to the east. The project site and its vicinity are generally flat and, given the urban nature of the site, including the buildings and street trees, views across the project site to the distant mountains generally do not exist. In addition, the absence of short, medium or long-range landmarks or points of visual interest and presence of nearby development all ensure that the proposed project’s effects on

views would be minimized. Impacts to scenic vistas within the project site as a result of the proposed project would be less-than-significant.

Although the project site is located immediately north of the Downtown, where buildings reach approximately 285 feet in height, the proposed 6- to 14-story buildings (with a maximum height of 175 feet) on the project site would be the tallest buildings within a radius of several blocks. The proposed project may be visible from higher elevations several miles away, including the I-280, I-880, U.S. 101, and SR 87 Urban Throughways and, to a lesser extent, the surrounding mountain ranges. However, at these distances, the proposed project would blend within the City skyline and represents a small fraction of the greater view. No scenic vistas that include the project site would be affected by the proposed project.

(2) Degrade Existing Visual Character. Both the existing and baseline conditions create blight in the project area. The baseline condition evaluated in this EIR considers the project site to be cleared and vacant. Because the site itself suffers from blight, which in turn degrades the visual character of the project vicinity, new development on the site would likely improve the visual character of the site. The proposed project would change the use and intensity of development on the site and provide a more vibrant mix of uses, creating a more dynamic urban environment. This type of development is compatible with the type and intensity of uses located south of the site, within the Downtown. For all of these reasons, the proposed project would not adversely affect the visual character of the site, and may provide a more desirable setting for new businesses and residents.

The proposed development on the Corporation Yard site and the City parking lot site has been designed at a conceptual site plan level; detailed design plans have not yet been developed. However, it is anticipated that project design would incorporate design themes appropriate to and/or compatible with the Japantown neighborhood. The project applicants intend to design the development on the Corporation Yard site and the City parking lot site for contextual sensitivity to the existing development character of Japantown and to enhance the future vision for Japantown. The overarching design intent would be to minimize building mass of the taller buildings through a shift in massing, materials, color and fenestration (building openings). The vertical tower elements would be set back from the street edge, stepping down to open sidewalks and plazas within the development. Thematically, architectural details and elements would be designed in a way that reflects the unique context of the neighborhood as one of three remaining Japantowns in the country. The first thirty feet of each building would reinforce an interactive and dynamic street edge consistent with a lively three to four story "main street" feel. Implementation of Mitigation Measure CULT-3a and 3b would further ensure the proposed project redevelopment would not degrade the existing visual character of the site.

Guidelines ensuring contextual sensitivity at the street level are included in the Jackson-Taylor Residential Strategy, and proposed guidelines relating to mid- and high-rise residential development are contained in Chapter 26 of the City of San Jose's Residential Design Guidelines. The project would be consistent with key design elements included in those guidelines. Key design elements of the proposed project are described below:

- *Height.* The buildings on the Corporation Yard site would be stepped down from tower heights (6 to 14 stories) to 3 to 4 stories at the Taylor and Jackson Street edges. Uses within these "podium" areas will include retail, townhomes, and live-work units.

- *Mass.* Primary building elements (living areas, retail bays, entrances, etc.) on the Corporation Yard site would be designed to reflect those in the vicinity creating a streetscape consistent with the existing 3 to 6 story experience. Building massing would be articulated with porches, bays and balconies. Variations in floor level, facades, roof styles, architectural details, materials and colors would be employed to create architectural diversity. The parking lot site will have its massing along 6th Street and near the adjoining Fuji Towers.
- *Scale.* Building facades on the Corporation Yard site would be varied and articulated to provide visual interest to pedestrians. Facade elements (windows, balconies, porches, parapets, pilasters, etc.) would contain horizontal and vertical relief, variety and texture to reinforce a vital inside/outside connection necessary for a thriving mixed use street. Ground level parking on the parking lot site will be screened from 6th Street by a lobby and community rooms, which will provide a sense of pedestrian scale and interest on 6th Street.
- *Access.* Building openings would face the street and sidewalk to enliven the pedestrian environment. Building entrances would orient to the sidewalk and public plaza. First floor residential units would be accessed directly from the street whenever possible. Street-facing garage entrances would be as narrow as is consistent with safety and would be spaced no less than 200 feet apart.
- *Materials.* Wood, stone, brick, metal, stucco and glass would likely be among the primary exterior materials. Their composition and arrangement would be designed to convey interior function, purpose and activity. The overarching design intent would be to reinforce a sense of permanence and connection with the building's basic functions at different levels.
- *Colors.* The chosen color palate would likely be a combined respond to historical precedents (both historically accurate and domestically interpreted.)
- *Mechanical and lighting.* All mechanical ventilation systems would be screened with louvers, screen walls, or porches and vent away from pedestrian areas. All parking garage lighting would be shielded to minimize light penetration to exterior spaces at night.
- *Public Space.* Outdoor plazas would be located over the parking podium with both common and private access. Ground level open space would be provided as an outdoor public amenity. Residential balconies on the parking lot site will face 6th Street.

In addition, the proposed project would be subject to design review to ensure that the visual character of the site and surrounding area is not degraded and that the proposed project complies with applicable design guidelines.

(3) Damage a Scenic Resource. Scenic resources may include trees, rock outcroppings, or historic buildings. All existing structures (none of which are historic) would be removed from the project site prior to construction of the proposed project. The baseline condition evaluated in this EIR considers the impacts associated with development of the cleared and vacant site. The proposed project would not alter or remove any rock outcroppings or historic buildings from the project site. However, the proposed project would alter the visual character and context of historic structures located adjacent to the project site. Potential impacts to surrounding cultural resources are discussed below.

(4) Detract from the Integrity of a Neighborhood. The project site is within the Japantown neighborhood and Jackson-Taylor Planned Residential Community (Jackson-Taylor PRC). As described above, the site itself suffers from blight. The Redevelopment Plan for the Japantown neighborhood envisions a mixed-use project that retains the cultural heritage of Japantown for the project site. As previously discussed, it is anticipated that project design would incorporate design themes appropriate to and/or compatible with the Japantown neighborhood. The project applicants intend to design the proposed project for contextual sensitivity to the existing development character of and to enhance the future vision for the Japantown neighborhood. The overarching design intent would be to minimize building mass of the taller buildings through a shift in massing, materials, color and fenestration (building openings). Architectural and site design would be compatible with surrounding development which represents the character and history of the Japantown community. Consistency with the plans for the Japantown neighborhood and Jackson-Taylor PRC is discussed in Chapter IV, Planning Policy. The proposed project would not visually detract from the integrity of the Japantown neighborhood.

c. Significant Visual Resources Impacts. The following pair of significant adverse impacts related to visual resources would result from the proposed project.

Impact VIS-1: The proposed project could detract from the existing visual character of historic resources located adjacent to the project site. (S)

Cultural resources are considered scenic resources as they often provide visual interest and character. As discussed in Section V.I, Cultural and Paleontological Resources, several City Landmarks and Structures of Merit are located across North 6th Street, directly across from the project site. Each of these structures contributes to the integrity of the historic Japantown community, which has been deemed eligible for listing on the National Register. Development of the proposed project would substantially alter the existing visual character and context of the adjacent structures. These and other historic structures located in the Japantown neighborhood are generally no more than one- to two-stories in height, although newer developments in the area range from three- to six stories in height.

The proposed project would range from 6 to 14 stories in height, well above existing building heights in the surrounding area. Building height, design, and scale may not be visually compatible with the existing character and context of the Japantown neighborhood, which may detract from the integrity of adjacent historic structures. Implementation of the following mitigation measures (see Section V.I, Cultural and Paleontological Resources) would ensure that significant visual impacts to surrounding historic structures are reduced to a less-than-significant level.

Mitigation Measure VIS-1: Implement Mitigation Measures CULT-3a and 3b, which require project design modifications to reduce the project's impacts to the San Jose Japantown Historic District's integrity of setting and feeling. This would be achieved by designing new construction that is sympathetic to the district's existing architectural context and historical qualities. (LTS)

Impact VIS-2: The removal of all ordinance sized trees from the project site would substantially damage scenic resources. (S)

Mature trees are considered scenic resources as they often provide visual interest and character. As discussed in Section V.J, Biological Resources, construction of the proposed project could result in the removal of the existing 128 trees and shrubs on the Corporation Yard and City parking lots sites. A total of eight ordinance-sized trees occur on the Corporation Yard site.

Mitigation Measure VIS-2: Implement Mitigation Measure BIO-1, which requires mitigation for the loss of ordinance sized trees by implementation of landscaping plans approved by the City of San Jose. Tree replacement for those trees greater than 18 inches in diameter shall occur at a ratio of 4:1 (trees planted to trees removed) with 24-inch box trees. (LTS)

L. SHADE/SHADOW AND LIGHT/GLARE

This section evaluates the effects of the proposed project on shade and shadow and light and glare in the project area.

1. Setting

The baseline condition assumes that all of the existing one-story structures have been removed from the project site, resulting in a project site that is vacant and cleared for development. See Chapter V.A, Land Use, for a detailed description of existing conditions at the project site (also see Figures V.A-1) as well as Chapter V.K, Visual Resources. There are a number of trees located along the perimeter of the Corporation Yard site; however, none of these are wide or tall enough to cast significant adverse shade or shadows. No significant shade or shadows are currently cast from the project site onto adjacent or nearby properties.

The City of San Jose identifies significant shade and shadow impacts as occurring when a building or other structure substantially reduces natural sunlight on public open spaces, measured on the first day of winter and on the days of the two equinoxes (June 21st and March 21st). The City has identified six major open space areas within the Downtown where future development could result in shade and shadow impacts. These six areas are the following: St. James Park, Guadalupe River Park, Plaza of Palms, Plaza de Cesar Chavez, San Antonio Plaza and Confluence Point at Guadalupe River Park. The project site is located immediately north of the Downtown. St. James Square is the nearest major open space and it is located over 1 mile to the south.

The closest public parks to the project site are Bernal Park and Backesto Park, approximately 0.25 miles to the north and 0.5 miles to the east, respectively. Neither of these open space areas are near enough to the project site that shade and shadow cast by the proposed project could reach them.

Lighting in the project area typically comes from street lights and building security lights. No major sources of light or glare exist within the project vicinity.

2. Impacts and Mitigation Measures

The following section identifies the criteria of significance for shade/shadow and light/glare impacts, discusses significant impacts and identifies mitigation measures, as necessary.

a. Criteria of Significance. The proposed project would have a significant shade and shadow impact if it would:

- Result in a 10 percent or greater increase in the shadow cast onto a major open space area in the Downtown San Jose area (St. James Park, Guadalupe River Park, Plaza of Palms, Plaza de Cesar Chavez, Paseo de Antonio, McEnery Park, and Confluence Point at the Arena Green); or
- Substantially shadow other public open space (beyond the major open space areas), but excluding streets and sidewalks or private open space, between September and March.

The proposed project would have a significant light and glare impact if it would:

- Produce substantial light or glare such that it poses a hazard or nuisance; or
- Create a new source of substantial light or glare which would adversely affect day or night time views in the area.

b. Less-than-Significant Shade and Shadow Impacts. Shade and shadow impacts occur when a structure's height or its width (or a combination of these two characteristics) reduces the access to sunlight enjoyed by another public open space area. It should be remembered that in a built urban environment like the project area, nearly all land uses create for others and, in turn, are subject to shade and shadows from neighboring structures. During the summer months in San Jose, shading may even be desirable.

Potential shade and shadow impacts resulting from the proposed project were analyzed based on a building envelope on the entire Corporation Yard and City parking lot sites. For purposes of this analysis, the building envelopes assumed a single structure covering the entire Corporation Yard site with zero setbacks and a maximum height of 175 feet, and a single structure covering the entire City parking lot site with zero setbacks and a maximum height of 85 feet.

Analysis of this envelope provides information on the maximum shadow impacts that could occur regardless of where the 14-story building is located on the Corporation Yard site or where the 6-story building is located on the City parking lot site. This analysis assumes a worst-case scenario; the PD Zoning for the project would limit the amount of development and establish development standards within the envelope. This worst-case scenario is described only to retain any configuration in building siting and massing that could result from approval of the Planned Development Rezoning.

In the summer, as the sun rises in the east, morning shadows are cast to the west. As the sun moves higher across the sky, shadows decrease until noon, and then extend generally to the east as the sun sets in the west. In the winter, the sun is lower in the sky and the shadows cast are greater. As the sun rises in the east, shadows are cast to the west-northwest. As the sun moves across the sky, shadows move from the west-northwest in the morning, to the north at noon, and to the east-northeast as the sun sets. The proposed project would likely cast shadows on the adjacent roadways and developments at different times of day and at different times of the year. However, based on the above assumptions, shadow simulations were prepared for December 21, the day on which shadow casts are at their longest, at 9:00 a.m., 12:00 noon, and 3:00 p.m.¹ Two types of shadow simulations were prepared and are shown in Figure V.L-1. Shadow simulations were prepared for the maximum development envelope considered in this EIR, which includes full coverage of the site and a maximum height of 14 stories for the Corporation Yard site and 6 stories for the City parking lot site. These represent the worst-case scenario. Simulations were also prepared for the conceptual site plans shown in this EIR (Figures III-3 and III-7), which show a smaller development envelope and are more representative of the shadows that will actually be cast by the project, once it is developed. The results of this analysis are described below.

- At 9:00 a.m., the maximum building envelope on the Corporation Yard site would cast a shadow covering approximately half of the block to the north of the site. Properties impacted by shadow at 9:00 a.m. on that portion of the block to the north of the Corporation Yard site include auto-serving commercial and multi-family residential. Also at this time, the maximum building envelope on the City parking lot site would cast a shadow onto approximately half of the facade of the 6-story residential building directly across from the City parking lot site and to the north. A courtyard and a portion of the surface parking lot associated with this 6-story residential building would also be shaded at this time.

¹ Ankrom Moison, 2008. *Shadow Study*. January.



Maximum Building Envelope

9:00 a.m.



Conceptual Site Plan

9:00 a.m.



Maximum Building Envelope

12:00 p.m.



Conceptual Site Plan

12:00 p.m.



Maximum Building Envelope

3:00 p.m.



Conceptual Site Plan

3:00 p.m.

LSA

FIGURE V.L-1



*Japantown Corporation Yard
Redevelopment Project EIR
Shadow Simulations, December 21st*

- At 12:00 noon, the maximum building envelope on the Corporation Yard site would cast a shadow over a portion of the partially vacant block to the east, and portions of the southeast and southwest corners of the blocks to the north and northeast of the Corporation Yard site. Properties impacted by shadow at noon on those portions of those blocks include office and multi-family residential. Also at this time, the maximum building envelope on the City parking lot site would cast a shadow across North 6th Street and onto a portion of the courtyard and surface parking lot associated with the 6-story residential building to the north.
- At 3:00 p.m., the maximum building envelope on the Corporation Yard site would cast a shadow covering the partially vacant block bisected by the railroad to the east of the site. Properties impacted by shadow at 3:00 p.m. on that block to the east include vacant space and mixed-use retail/housing. Also at this time, the maximum building envelope on the City parking lot site would cast a shadow across North 6th Street.

As described above, in a built urban environment such as this, nearly all structures create for others and, in turn, are subject to shade and shadows from neighboring structures. Temporary increases in shade and shadow cast on existing development by the proposed project would not significantly alter the character or setting of surrounding residential and commercial uses. In addition, shade and shadows cast upon private property are not considered a significant CEQA impact by the City.

Although the placement of project structures is not known at this time, due to the distance of the major open space areas and other public parks from the project site, shade and shadow cast by the proposed development would not reach these areas. In addition, the proposed park/plaza area on the project site extends east to west between North 6th and North 7th Streets and would be designed to allow as much sunlight as possible to reach the area throughout the year. As such, there would be no significant impacts on any open space areas resulting from shade and shadow cast by the proposed project.

c. Significant Shade and Shadow Impacts. No significant shade or shadow impacts would result from development of the proposed project.

d. Less-than-Significant Light and Glare Impacts. The proposed project would involve the introduction of lighting and structures to a vacant site that was once utilized as a City corporation yard and associated parking lot. The proposed project would include outdoor safety lighting which would be visible from surrounding view corridors and at a distance. Outdoor lighting would be designed to minimize glare and spillover to surrounding properties, and is not anticipated to be of a type or level that is more intrusive than that which exists in the immediate area. The project would use non-mirrored glass to minimize daytime glare. Lighting and building materials would be subject to design review to further ensure that light or glare does not adversely affect day or night time views or create a hazard or nuisance in the area.

e. Less-than-Significant Light and Glare Impacts. No significant light and glare impacts would result from development of the proposed project.

M. UTILITIES

This section analyzes the proposed project's potential impacts to utilities including: water, wastewater, solid waste, telecommunications, and electricity and natural gas. Potential impacts to utilities that could result from the proposed project are identified, and mitigation measures are recommended, as appropriate. The related topic of storm drainage is evaluated in Section V.G, Hydrology and Water Quality.

1. Setting

Existing conditions for the following utilities and infrastructure service systems are described below. The information presented was gathered from a variety of sources, including utility operators and service providers, and their planning and policy documents.

a. Water Supply. A description of existing conditions related to water sources, storage, and retail providers; conservation; and recycling is presented below.

(1) Water Sources, Storage, and Retail Providers. Wholesale water is provided to local water retailers by the Santa Clara Valley Water District (SCVWD). The local water retail agencies in turn supply water to their customers in the City of San Jose. The SCVWD obtains approximately one half of its water from the Santa Clara Valley groundwater basin. The remaining potable water supplies are provided through a combination of local surface water and imported water supplies from the State Water Project, the Central Valley Project and San Francisco Public Utilities Commission Hetch Hetchy water from the Sierra Nevada Mountains.

The groundwater basin is divided into three interconnected subbasins: the Santa Clara Valley Subbasin in the northern portion of the County and the Coyote and Llagas Subbasins in the southern portions of the County. The City of San Jose is located in the northern portion of the Santa Clara Valley subbasin. A confined zone of underground water within the northern areas of the Santa Clara Valley subbasin is overlaid with a thick clay layer. The SCVWD manages groundwater supplies through a conjunctive use program, pumping more groundwater in drier years and then replenishing and recharging the groundwater basin during wet and average years. The SCVWD augments natural recharge with a managed recharge program to offset groundwater pumping in order to sustain groundwater storage reserves and minimize the risk of land subsidence and saltwater intrusion. To ensure groundwater levels are sustained, imported surface water from the State Water Project and San Felipe Division of the Central Valley Water Project is stored and recharged via 18 reservoirs, 30 creeks and 71 percolation ponds. Ten reservoirs, with a total storage capacity of approximately 170,000 acre-feet (AF),¹ store runoff from local watersheds.

The SCVWD has a long term agreement with the Semitropic Water Storage District in Kern County and at the San Justo Reservoir in San Benito County, which allows the District to divert some of its surface water allocations for storage for use in future dry years. The Semitropic Water Bank is an "in lieu" storage program, meaning that the District does not retrieve its stored water directly from the groundwater basin at Semitropic. Rather, the District receives its water from Semitropic's State Water Project contract deliveries from the Delta, while Semitropic meets its water needs by increased

¹ Santa Clara Valley Water District, 2005. *Urban Water Management Plan*. December.

ground-water pumping of the excesses water stored by the SCVWD allotment during wet and normal water years.²

The SCVWD owns and operates an extensive distribution system and three water treatment plants: Penitencia (42 mgd capacity), Rinconada (75 mgd capacity), and Santa Teresa (100 mgd capacity).³ Upgrades are currently under way at the Rinconada plant to increase production to 100 mgd.

The San Jose Water Company (SJWC) is the water retail service provider for the project site. The SJWC provides water service for an area encompassing 138 square miles, including portions of San Jose, most of Cupertino, the entire cities of Campbell, Monte Sereno, Saratoga, the Town of Los Gatos and parts of unincorporated Santa Clara County. In 2004, 55 percent of SJWC potable water came from SCVWD treatment plants, 36 percent from SJWC groundwater and 9 percent from SJWC surface water sources.⁴ Ninety-four active and ten stand-by wells pump groundwater from the major water-bearing aquifers of the Santa Clara Valley Subbasin. These aquifers are recharged naturally by rainfall and artificially by a system of local reservoirs, percolations ponds and an injection well operated by the SCVWD. Treated SCVWD water from the Rinconada, Penitencia and Santa Teresa water treatment plants is piped into the SJWC system at various turnouts after treatment. Surface water in the local watersheds of the Santa Cruz Mountains is collected in a series of dams and automated intakes and then sent to the SJWC's Montevina Filter Plant for treatment prior to entering the distribution system. The SJWC's projected water supply for normal water years is listed in Table V.M-1.

Table V.M-1: SJWC Projected Potable Water Supply for Normal Water Years

Potable Water Supply (Acre-Feet)	Year
152,942	2005
163,669	2010
175,377	2015
188,474	2020
199,837	2025
211,464	2030

Source: Water Supply Assessment, SJWC, January 31, 2006

Following the 1987-1991 multi-year drought, the SJWC drafted a Water Shortage Contingency Plan which entails specific actions which prohibit certain uses of water, and provides enforcement mechanisms and possible penalties. Increased water efficiency and conservation measures, water metering programs, increased use of recycled water and other possible supplies such as desalinization are being evaluated to ensure that the SJWC will be able to meet the increasing demand for water within its service area.⁵

SJWC water has extensive water sampling and reporting requirements as required by the California Department of Health Services. The SJWC has a Water Quality Department which includes a large monitoring program and deals with all issues related to water quality.

The existing water supply system to the project area consists of water lines of various sizes within the street rights-of-way, including: a 12-inch cast iron water line below Taylor Street built in 1924; a 6-inch cast iron water line below North 6th Street; a 12-inch ductile iron water line below North 6th Street built in 1998. There are no water lines below the portions of Jackson Street and North 7th Street that border the project site.⁶

² Ibid.

³ Ibid.

⁴ San Jose Water Company, 2005. *Urban Water Management Plan*. October.

⁵ Ibid.

⁶ Larson, Vicki, 2007. Engineering Technician, San Jose Water Company. Personal communication with LSA Associates, Inc. November 20.

(2) Water Conservation. The City's water conservation and water recycling programs are intended to minimize flows to the sanitary sewer and sewage treatment systems, and to meet future water needs. Elements of the City's water conservation program include: limited landscape watering hours, restrictions on the use of potable water for construction purposes, ultra-low flow toilet incentives, a showerhead retrofit program, landscape ordinances for non-residential new construction, commercial/industrial water audits, financial incentives for commercial/industrial conservation, water use prohibitions, and a ban on cleaning vehicles without an automatic shut-off valve.

(3) Recycled Water. The City of San Jose administers the South Bay Water Recycling (SBWR) Program, a long-term program for the Cities of Milpitas, San Jose, and Santa Clara created to bring a reliable, sustainable, and drought-proof supply of non-potable water to the South Bay area. The SBWR was initially created to reduce the environmental impact of wastewater effluent discharge into the salt marshes of the south end of San Francisco Bay, and to help protect endangered species in the Don Edwards San Francisco Bay National Wildlife Refuge.

Wastewater from the sanitary sewer system travels to the San Jose/Santa Clara Water Pollution Control Plant (SJ/SC WPCP), is treated to tertiary levels, and distributed through the SBWR system. The finished product, SBWR water, is certified by the State Department of Health Services as suitable for non-potable water for uses such as irrigation at golf courses, parks, schools, sports complexes, agricultural lands, and for industrial purposes and cooling towers.⁷ All recycled water pipes are color-coded purple, the national standard to identify recycled water, and clearly labeled with the words, "Recycled Water- Do not Drink." This follows standard practice that requires separate pipes for drinking water and recycled water. Recycled water produced by the SBWR Program is intended for non-potable uses such as irrigation and industrial use. The recycled water meets the requirements of "unrestricted use" as defined in the State's Title 22 regulations.⁸ Recycled water is continually regulated, monitored, and tested using standards set by the U.S. Environmental Protection Agency, Regional Water Quality Control Board and the State Department of Health Services to ensure that recycled water quality far exceeds the quality required for its intended use.⁹ In San Jose, recycled water is used primarily for industrial and landscape irrigation purposes.

The recycled water system includes pump stations, reservoirs, and over 105 miles of pipe. Approximately 10,000 acre-feet of recycled water was distributed through the SBWR system in 2006 to 547 different customers.¹⁰ The San Jose Water Company anticipates a 3 percent annual increase in recycled water use within their service area during the next 25 years.¹¹

Existing recycled water lines in the vicinity of the project area are located on East Hedding Street two blocks northwest of the project site, and along North 12th Street four blocks northeast of the project

⁷ City of San Jose, 2005. Environmental Services: South Bay Water Recycling. Website: www.sanjoseca.gov/sbwr/about.htm.

⁸ San Jose Water Company, 2005, op. cit.

⁹ Ibid.

¹⁰ Hanson, Eric, 2007. Program Manager, South Bay Water Recycling. Personal communication with LSA Associates, Inc. November 20.

¹¹ San Jose Water Company, 2005, op. cit.

site.¹² Should the proposed project use recycled water, it would connect to the line in East Hedding Street.¹³

b. Sanitary Sewer Service and Wastewater Treatment. The San Jose/Santa Clara Water Pollution Control Plant (Plant) provides wastewater treatment for the project area. The Plant is a regional facility located in North San Jose, and provides tertiary treatment of wastewater from several surrounding cities and sanitation districts. The cities of San Jose and Santa Clara jointly own the facility, but the City of San Jose operates and maintains the Plant.

The Plant's treatment capacity of 167 mgd is allocated between the several agencies served and two co-owners. The average dry weather capacity as of July, 2007, was approximately 114 mgd.¹⁴

Most of the final treated water from the Plant is discharged through Artesian Slough and into South San Francisco Bay. The area contains the South San Francisco Bay wetlands, along the Alviso shoreline, which are part of the Don Edwards San Francisco Bay National Wildlife Refuge. About 10 percent is recycled through South Bay Water Recycling pipelines for landscaping, agricultural irrigation, and industrial needs around the South Bay.

In 1989, the San Francisco Bay Regional Water Quality Control Board ordered the Plant to reduce its discharge of metals (copper and nickel) by more than 50 percent to protect aquatic organisms and meet the State and Federal water quality objectives of the South San Francisco Bay. In addition, the Regional Board imposed a 120 mgd flow limit and required the Plant to reduce the quantity of effluent discharged to avoid converting the habitat of two endangered species, the salt marsh harvest mouse and the California clapper rail. The Plant has had programs in place since 1991 to reduce and maintain flows below 120 mgd and is currently in compliance with this requirement. Long-term plans to remain in compliance with the 120-mgd requirement include ongoing water conservation and water recycling.

The existing sanitary sewer collection system that serves the project site consists of a system of pipelines, lateral lines and interconnected main lines in the public right-of-way, draining to treatment at the Plant. Wastewater collection is maintained by the City of San Jose Department of Public Works. The treatment of wastewater is under the authority of the Department of Environmental Services. The General Plan provides standards to ensure that sanitary sewer lines maintain a Level of Service (LOS) D, which represents a free flow of wastewater sufficient to prevent "back up" problems.

The sewer system in the vicinity of the project site includes a 66-inch reinforced concrete pipe (RCP) rehabilitated with a Spiral polyvinyl chloride (PVC) liner, which is approximately 58 inches, on the east side of North 7th Street between Jackson Street and Taylor Street. On the West side of 7th between Jackson Street and Taylor Street, there is an 8-inch vitrified clay pipe (VCP). This pipe discharges into the cure-in-place-pipe (CIPP) lined by 28x42-inch brick sewer's invert. Based on flow

¹² San Jose, City of, 2006. City of San Jose Environmental Services Department, South Bay Water Recycling Program, Recycled Water Pipeline Program System (map). Website: www.sanjoseca.gov/sbwr. July 18.

¹³ Hanson, Eric, 2007. op. cit.

¹⁴ Rock, Ken, 2007. General Operations Supervisor, San Jose/Santa Clara Water Pollution Control Plant. Personal correspondence with LSA Associates, Inc. July 20.

monitoring of the 28x42-inch sewer conducted in 2003, the maximum recorded depth of sewage in this pipe is approximately 1.4 feet. There is also an 8-inch VCP running along North 6th Street between Jackson Street and Taylor Street.¹⁵

c. Solid Waste. Commercial solid waste collection in San Jose is provided by private haulers in a competitive, non-exclusive system. Collectors of garbage, rubbish, and mixed recyclables are required to have a franchise issued by the City. As of July 2, 2007, a new team of haulers – Garden City Sanitation, California Waste Solutions, and GreenWaste Recovery will provide garbage, recycling, yard trimmings, and street sweeping services in most San Jose neighborhoods.¹⁶ These haulers currently provide services to the project site.

As shown in Table V.M-2, there are five active landfills in San Jose. Four of these are permitted to accept all non-hazardous commercial wastes—Guadalupe Sanitary Landfill, Kirby Canyon Recycling & Disposal Facility, Newby Island Sanitary Landfill, and Zanker Material Processing Facility. The fifth, Zanker Road Class III Sanitary Landfill, is prohibited from accepting putrescible (rotten) waste. All five landfills have extensive recycling operations, including, at various sites, composting, construction and demolition debris processing, biomass fuel production, salvaging, and recovery of soils and inert materials for daily cover and on-site construction. The five sites are projected to have 17 to 25 years of life remaining (see Table V.M-2)¹⁷

San Jose generated 831,602 tons of waste in 2004 that was reported to the State as landfilled. Of this, 670,979 was disposed and 160,623 was used as Alternate Daily Cover, a method to reduce odor emanating from the landfill.¹⁸ Several hundred thousand additional tons were used by landfills as clean cover material, inert construction material, or for other “beneficial uses” on-site. Of the 832,000 tons generated in San Jose, 161,000 tons (approximately 19 percent) were sent to landfills outside of the City. The main destinations for disposal were Solano, San Joaquin, and Kings Counties. The main

Table V.M-2: San Jose Disposal Quantities (2004) and Projected Landfill Closure Dates

Landfill	Maximum Permitted Daily Throughput (Tons) ^a	Average Amount Of Waste Received Per Day (Tons) ^b	Average Permitted Daily Throughput Available (Tons)	Projected Landfill Closure Date ^c
Guadalupe Sanitary Landfill	3,650	1,494	2,156	2023-2028
Kirby Canyon Recycling & Disposal Facility	2,600	1,220	1,380	2022
Newby Island Sanitary Landfill	4,000	3,108	892	2021
Zanker Road Class III Landfill	1,300	672	628	2020
Zanker Material Processing Facility	350	425	-75	2018
Total Disposed In San Jose	11,900	6,919	4,981	

^a California Integrated Waste Management Board, Solid Waste Information System. Website: <http://www.ciwmb.ca.gov/SWIS/Search.asp>.

^b California Integrated Waste Management Board, Disposal Reporting System. Website: <http://www.ciwmb.ca.gov/LGCentral/DRS/Reports/>.

^c County of Santa Clara. Five-Year Review Report on the Countywide Integrated Waste Management Plan, May 2004. Website: <http://www.ciwmb.ca.gov/agendas/mtgdocs/2004/09/00016898.pdf>.

Source: City of San Jose, 2006.

¹⁵ Kam, Alan. Associate Engineer, Sanitary Sewer Section, San Jose Department of Public Works, 2007. Personal communication with LSA Associates, Inc. July 31.

¹⁶ San Jose, City of, 2007. San Jose Department of Environmental Services. Website: www.sjrecycles.org. July 18.

¹⁷ California Integrated Waste Management Board, 2005. Website: <http://www.ciwmb.ca.gov/agendas/mtgdocs/2004/09/00016898.pdf>.

¹⁸ California Integrated Waste Management Board, 2005. *Disposal Reporting System*. Website: <http://www.ciwmb.ca.gov/LGCentral/DRS/Reports/Origin/WFOrgin.asp?VW=SUBMIT>.

destination for Alternate Daily Cover was Alameda County. The 671,000 tons of San Jose waste landfilled at the five sites inside the City make up 45 percent of the 1,475,000 tons reported by those sites. Almost all of the other 804,000 tons of waste disposed of in San Jose originated in Santa Clara County, with smaller amounts (less than 1 percent) coming from other counties in the San Francisco and Monterey Bay Areas.

The Integrated Waste Management Act of 1989 (AB 939) requires all municipalities to divert 50 percent of its solid waste from landfills by the end of calendar year 2000 through the implementation of various strategies, including source reduction, composting, recycling, and yard waste programs. Using a combination of financial incentives, public education, technical assistance, and recycling collection services, the City increased its diversion rate dramatically from 11 percent in 1990 to 44 percent in 1995. By 1999, The City of San Jose successfully met the state requirement, achieving a 59 percent diversion rate. The City maintained at least a 59 percent diversion rate until 2005, which is the most recent year for which data is available.¹⁹ Waste stream reduction initiatives have included curbside recycling, a free waste assessment, policy incentives, facility recovery, and composting.²⁰

d. Electricity, Natural Gas, Telecommunications and Cable Television Services. The existing land uses on the project site are currently served with electricity, natural gas and communications services. The Pacific Gas and Electric Company (PG&E) provides natural gas and electricity services throughout the City, including the project site, from a variety of renewable and non-renewable sources both within and outside of the State. Within the City's boundaries, there are a number of facilities that produce and transmit power throughout the City, and these services are currently available on the project site.

AT&T/SBC Communications Inc. provides telecommunications service to the project site and Comcast provides cable services to the project site.

e. San Jose 2020 General Plan. The following policies from the *San Jose 2020 General Plan* are related to utilities systems and are relevant to the proposed project.

Natural Resources

- *Water Resources Policy 1:* The City, in cooperation with the Santa Clara Valley Water District, should restrict or carefully regulate public and private development in watershed areas, especially those necessary for the effective functioning of reservoirs, ponds, and streams, and for the prevention of excessive siltation.
- *Water Resources Policy 2:* Water resources should be utilized in a manner which does not deplete the supply of surface or ground water, and efforts to conserve and reclaim water supplies, both local and imported, should be encouraged.
- *Water Resources Policy 5:* The City should protect groundwater recharge areas, particularly creeks and creeksides, and riparian corridors.

Services and Facilities

- *Sanitary Sewer Systems Policy 6:* The minimum performance standard for sanitary sewer lines should be level of service "D", defined as restricted sewage flow during peak flow conditions. Development which will have the potential to reduce the downstream level of service to worse than "D", or development which would be served by downstream lines already operating at a level of service worse than "D", should be required to provide mitigation measures to

¹⁹ The data for the 2005 reporting year is preliminary, and not yet completed.

²⁰ California Integrated Waste Management Board, 2007. *Jurisdiction Profile for the City of San Jose*. Website: www.ciwmb.ca.gov/profiles/juris. July 13.

improve the level of service to “D” or better. In recognition of the substantial non-sewer benefits of infill development, small infill projects may be exempted from sewer mitigation requirements.

- *Sewage Treatment Policy 7:* The City should monitor and regulate growth so that the cumulative sewage treatment demand of all development can be accommodated by San Jose’s share of the treatment capacity of the San Jose/Santa Clara Water Pollution Control Plant.
- *Sewage Treatment Policy 8:* The operation of the Water Pollution Control Plant should comply with the water quality standards for the South San Francisco Bay established by the Regional Water Quality Control Board and implemented through NPDES (National Pollutant Discharge Elimination System) permits.
- *Sewage Treatment Policy 9:* The City should continue to encourage water conservation programs which result in reduced demand for sewage treatment capacity.
- *Solid Waste Goal 2:* Extend the life span of existing landfills by promoting source reduction, recycling, composting and transformation of solid wastes.
 - o *Solid Waste Policy 1:* Monitor the continued availability of long-term disposal capacity to ensure adequate solid waste disposal capacity.
 - o *Solid Waste Policy 20:* Solid waste reduction techniques including source reduction, reuse, recycling, source separation and energy recovery, should be encouraged.

f. Regulatory Framework. Public electricity providers (such as PG&E) within the State are subject to both State and local jurisdictions’ utilities regulations. These regulations are discussed below.

(1) California Public Utilities Commission. The California Public Utilities Commission (CPUC) regulates the activities of private utilities within the State, including privately held electrical service providers such as PG&E. PG&E is required to comply with the provisions of CPUC General Order No. 131-D, when constructing, modifying, or relocating its electrical facilities, specifically substations.²¹ General Order No. 131-D, Section III, Need for Commission Authorization, B. Permit to Construct, states:

No electric public utility shall begin construction in this state of any electric power line facilities or substations which are designed for immediate or eventual operation at any voltage between 50-kV or 200-kV or new or upgraded substations with a high side voltage exceeding 50-kV without the Commission’s having first authorized the construction of said facilities by issuance of a permit to construct in accordance with the provisions of Sections IX.B, X, and XI.B.

(2) Senate Bill 610. California State Senate Bill (SB) 610 requires that any project subject to the California Environmental Quality Act supplied with water from a public water system be provided a specified water supply assessment, except as specified in the law.²²

(3) Senate Bill 221. California State Senate Bill (SB) 221 prohibits approval of subdivisions consisting of more than 500 dwelling units unless there is verification of sufficient water supplies for the project from the applicable water supplier(s). This requirement also applies to increases of 10

²¹ Public Utilities Commission of the State of California, 2005. *Rules Relating to the Planning and Construction of Electrical Generation, Transmission/Power/Distribution Line Facilities and Substations Located in California*, General Order No. 131-D, Adopted June 8, 1994, modified August 11, 1995.

²² http://www.groundwater.water.ca.gov/water_laws/index.cfm#sb610

percent or more of service connections for public water systems with less than 500 service connections. The law defines criteria for determining "sufficient water supply" such as using normal, single-dry, and multiple-dry year hydrology and identifying the amount of water that the supplier can reasonably rely on to meet existing and future planned uses. Rights to extract additional groundwater, if used for the project, must be substantiated.²³

2. Impacts and Mitigation Measures

The following section evaluates impacts related to utilities and infrastructure service systems that could result from the implementation of the proposed project. The section begins with the criteria of significance, which establish the thresholds to determine whether an impact is significant and concludes with impacts of the project and mitigation measures, if required.

a. Criteria of Significance. Implementation of the proposed project would have significant impacts on utilities and infrastructure service systems if it would have the following effects:

- Exceed wastewater treatment requirements of the Regional Water Quality Control Board (RWQCB);
- Create substantial demand for water beyond the existing or planned City's water supply, requiring additional water storage capacity;
- Interfere with the accomplishment of waste diversion goals mandated by the California Integrated Waste Management Act;
- Require or result in the construction of a new water, stormwater, or wastewater facility or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Require new or expanded entitlements for water supplies;
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Directly affect a major energy line or facility.

b. Less-than-Significant Utilities Impacts. The proposed project would create a small increase in demand for each of the utilities addressed in this section. However, in each case, the extent of the increased draw on those services would be within the physical and financial capability of the provider.

(1) Water Supply. SB 610 requires that this project provide a specified water supply assessment and SB 221 requires that the water retailer verify whether its water supplies are sufficient to meet the projected demand of this project. The Water Supply Assessment (WSA) assumes that the proposed project would include 685 residential units and 40,000 square feet of retail space. Using the City's estimates of 225 gallons per day (gpd) for each single family high density residential unit and 0.0751 gpd per square foot of retail space, SJWC determined that the project's water demand would be 157,129 gallons per day, or approximately 57 million gallons per year. The WSA is included in

²³ Ibid.

Appendix G. This amount of water is well within the SJWC's future water demand projections as included in the 2005 UWMP.²⁴

(2) Water Infrastructure. As described above, existing potable water lines in the vicinity of the project site include the following: a 12-inch cast iron water line below Taylor Street built in 1924 and in poor condition; a 6-inch cast iron water line below North 6th Street with unknown installation date and condition; a 12-inch ductile iron water line below North 6th Street built in 1998. Water mains in the project vicinity would not need to be replaced or upgraded to accommodate the proposed project.²⁵ New lateral water supply lines within the site would have to be constructed to connect to existing lines.

Existing recycled water lines in the vicinity of the project area are located on East Hedding Street two blocks northwest of the project site, and along North 12th Street four blocks northeast of the project site.²⁶

Recycled water could be provided to the project site since planned and existing pipelines are close to the project site and water use at the site would be conducive to use of recycled water. As indicated above, the proposed project would connect to the line on East Hedding Street should it choose to use recycled water. Recycled water is typically used for irrigation, but could also be used in toilets. The use of recycled water and conservation measures would minimize the effects on water supply during a drought.

At the time that a specific project design is finalized, water conserving technologies and design features would be incorporated into the project. These elements would include both indoor and outdoor features.

(3) Wastewater Treatment. As described above, the San Jose/Santa Clara Water Pollution Control Plant's treatment capacity is 167 mgd. As of July, 2007, the Plant's average daily flow was approximately 114 mgd, or 68 percent of total capacity. The Water Supply Assessment for the proposed project found that the project would demand 56 million gallons per year. Assuming that wastewater generation would be 95 percent of water usage²⁷, the proposed project would generate approximately 0.15 million gallons per day. Because the proposed project would amount to less than one hundredth of a percent of the Plant's total capacity, it would result in a less than significant effect on wastewater treatment and disposal.

²⁴ San Jose Water Company, 2008. *Water Supply Assessment (WSA) for the Japantown Corporation Yard Redevelopment Project Update*. January 8.

²⁵ Warren, Wayne, 2007. Manager, Water Services Department, San Jose Water Company. Personal communication with LSA Associates, Inc. November 30.

²⁶ San Jose, City of, 2006. City of San Jose Environmental Services Department, South Bay Water Recycling Program, Recycled Water Pipeline Program System (map). op. cit.

²⁷ This is a conservative estimate. Wastewater generation would likely be closer to 85 percent of water usage.

(4) Solid Waste. As noted above, sufficient capacity exists at local landfills for at least another 15 years. Consistent with City policies, construction and demolition activities would be subject to recycling standards. New development would need to comply with existing General Plan policies and programs designed to reduce the amount of solid waste needing to be disposed of in landfills.

New development will be designed to facilitate recycling activities. Table V.M-3 shows the amount of recyclable material associated with development of projected retail, community space, residential units, and live/work units. The amounts shown in the table are projected for diversion from landfills. As shown, implementation of the proposed project would not interfere with the accomplishment of waste diversion goals. Additionally, there is sufficient capacity at local landfills to serve future development within the Greater Downtown. No significant adverse impacts associated with solid waste disposal are expected to occur.

Table V.M-3: Solid Waste Generation

	Size	Solid Waste Rate	Solid Waste Generated (lbs/day)
Retail ²⁸	15,000 – 30,000 sf	2.5 lbs./100 sf/day	375 - 750
Community Space ²⁹	10,000 – 20,000 sf	0.007 lbs./sf/day	70 - 140
Dwelling Unit ³⁰	685 units	5.4 lbs./day/du	3,699
Live/Work Unit ³¹	Up to 24 units	6.9 lbs./day/u	166

(5) Natural Gas and Telecommunication and Cable Television Services. Facilities providing electricity, natural gas and telephone services are built and maintained by the private utilities that provide these services under their franchise agreements with the State of California. New and expanded facilities are paid for from capital funds financed by fees paid by users. The project site is currently served by existing electricity, natural gas and telephone infrastructure.

Comcast Cable would provide verification of services for new residents and prior to construction a technician would visit the site to determine where the existing cable network is located, how to provide service to the proposed development and would give Comcast a quote on the cost of installation. Since the proposed project is within an area which is currently developed, it is likely that cable infrastructure would be readily available in the vicinity of the project site. Comcast seeks to expand their customer base and works to provide service to new customers in order to gain new accounts.

AT&T/SBC Communications currently provides communications service to the existing facilities on the project site. Depending on the communication needs of for the proposed project, AT&T/SBC may install a fiber optic cable to provide service to the site. Because the project site is within an urbanized area currently served by communications services, extending additional communication lines to the site would be feasible. Further refinement of the proposed project will determine the communication

²⁸ SJW Land Company Delmas Avenue Site Draft EIR, 2003.

²⁹ Monterey Park Redevelopment Agency. Draft EIR for the Central Commercial Redevelopment Project.

³⁰ SJW Land Company Delmas Avenue Site Draft EIR, 2003.

³¹ SJW Land Company Delmas Avenue Site Draft EIR, 2003; Santa Barbara County Public Works Department, 1997. *Guide to Solid Waste and Recycling Plans for Development Projects*. May. This EIR assumes that each live/work unit would produce one job, and is therefore equivalent to one dwelling unit plus one office employee. As a result, the solid waste generation rate was calculated by combining the rate for a dwelling unit (5.4 lbs./day/du) and the rate for one office employee (1.5 lbs./employee/day).

needs of proposed project and which type of infrastructure AT&T/SBC Communications would utilize to service the project site.

All of the utilities monitor the plans and growth patterns of the urban jurisdictions that they serve and, in doing so, maintain adequate backbone infrastructure to serve new development of the scale of the proposed project. (Potential impacts related to energy supplies are also addressed in Chapter V.O, Energy.)

c. Significant Utilities Impacts. Implementation of the proposed project could result in the following significant adverse impact related to utilities and service systems.

Impact UTIL-1: The proposed project could exceed the capacity of some sewer lines in the vicinity of the project site. (S)

As described above, the sewer system in the vicinity of the project includes a 66-inch RCP rehabilitated with a 58-inch Spiral PVC liner on the east side of North 7th Street between Jackson Street and Taylor Street. This pipe has capacity for the planned development. Lateral connections to this pipe shall be at manholes only. No tapped lateral connections directly to the pipe will be allowed.³² On the West side of 7th between Jackson Street and Taylor Street, there is an 8-inch VCP. This pipe discharges into the CIPP lined by 28x42-inch brick sewer's invert. Based on flow monitoring of the 28x42-inch sewer conducted in 2003, the maximum recorded depth of sewage in this pipe is approximately 1.4 feet. During peak flow in the brick sewer, the 8-inch VCP is slightly hydraulically blocked. This may be a concern because of the depth of the underground portion of the proposed parking facility on the Corporation Yard site. There is also an 8-inch VCP running along North 6th Street between Jackson Street and Taylor Street.³³ Implementation of the following mitigation measure would reduce impacts associated with wastewater infrastructure in the vicinity of the project site to a less-than-significant level.

Mitigation Measure UTIL-1: As a condition of project approval, the applicant for redevelopment of the Corporation Yard site shall verify with survey data, to be submitted to the San Jose Department of Public Works, that the 8-inch VCPs on North 7th Street between Jackson Street and Taylor Street and on North 6th Street between Jackson Street and Taylor Street could accommodate any proposed lateral connections from the below grade garage. If the VCPs cannot accommodate the proposed laterals from the below grade garage, then the applicant shall contract with a qualified engineering firm to design a system that could include ejector pumps and backflow preventors. (LTS)

This mitigation measure does not apply to the City parking lot site as redevelopment of this site does not include a below grade garage, basement or other subsurface areas that could require lateral connections.

³² Kam, Alan, 2007. op. cit.

³³ Ibid.

N. PUBLIC SERVICES AND FACILITIES

This section analyzes the proposed project's potential impacts to public services including: police services, fire protection, parks and recreation, and schools. Potential impacts to public services that could result from the proposed project are identified, and mitigation measures are recommended, as appropriate.

1. Setting

Existing conditions for public services and facilities are described below. The information presented was gathered from a variety of sources, including service providers and their planning and policy documents.

a. Police Protection Services. The City of San Jose Police Department (SJPd) provides police protection services throughout the City. The SJPd strives to maintain an average of 1.82 sworn officers per thousand residents. Currently, there are approximately 1,366 sworn officers in the SJPd force.¹ Based on the California Department of Finance's estimate that the City's population was 944,475 in 2005, the SJPd currently maintains a ratio of 1.44 sworn officers per thousand residents. The SJPd does not calculate the utilization of Police Reserve Officers (volunteer Officers) in the analysis for staffing requirements to meet police service delivery goals.

The SJPd provides services within its jurisdiction to an area that consists of 83 beats, allocated to 16 districts not including the Airport District and officers assigned to the airport. Beats are identified with a number and the districts are identified with a letter (e.g., N2). The project site is located within District Victor (DV), Beat 3, and is staffed by one Patrol Officer per shift. The patrol division works three 10-hour shifts to provide daily coverage for the City. Six Patrol Officers are assigned to DV Beat 3 to accomplish 24-hour coverage, seven days a week. Officers are currently providing police services within the proposed project area. The highest policing priorities for the Central Division, where the project site is located, are traffic, quality of life, school safety, park safety, gang and narcotic activity, violent crime, and property crime.²

The SJPd has established a response time goal for police protection services of 6 minutes or less for 60 percent of Priority 1 calls (defined as involving immediate danger to life or property), and 11 minutes or less for 60 percent of Priority 2 calls³ (when there is injury or property damage, or potential for either to occur).⁴ The SJPd's current City-wide average response time for Priority 1 calls within the City is 6 minutes, 21 seconds, and the average response time for Priority 2 calls is 11 minutes, 54 seconds.

¹ Mank, Kevin, 2007. Officer, Crime Prevention Through Environmental Design Detail, San Jose Police Department. Personal Communication with LSA Associates, Inc. October 31.

² San Jose Police Department, 2007. Website: www.sjpd.org. August 7.

³ According to the *San Jose 2020 General Plan*, this benchmark measure of Citywide service is to be used to evaluate the cumulative impacts of land use changes and development. However, the *General Plan* specifically states that "these benchmarks are not intended as thresholds for assessing environmental impacts under the California Environmental Quality Act."

⁴ Mank, Kevin, 2007. op. cit.

b. Fire and Emergency Medical Services. Fire protection, rescue and emergency medical services (EMS) within San Jose are provided by the City of San Jose Fire Department (SJFD). The SJFD serves a total of 206 square miles, and responds to all fires, hazardous materials spills, and medical emergencies (including injury accidents).

The SJFD includes 33 fire stations located throughout the City, which house 33 engine companies, eight truck companies, three Urban Search and Rescue (USAR) companies, one Hazardous Materials Incident Team (HIT), five Battalion Chiefs, one Paramedic Supervisor, and one Arson Investigator. The Department maintains a minimum staffing of four positions (e.g., one captain, one engineer, one firefighter paramedic and one firefighter) for engine companies and five positions (e.g., one captain, two engineers, one firefighter paramedic, and one firefighter) for ladder/truck/USAR companies. All of the 31 engine companies and 11 truck/USAR companies have a paramedic firefighter assigned on duty to provide advanced life support (ALS) capabilities.

Table V.N-1: Fire Station Location and Response Capability

Fire Station Number	Address	Distance from Project (Miles)	Response Capability
1	225 N. Market Street	1.0	Engine, Ladder Truck, Light Unit and Battalion Chief 1
5	1380 N. 10th Street	1.1	Engine, Urban Search and Rescue
7	800 Emory Street	1.5	Engine
8	802 E. Santa Clara Street	1.5	Engine

Source: City of San Jose, 2007.

The Department consists of 758 sworn positions with 719 positions currently assigned to fire stations. The Department consists of career firefighters only. Citywide daily staffing level for emergency response is 201 personnel on-duty.⁵ Fire Station 1 is the closest fire station to the project site with secondary resources responding from three other fire stations located in the vicinity of the project site, as shown in Table V.N-1.

The City of San Jose also participates in automatic aid programs with the Cities of Milpitas and Santa Clara and the Santa Clara County Fire Department. These automatic aid programs assign the closest responding first-due units, when available, in several designated areas in San Jose and the other participating jurisdictions.

The City of San Jose also participates in a Countywide Mutual Aid Program with many other fire agencies in Santa Clara County and the California Department of Forestry (CDF). Through this program, should any of the participating jurisdictions need additional assistance in a major emergency, and a significant portion of their own resources are committed to emergency operations, strike teams, composed of designated units from one or more of the program cities, would provide assistance to mitigate the emergency.

Emergency medical services within the City of San Jose are jointly provided by the SJFD and American Medical Response (AMR). The SJFD provides ALS first responder services from 42 apparatus deployed from 31 stations. AMR provides ALS patient transport. The SFJD also maintains five

⁵ Cady, Geoff, 2007. Resource Planning and Deployment AO, San Jose Fire Department. Personal communication with LSA Associates, Inc. July 31 and personal communication with City of San Jose, January 2008.

transport-capable Supplemental Transport Ambulance Resources (STAR) units in the event AMR is delayed and immediate patient transport is required.

As noted in the *San Jose 2020 General Plan*, the City has established an average response time standard of 4 minutes for Fire Department first-due emergency response.⁶ The level of service set by the SJFD is based on average conditions (i.e., dry weather, time of day, traffic patterns, etc.) and is measured upon the arrival of the emergency response vehicle to the “curb.”

The SJFD uses fractile measures⁷ for performance standards in determining resource planning and deployment decisions. The adopted performance objective is 8 minutes or less for 80 percent of emergency responses.

c. Parks and Recreation Facilities. The City of San Jose provides park lands, open space and community facilities for public recreation and community services. Parks and recreation facilities vary in size, use, type of service, and provide for city, regional and neighborhood uses. The City Department of Streets and Parks is responsible for the construction, operation and maintenance of all City park and recreation facilities. There are no existing parks on the project site.

The City has adopted a Parkland Dedication Ordinance (PDO) to help meet demand for neighborhood and community parks from new residential development. The City has also adopted a Park Impact Ordinance (PIO), which requires parkland dedication to new residential development in non-subdivided units. Both the PDO and PIO require that new residential projects either dedicate land for parkland, pay a fee in lieu of dedication, or a combination of both. Compliance with the PDO ensures that a new residential development has fulfilled the requirements and procedures as set forth in the Quimby Act, Section 66477 of the California Government Code.

As noted in the *San Jose 2020 General Plan*, the City of San Jose has established level of service measures for park land and community centers. These levels of service are as follows:

- 3.5 acres of neighborhood and community serving recreational lands per 1,000 population, of which a minimum of 1.5 acres must be City owned neighborhood or community park lands and up to 2 acres can be provided by school playgrounds, and all should be located within reasonable walking distance;
- 7.5 acres of regional/Citywide park lands per 1,000 population; and
- 500 square feet of community center space per 1,000 population.

According to the City’s 2008-2012 Capital Improvement Program for the Parks and Community Facilities Capital Development Program, San Jose had: 1) 3.27 acres of neighborhood and community serving recreational lands per 1,000 population; 2) 2.61 acres of regional/Citywide park lands per 1,000 population; and 459 square feet of community center floor area per 1,000 population.⁸

⁶ San Jose, City of, 1994. *San Jose 2020 General Plan*. August.

⁷ Fractile measures are percentile based figures which use a specific response goal and a percentage that represents the amount of times which the goal is met. Fractile measures provide a more accurate measure of emergency response time which reflects a reliability factor as opposed to relying on an simple average (arithmetic mean) response time, which does not effectively measure reliability.

⁸ Cano, Matt, 2007. Division Manager, City of San Jose Parks, Recreation and Neighborhood Services. Personal communication with LSA Associates, Inc. July 19.

The following parks are within the vicinity of the project site:

- Bernal Park. (5.8 acres, located 0.4 miles north of project site on Hedding Street and 7th Street, the park contains restrooms, one playground, picnic tables, and a softball field.)
- Backesto Park. (13 acres, located 0.6 miles east of the project site at the corner of 13th and Empire Street, the park contains restrooms, picnic tables and BBQ areas, tennis courts, a lit softball field, basketball/handball courts and 2 playgrounds.)
- Guadalupe River Park & Gardens. (Located 0.8 miles west of the project site along the west side of the Guadalupe Parkway and the banks of the Guadalupe River, this large recreation area contains several parks and other facilities such as gardens and public art spaces.)
- Ryland Park (3.2 acres, located 0.9 miles southwest of the project site, the park contains restrooms, picnic tables and BBQ areas, two playgrounds, two basketball courts, an exercise course, and a dog park.)

San Jose Greenprint, A 20-Year Strategic Plan for Parks and Community Facilities and Programs (2000), describes Council District 3, where the project site is located, as parkland deficient and is projected to remain so in the future. The district had only 190 acres of neighborhood/community serving parkland as of 2000, which is the lowest number of parkland acres of any council district. In order to meet the overall level of service objective of 3.5 acres per 1,000 residents, the district will need 246 additional acres. But given the population and development density of the area, it is not possible to acquire this amount of land. The *Greenprint* proposes that the best parkland strategy is to develop small public and private parks and improve access to existing facilities outside the district.⁹ Within the district, it describes the area north of Julian Street, east of First Street, south of Taylor Street, and west of Tenth Street as one of four “underserved park areas.” The project site is located within this area. The *Greenprint* recommends that the City identify and acquire new parkland with neighborhood redevelopment efforts on the Corporation Yard site. The southern portion of the Corporation Yard site is designated “parkland” in the *Greenprint*.

According to the *Greenprint*, there are no areas within District 3 that are underserved by community centers. The San Jose Parks, Recreation and Neighborhood Services Department is currently updating *Greenprint* and plans to publish in early 2008.¹⁰

d. Schools. The project site and vicinity are within the San Jose Unified School District (SJUSD), which served 30,589 students from Kindergarten to Grade 12 in 2006. The current enrollment, as of October 18, 2007, is 30,937.¹¹ The SJUSD is the largest school district in the City, consisting of 45 schools: 31 elementary schools, seven middle schools, and seven high schools. Most students are assigned based on school attendance boundaries. The District has three Elementary Magnet Schools, whose students are assigned based on a lottery. Incoming 6th and 9th graders are also able to choose which school they attend. The SJUSD schools whose attendance boundaries include the project site are listed in Table V.N-2, which includes enrollment projections for these schools.

⁹ San Jose, City of, 2000. *San Jose Greenprint, A 20-Year Strategic Plan for Parks and Community Facilities and Programs*. June.

¹⁰ Cano, Matt, 2007, op. cit.

¹¹ Gonzales, Robert D., 2007. Director, Student Assignment and Demographics, San Jose Unified School District. Personal communication with LSA Associates, Inc. October 26.

Table V.N-2: Enrollment of Schools Serving the Project Site

School Site	10/18/07 Enrollment	Enrollment Capacity	Projection 2007-08	Projection 2008-09	Projection 2009-10	Projection 2010-11	Projection 2011-12
Grant Elementary	534	624	541	557	571	628	697
Burnett Middle	862	870	835	845	875	905	935
San Jose High	988	1,218	1,020	1,064	1,072	1,100	1,128

Note: Projections do not include students generated by the proposed project.

Source: San Jose Unified School District, 2007.

Grant Elementary is located at 470 Jackson Street, 0.2 miles northeast of the project site. Peter Burnett Academy (Middle School) is located at 850 North 2nd Street, 0.5 miles northwest of the project site. San Jose High Academy is located at 275 North 24th Street, 1.6 miles east of the project site. If any of these schools are over capacity, students at the project site would be directed to the following schools: Anne Darling Elementary School (2.1 miles northeast of the project site) or Horace Mann Elementary School (0.8 miles southeast of the project site); Herbert Hoover Middle School (2.2 miles southwest of the project site); or Lincoln High School (2.6 miles southwest of the project site).

SJUSD's maximum student to teacher ratios are as follows: 20:1 for grades K-2; 30:1 for 3rd grade; 31:1 for grades 4 and 5; 31:1 for grades 6 through 8 (middle school); and 31:1 for grades 9 through 12 (high school).

Senate Bill 50 (SB 50), which revised the existing limitation on developer fees for school facilities, was enacted as urgency legislation which became effective on November 4, 1998 as a result of the California voters approving a bond measure (Proposition 1A). SB 50 established a 1998 base amount of allowable developer fees (Level One fee) for residential construction (subject to adjustment) and prohibits school districts, cities, and counties from imposing school impact mitigation fees or other requirements in excess or in addition to those provided in the statute. Consistent with SB 50, developers must pay the required development fee to SJUSD for residential development (\$2.63 per square foot) and commercial/senior housing development (\$0.42 per square foot). These funds would be used to expand existing or develop new school facilities as needed.

A student generation rate (SGR) is an estimate of the average number of students that would live in each dwelling unit. An SGR is employed to calculate anticipated student yields from new residential development. SJUSD uses an SGR that assumes apartment/condominium development generates 0.116 elementary school students, 0.057 middle school students, and 0.065 high school students per unit. Senior housing does not generate students.

e. General Plan. The following policies from the *San Jose 2020 General Plan* are related to public services and facilities utilities and are relevant to the proposed project.

Services and Facilities

- Schools Policy 21:* The City encourages school districts and developers to engage in early discussions regarding the nature and scope of proposed projects and possible fiscal impacts and mitigation measures. These discussions should occur as early as possible in the project planning stage, preferably preceding immediately or following land acquisition.

- *Other Services Policy 16:* Utilize the following Citywide level of service measures as benchmarks to be used to evaluate major General Plan land use and policy changes, such as expansions of the Urban Service Area or land use changes from non-residential to residential:
 - For police protection, achieve a response time of six minutes or less for 60 percent of all Priority 1 calls, achieve a response time of eleven minutes or less for 60 percent of all Priority 2 calls.
 - For fire protection, a 4-minute average response time to all calls.
 - For parks and recreation: 3.5 acres of neighborhood and community serving recreational lands per 1,000 population, of which a minimum is 1.5 acres of neighborhood, community or locally serving regional/City-wide park lands and up to 2 acres of school playgrounds, and all of which is located within a reasonable walking distance of the project; 7.5 acres of regional/City-wide park lands per 1,000 population; and 500 square feet of community center floor area per 1,000 population.
 - The City recognizes that these performance measures are limited reflections of all City services and may change over time to reflect increasing diversity, new methods of service delivery or to reflect changing needs and priorities that are determined in the budgetary process. The details of these performance measures may also be addressed in the new or existing service planning documents of the relevant City departments that provide these services.
- *Other Services Policy 17:* In reviewing major land use or policy decisions, the City should consider the availability of police and fire protection, parks and recreation, and library services to the affected area as well as the potential impacts of the project on existing service levels.
- *Other Services Policy 18:* Fire service facilities should be located so that essential services can be most efficiently provided.

Aesthetic, Cultural and Recreational Resources

- *Parks and Recreation Goal 1:* Provide park lands and recreational areas which enhance the livability of the urban environment by providing parks for residential neighborhoods, preserving significant natural, historic, scenic and other open space resources, and meeting the open space and recreational services needs of community residents.
 - *Parks and Recreation Policy 1:* The City should consider as an objective the provision of neighborhood or community park within reasonable walking distance for each resident. That portion of a Citywide or regional park which provides recreational accessibility for nearby residents in the same manner as a neighborhood or community park should be considered as meeting this objective.
 - *Parks and Recreation Policy 3:* Through the development review process, private open space and recreation facilities should be encouraged in high density residential projects, mixed use projects and major transit corridors in order to meet a portion of the open space and recreation needs of residents, employees and visitors that will be generated by that development.
 - *Parks and Recreation Policy 17:* In the planning of future park expenditures, the provision of new park and recreation facilities and improvements in park deficient areas should be considered a top priority.

2. Impacts and Mitigation Measures

The following section evaluates impacts related to public services and facilities that could result from the implementation of the proposed project. The section begins with the criteria of significance, which establish the thresholds to determine whether an impact is significant and concludes with impacts of the project and mitigation measures, if appropriate.

a. Criteria of Significance. Implementation of the proposed project would have significant impacts on public services and facilities if it would have the following effects:

- Result in substantial adverse impacts associated with the provision of or need for new or physically altered police, fire, park, or school facilities, the construction of which could cause

significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

b. Less-than-Significant Public Services Impacts. Implementation of the proposed project would result in the following less-than-significant impacts to public services and facilities.

(1) Police Protection Services. The proposed project would create a small increase in demand for police services within the City of San Jose. The City will consider the need for additional funding for new officers, vehicles, and other safety and communications equipment for the area to maintain current service delivery goals. A new police station would not be needed.¹² The increase in demand for these services would not impact the Department's ability to maintain established response time goals for service. As such, the proposed project would have a less-than-significant impact on police services.

(2) Fire and Emergency Medical Response. The following discussion is based on the SJFD's comments from their initial review of the proposed project.¹³ The Fire Department relies on surface streets for access as it responds to fire and medical emergencies. Any potential obstructions or conditions limiting travel speeds will impede or reduce or lessen response time performance.

The SJFD would review preliminary building plans' compliance with Article 9, Appendix III-A and Appendix III-B of the 2001 California Fire Code and with City of San Jose Amendments (SJPD) prior to issuance of development permits. Compliance with all other applicable fire and building codes and standards relating to fire and panic safety would be verified by the SJFD during the building permit process.

New facilities on the project site would be required to comply with all applicable elements of the Uniform Building and Fire Codes, California Building and Fire Codes, and San Jose Building and Fire Codes at the time of construction. Minimum street widths would be maintained for emergency vehicle access as well as access through any traffic calming devices (typically ingress and egress routes for emergency response vehicles to the field and facility would have a minimum lane width of 12 feet and 14 feet of vertical clearance).¹⁴ The City of San Jose Fire Code requires that fire apparatus must be able to get within 150 feet of entrances to the building; be designed and maintained to support the loads of fire apparatus of at least 69,000 pounds; have a minimum inside turning radius of 30 feet and an outside turning radius of 50 feet; have a gradient less than or equal to 15 percent.¹⁵¹⁶ In the event that structural design elements cannot accommodate vehicle turning radius, width and height requirements to reach the field and other to-be-determined areas within the structure, additional specialized equipment would be required.

¹² Mank, Kevin, 2007. op. cit.

¹³ Cady, Geoff, 2007, op. cit

¹⁴ Ibid.

¹⁵ City of San Jose Municipal Code, 2005. Chapter 17.12.445 Additional safety requirements for multi-story and other buildings presenting unique firefighting challenges.

¹⁶ Naum-Stoian, Nadia, 2007. Fire Protection Engineer, San Jose Bureau of Fire Protection. Personal communication with LSA Associates, Inc. August 1.

The project site is within an area of the City already receiving service levels within adopted parameters. Response times to the project site from Station 1 are anticipated to be within the Department's performance objective of 8 minutes for 86 percent of responses. The site is also projected to receive an Effective Response Force within Department performance objectives.¹⁷ The Fire Department does not anticipate that the project would degrade service levels below adopted performance objectives. Therefore, the proposed project would result in a less-than-significant impact upon fire services in San Jose.

(3) Parks and Recreation Facilities. As described in V.B Population, Employment and Housing, the proposed project would directly generate housing-related population growth by adding between 685 and 709 new residential units. The population of the Corporation Yard site would be approximately 1,908 and the population of the City parking lot site would be approximately 170. As a variation on the proposed project, up to 15,000 square feet of retail space may be replaced with up to 24 live/work units. These live/work units would increase the Corporation Yard site's population by 76. Therefore, the proposed project would increase the City's population by between 2,078 and 2,154 persons. The project would also include approximately 10,000 to 20,000 square feet of community space and one public plaza.

In accordance with the Parkland Dedication Ordinance and the Parkland Impact Ordinance, as delineated in the San Jose Municipal Code, the applicant shall dedicate parkland, pay a parkland fee in lieu of dedication, or both, for neighborhood and community park or recreational purposes.¹⁸ According to the Municipal Code, the addition of between 600 and 624 new housing units to the project site would require the applicant for the City Corporation Yard site to dedicate between 5.72 and 5.95 acres of parkland. Live/work units would be subject to parkland dedication and in lieu fee requirements because the Municipal Code counts them as residential units.¹⁹ The proposed project's 85 units of affordable senior housing would be exempt from parkland dedication or in lieu fees.²⁰ The City would review the proposed project's public plaza final design at the Planned Development Permit stage to determine whether it would qualify as a neighborhood park, and count towards the project's dedication or in lieu fee requirements.

As noted above, *San Jose Greenprint, A 20-Year Strategic Plan for Parks and Community Facilities and Programs* describes Council District 3, where the project site is located, as deficient in parkland but sufficient in community centers. Furthermore, *Greenprint* recommends that the City identify and acquire new parkland with neighborhood redevelopment efforts on the Corporation Yard site. The southern portion of the Corporation Yard site is designated "parkland" by the Greenprint. As such, the population increase in the area as a result of the project, if implemented, would further the district's trend as being parkland deficient. The City will continue to fail to meet the *General Plan's* stated goal to provide 3.5 acres of neighborhood and community serving recreational lands per 1,000 population, of which a minimum of 1.5 acres must be City owned neighborhood or community park lands and up to 2 acres can be provided by school playgrounds, and all should be located within reasonable walking distance). As noted above, according to the City's 2008-2012 Capital Improvement Program

¹⁷ Cady, Geoff, 2007, op. cit.

¹⁸ Please refer to Title 19 Subdivisions, Chapter 19.38 Parkland Dedication of the San Jose Municipal Code for requirements and procedures related to parkland dedication and in lieu fees for subdivisions.

¹⁹ City of San Jose Municipal Code, 2005. Chapter 20.70.100. Allowed uses and permit requirement; Table 20-140.

²⁰ City of San Jose Municipal Code, 2005. Chapter 19.38.520 Low-income unit exemption.

for the Parks and Community Facilities Capital Development Program, San Jose had: 1) 3.27 acres of neighborhood and community serving recreational lands per 1,000 population; 2) 2.61 acres of regional/Citywide park lands per 1,000 population; and 459 square feet of community center floor area per 1,000 population.²¹

In light of *Greenprint's* findings, it is advisable that parkland be developed on or in close proximity to the project site, in order to improve the area's poor parkland-to-population ratio. However, the City of San Jose Parks, Recreation and Neighborhood Services department has indicated that the proposed project would not cause substantial deterioration to existing parkland facilities.²² In addition, compliance with the City's PDO and PIO would ensure that the proposed project would not result in a significant impact to the City's neighborhood and community parkland ratios.

(4) Schools. As discussed in Section V.B, Population, Employment and Housing, the addition of 600 residential units and up to 24 live/work units would result in an increase of between 1,908 and 1,984 new residents within the Corporation Yard site. (The proposed project's 85 units of affordable senior housing on the City parking lot site would not be included in student generation rate calculations.) All students generated by the proposed new housing would attend schools within the San Jose Unified School District. SJUSD uses a student generation rate that assumes apartment/condominium development generates 0.116 elementary school students, 0.057 middle school students, and 0.065 high school students per unit. Based on these rates, the proposed project would generate between 70 and 72 elementary school students, between 34 and 36 middle school students, and between 39 and 41 high school students. In total, the proposed project would generate between 143 and 149 school age children.

The addition of between 70 and 72 students to Grant Elementary would increase the school's operating capacity by approximately 11 percent. SJUSD would need to add three classrooms at this school by 2012 in order to accommodate new students generated by the proposed project. The addition of between 34 and 36 middle school students to Peter Burnett Academy (Middle School) would increase the school's capacity by approximately 4 percent. SJUSD would need to add two classrooms at this school by 2012 in order to accommodate new students generated by the proposed project. San Jose High Academy could absorb new students generated by the project.²³

Consistent with SB 50, developers must pay the required residential development fee to SJUSD (\$2.63 per square foot) and commercial development fee (\$0.42 per square foot). These fees would be directed toward maintaining adequate service levels, which include incremental increases in school capacities. Implementation of this State fee system would ensure that any significant impacts to schools that could result from the proposed project would be offset by development fees, and in effect, reduce potential impacts to a less-than-significant level.

c. Significant Public Services Impacts. Implementation of the proposed project would not result in significant impacts to public services and facilities within the City of San Jose.

²¹ Cano, Matt, 2007. Division Manager, City of San Jose Parks, Recreation and Neighborhood Services. Personal communication with LSA Associates, Inc. July 19.

²² Cano, Matt, 2007, op. cit.

²³ Gonzales, Robert D., 2007. op. cit.

O. ENERGY AND MINERAL RESOURCES

This section describes the existing energy and mineral resources available at the project site and analyzes the impacts related to these resources that would result from the implementation of the proposed project. Where appropriate, mitigation measures are recommended.

1. Setting

The following section discusses existing energy sources, as well as the planning and regulatory framework that governs energy use.

a. Energy Resources. The Pacific Gas and Electric Company (PG&E) provides natural gas and electricity services to the City, including the project site, from a variety of renewable and non-renewable sources both within and outside of the State. Within the City's boundaries, there are currently seven power plants that produce and transmit power throughout the City.

b. Regulatory Framework. Public electricity providers (such as PG&E) within the state are subject to both State and local jurisdictions' utilities regulations. California's recent energy crisis prompted the City of San Jose to begin efforts to promote energy conservation, energy efficiency, and alternative energy sources to achieve greater self-sufficiency and system reliability. San Jose's recent efforts are briefly described below. City of San Jose regulations are discussed below; State regulations, which are more focused on infrastructure, are discussed in Section V.M, Utilities.

(1) Smart Energy Plan. In March 2001, the City adopted a Smart Energy Plan, which includes discussions and implementation steps for the following strategies:

- Explore regional energy solutions together with neighboring communities.
- Collaborate with neighboring communities to identify regional criteria for appropriate locations for new large clean plants in Silicon Valley that do not harm residential communities.
- Explore creative energy partnerships among cities, the State, and federal governments, and the private sector to help ensure reliable supplies and achieve conservation.
- Reduce the City's energy demand through vigorous conservation efforts to achieve at least a 10 percent savings and encourage community conservation.
- Expand the City's model program for energy-efficient buildings to encourage long-term permanent conservation.
- Actively encourage small clean power plants in San Jose that can be located in appropriate industrial areas and publicly-owned lands, not in residential neighborhoods.
- Set clear predictable standards for clean energy generation projects within the City's authority and streamline the City's review and approval of appropriate power projects.

(2) Sustainable Energy Policy and Action Plan. In March 2003, the City presented a Sustainable Energy Policy and Action Plan,¹ which was designed to complement and update the energy component of the Sustainable City Plan as detailed within the San Jose 2020 General Plan. The purpose of the Policy and Action Plan is to create a community where energy is generated and used in the most sustainable manner possible. The Plan supports the development of an infrastructure that values energy conservation and efficiency, energy reliability, reasonable and predictable energy costs, and the creation of clean, local energy sources. The Plan identifies the following goals:

¹ San Jose, City of, 2003. *Sustainable Energy Policy and Action Plan*. March.

- Lead by example in pursuing the most efficient use of energy in City facilities and activities.
- Explore opportunities to improve energy reliability, supply and price stability to meet current and future needs.
- Promote collaboration on energy issues.
- Promote and achieve a cleaner and healthier environment, including improving air quality and reducing greenhouse gas emissions.
- Encourage the development and use of renewable energy sources and alternative fuels.

(3) City Energy Programs. The City also has a number of programs to further promote energy conservation among residents and businesses in the City. The Low Income Energy Assistance Program provides financial assistance for energy bill payments to eligible residents and provides them with energy efficiency education, audits, and improvements, as defined by the California Low Income Home Energy Assistance Program guidelines. In addition, energy efficiency education, audits, and improvements are provided to eligible residents, as defined by the City of San Jose Community Development Block Grant guidelines.

The Cool Communities Program and policies are designed to mitigate the Urban Heat Island effect (in which urban areas can be 6 to 10 degrees warmer than the surrounding countryside due to heat storing properties of urban surfaces), reducing energy use and air pollution resulting from extreme summer temperatures. Cool Communities policies also include tree planting and green roofs to increase both quality of life and property values while reducing urban runoff. San Jose participated in an Urban Heat Island Reduction Initiative of the U.S. Environmental Protection Agency (EPA), which provided City staff with technical and policy expertise. The City is also a participant in the Cities for Climate Protection Campaign, which engages local governments in developing and implementing policies and programs to reduce the greenhouse gas emissions that contribute to global warming.

The City is also an active member of the Bay Area Solar Consortium, which promotes the installation of solar technologies throughout the San Francisco and Monterey Bay areas. The South Bay Clean Cities Coalition, one of 80 coalitions nationwide that comprise the Clean Cities Program of the U.S. Department of Energy, is coordinated by the City's Environmental Services Department and works to advance the use of alternative vehicles and the infrastructure of alternative fuels.

(4) Green Building Policies. The San Jose City Council adopted a series of Green Building Policies on June 19, 2001, to demonstrate the City's commitment to the environmental, economic, and social stewardship and to yield cost savings to city taxpayers through reduced operating costs, to provide healthy work environments for staff and visitors, and to contribute to the City's goals of protecting, conserving, and enhancing the region's environmental resources. Green building policies are listed below. These policies are mandatory for City buildings, but not for private sector buildings.

The Green Building Policy goals center on five main categories: sustainable sites; energy and atmosphere; water efficiency; materials and resources; and indoor environmental quality. Energy and atmosphere policy goals are as follows:

- *Minimum Energy Performance:* establish the minimum level of energy efficiency for the base building and systems.
- *Optimize Energy Performance:* achieve increasing levels of energy performance above the minimum standard to reduce environmental impacts associated with excessive energy use.
- *Building Commissioning:* verify and ensure that the entire building is designed, constructed, and calibrated to operate as intended.

- *Measurement and Verification*: provide for the ongoing accountability and optimization of building energy and water consumption performance over time.
- *Renewable Energy*: encourage and recognize increasing levels of self-supply through renewable technologies to reduce environmental impacts associated with fossil fuel energy use.
- *Green Power*: encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis.
- *Reduce Ozone Depletion*: support early compliance with the Montreal Protocol by eliminating the use of CFC-based refrigerants and reducing the use of HCFCs and halons.

As part of its promotion of Green Building policies, the City encourages participation in City-sponsored organized educational and training events covering green building topics to increase the use of green building techniques in municipal, commercial, and residential building development projects in the City and create greater awareness of these practices.

c. Mineral Resources. The project site, located immediately north of the Downtown area of San Jose, is comprised of two parcels. According to the California Department of Conservation, the site is classified MRZ-1, "Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources."² As such, there are no known mineral resources or mineral resources extraction facilities on or adjacent to the project site.

d. San Jose 2020 General Plan. The following policies from the *San Jose 2020 General Plan* are related to energy and are relevant to the proposed project.

Community Development

- *Urban Design Goal 1*: Provide a high quality living environment in residential neighborhoods.
 - *Residential Land Use Policy 2*: Private development should include adequate landscaped areas. Landscaped areas should utilize water efficient plant materials and irrigation systems. Energy conservation techniques such as vegetative cooling and wind shielding should also be utilized. All landscaped areas should include provision for ongoing landscape maintenance.

Housing

- *Housing Goal 5*: Incorporate good design, foster aesthetics, and promote usable open space, and encourage use of alternative energy sources and energy conservation techniques in residential development.

Services and Facilities

- *Transportation Goal 1*: Provide a safe, efficient, and environmentally sensitive transportation system for the movement of people and goods.
 - *Transportation Policy 45*: Bicycle parking facilities that are secure and convenient should be an integral component of such activity centers as major public facilities, business and employment sites and shopping centers.

Natural Resources

- *Urban Forest Goal 1*: Preserve, protect, and increase plantings of urban trees within the City.
 - *Urban Forest Policy 5*: The City should encourage the selection of trees appropriate for a particular urban site. Tree placement should consider energy saving values, nearby power lines and root characteristics.

² California Department of Conservation, 1987. *Mineral Land Classification Special Report 146 part 2*, Map plate 2.50, San Jose West Quadrangle.

- *Energy Goal 1:* Consistent with Sustainable City Strategy Goals, the City should foster development which, by its location and design, reduces the uses of non-renewable energy resources in transportation, buildings and urban services (utilities) and expands the use of renewable energy resources.
 - *Energy Policy 1:* The City should promote development in areas served by public transit and other existing services. Higher residential densities should be encouraged to locate in areas served by primary public transit routes and close to major employment centers.
 - *Energy Policy 4:* The energy-efficiency of proposed new development should be considered when land use and development review decisions are made. The City's design techniques include provisions for solar access, for siting structures to maximize natural heating and cooling, and for landscaping to aid passive cooling protection from prevailing winds and maximum year-round solar access.
 - *Energy Policy 7:* The City should require low-pressure sodium vapor lighting for outdoor, unroofed areas in all new developments and encourage existing development to retrofit using low-pressure sodium vapor lighting.

2. Impacts and Mitigation Measures

The following section evaluates impacts related to energy that could result from implementation of the proposed project. The section begins with the criteria of significance, which establish the thresholds to determine whether an impact is significant. The latter part of this section presents the impacts from the project, and mitigation measures if required.

a. Criteria of Significance. Implementation of the proposed project would have significant impacts on energy if it would have the following effects:

- Directly affect a major energy line or facility;
- Result in a substantial increase in the demand for energy supplies or transmission services; or
- Use energy in a wasteful manner.
- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State.
- 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.

b. Less-Than-Significant Energy Impacts. The proposed project would result in the following less-than-significant energy and mineral resources impacts.

(1) Energy. The proposed new retail, housing, and community facilities uses on the site would result in increased energy use of several types. The proposed project would consume energy in three forms: (1) the fuel energy consumed by construction vehicles; (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass; and (3) ongoing energy required for interior lighting, heating/ventilating/air conditioning (HVAC), kitchen appliances, computers/printers, entertainment components, and security systems. However, all new development is required to incorporate energy conservation measures in compliance with Title 24 and the Uniform Building Code. Compliance with the requirements of Title 24 would adequately mitigate this potential impact to a less-than-significant level.

In addition, the proposed buildings on the Corporation Yard site would register with the U.S. Green Building Council and target Leadership in Energy and Environmental Design (LEED) certification.

The buildings would utilize a combination of Energy Star and "green roofs" to reduce energy consumption. These and other energy saving measures would be assessed by a third-party energy modeler as part of the LEED program. The proposed structures would incorporate other energy saving elements, such as high performance glazing, fluorescent light bulbs, and high efficiency water heaters. The project applicant for the Corporation Yard site would evaluate the use of other creative energy saving measures, such as the use of water source heatpumps, Energy Star appliances, timers or motion sensors for garage and stairwell lighting, and window shades. Like the Corporation yard site, the proposed structure on the City parking lot site would have a "green roof" consisting of four to six inches of soil planted with native, organic plants. The structure would also include a photovoltaic system for reduction of common area electrical needs, and all lighting installed on the site would be florescent. All appliances to be installed in the residential units and all building products to be used for the project that receive Energy Star ratings would be Energy Star rated.

The proposed project promotes high-density residential, commercial, and community uses in areas served by public transit and close to employment centers and other existing services. In this way, it encourages more efficient energy use than development at the edge of the City or in a development where the land use pattern was more mono-dimensional and segregated by use.

The proposed project would not affect any major energy line or facility. Small distribution lines may need to be upgraded or installed for the new development.

(2) Mineral Resources. As noted above, the California Department of Conservation has indicated that there is a low likelihood of mineral resources on the project site. In addition, the State Geologist and the State Mining and Geology Board has identified the Communications Hill area in San Jose, approximately 6 miles south of the project site, as the only area in the City containing mineral deposits which are either of statewide significance or the significance of which requires further evaluation.³

There are no known mineral resources or mineral resources extraction facilities on or adjacent to the project site. Implementation of the proposed project would not result in the loss of a known mineral resource.

c. Significant Energy Impacts and Mitigation Measures. Implementation of the proposed project would not result in significant energy or mineral resources impacts.

³ San Jose, City of, 1994. *San Jose 2020 General Plan*. August.

P. GLOBAL CLIMATE CHANGE

This section provides a broad discussion of global climate change and the proposed project's potential contribution to the effects of climate change. This discussion is based on research, information, and analysis completed by the International Panel on Climate Change (IPCC), United States Environmental Protection Agency (EPA), United States Department of Energy and California Air Resources Board.

1. Setting

Global climate change is an alteration of the average weather of the Earth, measured by wind patterns, storms, precipitation, and temperature. Global temperatures are affected by naturally occurring and human-generated atmospheric gases, such as carbon dioxide (CO₂), methane, and nitrous oxide. These gases allow sunlight into the atmosphere, but prevent radiative heat from leaving. The phenomenon is known as the greenhouse effect and it is thought to be the cause of global climate change. This setting section describes the potential causes and effects of global climate change.

a. Causes of Global Climate Change. Global warming is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. In the 20th century the Earth's average near-surface atmospheric temperature rose $1.1 \pm 0.4^\circ\text{Fahrenheit}$ ($0.6 \pm 0.2^\circ\text{Celsius}$).¹ The poles have experienced the most extreme temperature increase, with up to a nine degree increase observed over large areas of the Arctic during the 20th century.² The prevailing scientific opinion on climate change is that "most of the warming observed over the last 50 years is attributable to human activities."³ The IPCC, an international group of scientists and representatives of 113 governments, recently released a report that concluded, "the widespread warming of the atmosphere and ocean, together with ice-mass loss, support the conclusion that it is extremely unlikely that global climate change of the past 50 years can be explained without external forces, and very likely that it is not due to unknown natural causes alone."⁴ It is believed that the increased amounts of carbon dioxide and other greenhouse gases (GHGs) are the primary causes of the human-induced component of warming. They are released by the burning of fossil fuels, land clearing, and agricultural activities, and lead to an increase in the greenhouse effect.

Greenhouse gases are present in the atmosphere naturally, released by natural sources, or formed from secondary reactions taking place in the atmosphere. They include carbon dioxide, methane, nitrous oxide and ozone. In the 150 years since the Industrial Revolution, mankind has been releasing substantial quantities of greenhouse gases into the atmosphere. These extra emissions increase greenhouse gas concentrations in the atmosphere and enhance the natural greenhouse effect, which is believed to be causing global warming. Concentrations of carbon dioxide in the atmosphere have risen 30 percent since the Industrial Revolution. While some anthropogenic produced greenhouse gases, including carbon dioxide, methane and nitrous oxide, naturally exist in the atmosphere, others, such as chlorofluorocarbons (CFCs), are new to the atmosphere.

¹ Intergovernmental Panel on Climate Change (IPCC), 2007. *Climate Change 2001: The Scientific Basis*. Website: www.grida.no/climate/ipcc_tar/wg1/index.htm.

² San Jose, City of, 2007. *Draft Environmental Impact Report, Coyote Valley Specific Plan*. March.

³ Intergovernmental Panel on Climate Change (IPCC), 2007. op. cit.

⁴ Ibid.

(1) Carbon Dioxide. Natural sources of carbon dioxide include the respiration (breathing) of animals and plants, decomposition of dead organic matter, and evaporation from the oceans. Together, these natural sources release about 150 billion tons of carbon dioxide each year, far outweighing the 7 billion tons of anthropogenic emissions from fossil fuel burning, waste incineration, deforestation and industrial activities. Nevertheless, natural removal processes, such as photosynthesis by land and ocean-dwelling plant species, cannot keep pace with this extra input of anthropogenic carbon dioxide emissions, and consequently the gas is building up in the atmosphere. In 2002 California's carbon dioxide emissions totaled 360 million tons, of which, 98 percent came from fossil fuel combustion.⁵

(2) Methane. Methane is produced naturally when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, oceans, and the anaerobic decay of organic matter. Anthropogenic sources include the mining and burning of fossil fuels, digestive processes in ruminant animals such as cattle, rice cultivation, and waste management. It is estimated that 60 percent of methane emissions come from human-related activities.⁶ In 2005, anthropogenic emissions of methane in the United States totaled 26.6 million tons.⁷ In total, methane emissions account for approximately 9 percent of total climate change emissions.⁸ As is the case for carbon dioxide, the major removal process of atmospheric methane - chemical breakdown in the atmosphere - cannot keep pace with source emissions, and as a result, methane concentrations in the atmosphere are increasing. Methane has a global warming potential (the potential of a gas to trap heat in the atmosphere) 21 times that of carbon dioxide,⁹ indicating that the annual methane emissions is equivalent to approximately 612 million tons of carbon dioxide.

(3) Nitrous Oxide. Nitrous oxide is produced naturally by microbial processes in soil and water. It is produced by humans during agricultural activities involving fertilizer containing nitrogen. In addition to agricultural sources, industrial processes, such as fossil fuel-fired power plants and vehicle emissions, also lead to the increase in the atmospheric load of nitrous oxide. In 2003 there was a total of 1.3 million tons of nitrous oxide emitted from anthropogenic sources.¹⁰ In total, nitrous oxide accounts for approximately 5 percent of total GHG emissions.¹¹ Nitrous oxide has a global

⁵ United States Energy Information Administration, 2002. *Comparison of Global Warming Potentials from the Second and Third Assessment Reports of the Intergovernmental Panel on Climate Change (IPCC)* August 12. Website: www.eia.doe.gov/oiaf/1605/gwp.html

⁶ Intergovernmental Panel on Climate Change (IPCC), 2007. op cit.

⁷ Energy Information Administration, 2005. *Emissions of Greenhouse Gases in the United States 2005*. November. Website: www.eia.doe.gov/oiaf/1605/ggrpt/index.html

⁸ Energy Information Administration, 2003. *Greenhouse Gases, Climate Change, and Energy*. November. Website: www.eia.doe.gov/oiaf/1605/ggccebro/chapter1.html

⁹ Hendrix, M., and Wilson, C., 2007. Association of Environmental Professionals, *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents*. June 29.

¹⁰ United States Environmental Protection Agency, 2005 *US Emissions Inventory: Inventory of U.S. Greenhouse Gas Emissions and Sinks*. Website: yosemite.epa.gov/oar/globalwarming.nsf/content/ResourceCenterPublications/GHGEmissionsUSEmissionsInventory2005.html

¹¹ Energy Information Administration, 2003. *Greenhouse Gases, Climate Change, and Energy*. November. Website: <http://www.eia.doe.gov/oiaf/1605/ggccebro/chapter1.html>

warming potential of 296 times that of the same amount of carbon dioxide,¹² indicating that 1.3 million tons of nitrous oxide is equivalent to approximately 377 million tons of carbon dioxide.

b. Effects of Global Climate Change. The IPCC Fourth Assessment Report (AR4) predicts global temperature increases of between 2 and 11.5° Fahrenheit by the year 2100, with temperatures most likely increasing by between 3.2 and 7.1° Fahrenheit. Sea levels are predicted to rise by 7 to 23 inches by the end of the century, with an additional 3.9 to 7.8 inches possible depending upon the rate of polar ice sheet melt from increased warming. In addition, the IPCC report states that the increase in hurricane and tropical cyclone strength since 1970 can likely be attributed to anthropogenic-generated greenhouse gases.¹³

According to the 2006 Climate Action Team Report, the following climate change effects are expected in California over the course of the next century (per the IPCC):

- A diminishing Sierra snowpack declining by 70 to 90 percent, threatening the State's water supply;
- Increasing temperatures from 8 to 10.4° Fahrenheit under the high emissions scenarios, leading to a 25 to 35 percent increase in the number of days ozone pollution levels are exceeded in most urban areas;
- Coastal erosion along the length of California and sea water intrusion into the Sacramento River Delta from a 4- to 33-inch rise in sea level, exacerbating flooding in already vulnerable regions;
- Increased vulnerability of forests due to pest infestation and increased temperatures;
- Increased challenges for the State's important agricultural industry from water shortages, increasing temperatures, and saltwater intrusion into the Delta; and
- Increased electricity demand, particularly in the hot summer months.¹⁴

2. Regulatory Setting

Agencies at the international, national, state, and local levels are considering strategies to control emissions of gases that contribute to global warming. At this time, there is no comprehensive strategy that has been implemented to address climate change on a global scale. However, State agencies are beginning to offer some guidance on strategies to address global climate change, which will be examined in this section.

a. Executive Order S-3-05 and AB 32. California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels.

¹² United States Energy Information Administration, 2002. *Comparison of Global Warming Potentials from the Second and Third Assessment Reports of the Intergovernmental Panel on Climate Change (IPCC)* August 12. Website: www.eia.doe.gov/oiaf/1605/gwp.html

¹³ Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Summary for Policy Makers*. Website: <http://www.ipcc.ch/>

¹⁴ State of California, California Climate Action Team, 2007. Climate Action Team Report. http://www.climatechange.ca.gov/climate_action_team/reports/index.html. April 20.

In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006 and the Governor signed it into law. AB 32 focuses on reducing GHG (defined to include: carbon dioxide, methane, nitrous oxide, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride). AB 32 requires the California Air Resources Board (CARB) to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to statewide levels in 1990 by 2020. AB 32 also requires that by January 1, 2008, the State Board determine what the statewide greenhouse gas emissions level was in 1990, and approve a statewide greenhouse gas emissions limit that is equivalent to that level, to be achieved by 2020.

b. Energy Efficiency Standards. California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The latest amendments were adopted in October 2005 and require new homes to use half the energy they used only a decade ago. Energy efficient buildings require less electricity, resulting in decreased greenhouse gas emissions.

c. CEQA Guidance. As of August 2007, there were several pending California lawsuits brought under CEQA regarding the appropriate breadth, depth and methodology of global climate change in EIRs. On August 21, 2007 the California Attorney General announced a settlement agreement for the State's global warming lawsuit against San Bernardino County. The lawsuit argued that the San Bernardino County General Plan did not adequately analyze the impacts of development on global warming and did not identify feasible mitigation measures. The settlement requires San Bernardino County to 1) establish an inventory of all known (or reasonably discoverable) sources of greenhouse gases in the county; 2) establish an inventory of 1990 greenhouse gas emissions levels, present day greenhouse gas emission levels, and projected 2020 greenhouse gas emissions levels; and 3) develop a target for the reduction of emissions resulting from the county's discretionary land use decisions and governmental operations.

However, there is currently no case law that provides guidance on the methodology and criteria for what constitutes a project impact, individually or cumulatively, to global warming. On August 24, 2007 Governor Schwarzenegger signed SB 97 which requires the Office of Planning and Research (OPR) to prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions, including, but not limited to, effects associated with transportation or energy consumption. Under the provisions of SB 97, OPR has been directed to propose CEQA Guidelines advising lead agencies how to mitigate the impacts of GHG emissions. OPR will circulate these Guidelines by July 2009, and the Resources Agency has been directed to adopt such guidelines by January 2010.

3. Impacts and Mitigation Measures

Neither CEQA nor the CEQA Guidelines mention or provide any methodology for analysis of GHGs, including carbon dioxide, nor do they provide any significance thresholds. Furthermore, there has not yet been any agency guidance on how to evaluate GHG emissions in EIRs.

In addition, the scientific literature from groups such as the IPCC and the National Research Council, a branch of the National Academy of Science, indicates that the relationship between land use

projects and climate change is not yet understood or reflected in climate models at a scale that is meaningful for the evaluation of a particular development project. For example, a 2005 report prepared by the National Research Council entitled *Radiative Forcing of Climate Change: Expanding the Concept and Addressing Uncertainties* (2005) included an analysis of the uncertainties involved in determining the impact of land use changes on global climate. That report concluded that “[t]he mechanisms involved in land-atmosphere interactions are not well understood, let alone represented in climate models. A synergistic approach combining state-of-the-art models, field observations, and satellite imagery will be needed to advance our knowledge.”

Similar conclusions are included in some of the reports of the IPCC, and in reports which have been prepared for the California Energy Commission and the California Department of Water Resources. For example, in the IPCC report *IPCC Meeting on Current Understanding of the Processes Affecting Terrestrial Carbon Stocks and Human Influences Upon Them* (2003), the IPCC stated that “[t]he scientific community cannot currently provide a practicable methodology that would factor out direct human-induced effects from indirect human-induced and natural effects for any broad range of [land use, land use change, and forestry] activities and circumstances.” Even more recently, in *Climate Change 2007: The Physical Science Basis*, the IPCC has concluded that attributing climate change at smaller regional scales is difficult at best. “Difficulties remain in reliably simulating and attributing observed temperature change at smaller scales. On these scales, natural climate variability is relatively larger, making it harder to distinguish changes expected due to external forces.” These conclusions of the IPCC are particularly applicable here, given the relatively small size of the proposed project in comparison with other, more large-scale and regional sources of GHG emissions.

There is also no concrete guidance on evaluating impacts of climate change on a project. For example, in the context of claims that climate change will affect available water supply, the existing scientific literature on California’s water supply, including reports from the Department of Water Resources and independent groups, essentially concludes that, at present, it is unclear whether potential climate change impacts (such as a possible reduction in snow-pack) would increase or decrease available water supplies.

While there is very little guidance on significance criteria and thresholds, this section examines, to the extent feasible, whether a project creates or contributes to an impact on global climate change or is subject to impacts from global climate change, and what mitigation measures are available to avoid or reduce impacts, if appropriate.

a. Project’s Contribution to Global Climate Change. Although there are no established thresholds of significance for evaluating when a project’s contribution of GHG emissions could be considered significant or cumulatively considerable, a recent presentation summary prepared by Deputy Attorney General Sandy Goldberg entitled *CEQA and Global Warming* describes emissions of 100,000 tons per year as being the lower level of emissions reductions that the State is considering in developing compliance standards for AB 32.¹⁵ The proposed project would generate up to 21 tons per day (calculated using the URBEMIS model, included in Appendix C) of carbon dioxide primarily in the form of vehicle exhaust and in the consumption of natural gas for heating. This amount of carbon dioxide is far less than 100,000 tons per year.

¹⁵ CARB, 2007. *Proposed Early Actions to Mitigate Climate Change in California*, Table 2, p.7-8. April 20.

In terms of vehicle emissions, as stated in Section V.C., Transportation, Circulation and Parking, the net average daily trips generated by the proposed project would be 5,010. Assuming the average vehicle trip length is approximately three miles, future users of the proposed project would travel a total of approximately 15,030 miles per day. The carbon dioxide emission rate for a year 2030 vehicle mix is about 1.13 pounds per mile.¹⁶ Based on the estimated miles traveled for the project and the carbon emission rate assumption, the daily project total carbon dioxide vehicle emissions would be approximately 7.7 tons per day (or 42,811 metric tons per year). The 15,030 miles per day would also emit 0.033 tons of nitrous oxide per day.

Even though it is speculative at this time to determine the significance of this project's contribution to global GHG emissions, it is significant that several aspects of the proposed project, identified below, would result in less GHG emissions than if the project were developed elsewhere. In the future, when it becomes reasonable based upon scientific and regulatory guidance to determine the significance of a land use project's GHG emissions, these aspects of the project likely would support a finding that the impacts of this project on climate change are not significant or cumulatively considerable. The following aspects of the project would lessen the GHG emissions:

- The proposed new development is of a relatively high density and constitutes an urban infill project;
- The project site is located in an area served by public transit;
- The VTA Light Rail is within walking distance of the project site;
- The project site is close to employment centers and other existing services; and
- The proposed project would include a mix of retail, residential and community uses and a pedestrian-oriented design intended to decrease reliance on the automobile.

In addition, the proposed retail, housing, and community facilities uses on the project site would incorporate design elements and other measures to reduce GHG emissions. The proposed buildings on the Corporation Yard site would register with the U.S. Green Building Council and target Leadership in Energy and Environmental Design (LEED) certification, which would increase energy efficiencies and result in reduced GHG emissions. The buildings would utilize a combination of Energy Star characteristics or elements and "green roofs" to reduce energy consumption. The "green roofs" in particular would reduce ambient heat that is normally reflected off of the roof, and they would add oxygen to the environment and provide additional roof insulation. The proposed structures would incorporate other energy saving elements, such as high performance glazing, fluorescent light bulbs, and high efficiency water heaters. The project applicant for the Corporation Yard site would evaluate the use of other creative energy saving measures, such as the use of water source heatpumps, Energy Star appliances, timers or motion sensors for garage and stairwell lighting, and window shades.

Like the Corporation Yard site, the proposed structure on the City parking lot site would have a "green roof" planted with native, organic plants. The structure would also include a photovoltaic system for reduction of common area electrical needs, and all lighting installed on the site will be

¹⁶ San Jose, City of, 2007. *Draft Environmental Impact Report, Coyote Valley Specific Plan*. March.

fluorescent. All appliances to be installed in the residential units and all building products to be used for the project that receive Energy Star ratings would be Energy Star rated. In addition, the carpeting to be used would be “cradle-to-cradle” recyclable. Further, the project applicant for the City parking lot site intends to provide free, annual “Eco passes” to all of its tenants for free bus and light rail service in Santa Clara County.

Given the overwhelming scale of the global climate change phenomenon, it is not anticipated that a single development project would have an individually discernable effect. Rather, it is more appropriate to conclude that the greenhouse gas emissions generated by a proposed project would combine with emissions across the State, nation, and globe to cumulatively contribute to global climate change. In addition, the project would not impede the State’s ability to reach emission standards set forth in AB 32. The project’s plans for an infill, high density, mixed-use development is the type of new development that is anticipated to result in a land use pattern that supports the State’s efforts to reach emission standards. At this time, the information about the project’s impact on global climate change is too speculative to determine the significance level.

b. Impacts to the Proposed Project from Global Climate Change. Given the climate change predictions for California, it is reasonably foreseeable that local temperatures could increase by as much as 11.5 degrees over the course of the century with or without the proposed project. This increase in temperature could lead to other climate effects including, but not limited to, increased flooding due to increased precipitation and runoff and a decrease in the Sierra snow pack (a major water source). While the site is not located in a 100-year floodplain, future flooding conditions on the project site from global warming cannot be predicted at this time. The Santa Clara Valley Water District is the public agency entrusted with providing adequate water supply and flood control within Silicon Valley and is currently considering how to address both of these issues associated with climate change. At this time, the information about the potential impacts of global climate change may have on the project site is too speculative to determine the significance level.

VI. CUMULATIVE IMPACTS

CEQA defines cumulative impacts as “two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts.” Section 15130 of the *CEQA Guidelines* requires that an EIR evaluate potential environmental impacts when the project’s incremental effect is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual 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. These impacts can result from a combination of the proposed project together with other projects causing related impacts. “The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.”

When evaluating cumulative impacts, CEQA allows the use of either a list of past, present, and probable future projects, including projects outside the control of the (lead) agency, or a summary of projections in an adopted planning document. Generally, this EIR bases its cumulative analysis on the buildout of the projects listed in Table VI-1 and shown in Figure VI-1.

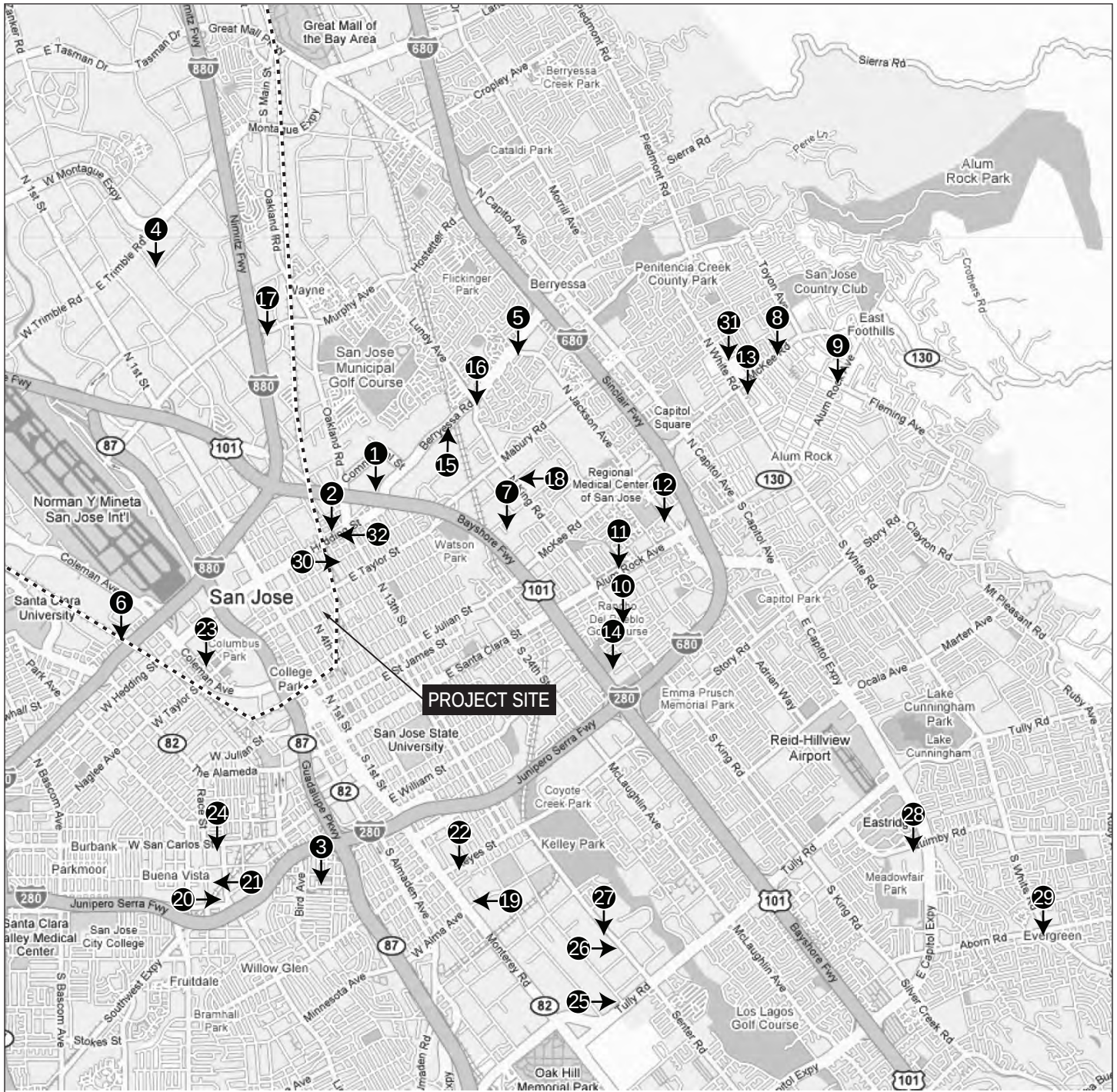
Potentially significant cumulative impacts to which the proposed project may contribute are discussed below for each topic evaluated in Chapter V.

1. Land Use

a. Cumulative Impacts. Cumulative land use issues can be divided into short-term and long-term impacts. Short-term impacts occur during construction and primarily affect existing sensitive land uses, such as hospitals, schools, and residential development near the construction site. These impacts include the noise and dust generated by grading and excavation activities and the use of heavy machinery, and the use of hazardous materials such as solvents. These specific impacts are discussed in greater detail in Chapter V, Sections V.D, Noise; V.E, Air Quality; and V.I, Hazards and Hazardous Materials, of this EIR.

Long-term impacts could occur once the project is constructed and operational. The proposed project would develop a vacant parcel within an urban area of San Jose. The proposed project is not expected to contribute to cumulative land use impacts in the Japantown or Jackson-Taylor areas. While the proposed project along with those listed in Table VI.1 would result in land use changes, such changes are generally consistent with the City’s goals and policies that area found in the General Plan, and with the Jackson-Taylor Residential Strategy. The proposed project, along with the cumulative projects discussed in this analysis would have a less-than-significant cumulative land use impact.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative land use impacts.



LSA

LEGEND

1 SAN JOSE FLEA MARKET	17 INTERSTATE 880/BROKAW ROAD
2 GOODWILL	18 NORTH KING ROAD/LAS PLUMAS AVENUE
3 DOWNTOWN STRATEGY 2000 PHASE 2	19 SOUTH FIRST STREET/EAST ALMA AVENUE
4 VISION NORTH SAN JOSE PHASE 2	20 LINCOLN AVENUE-NORTHUP STREET/ I-280/RACE STREET
5 PEPPER LANE	21 RACE ST-AUZERIAS AVENUE/ LINCOLN AVENUE/UPRR TRACKS
6 BART EXTENSION - - - - -	22 SOUTH THIRD AND KEYES STREETS
7 HOUSHOLD HAZARDOUS WASTE FACILITY	23 COLEMAN AVE BETWEEN HEDDING STREET/ AUTUMN STREET
8 LA PALA TOWNHOMES	24 WEST SAN CARLOS STREET/LINCOLN AVENUE
9 FLEMING AVE RESIDENTIAL	25 TULLY ROAD/SOUTH 10TH STREET
10 SOUTH KING ROAD RESIDENTIAL	26 SENTER ROAD/BURKE STREET
11 LAS BRISAS RESIDENTIAL PROJECT/ TRANSIT CORRIDOR	27 SENTER ROAD SOUTH OF WOOL CREEK DRIVE
12 JACKSON SQUARE CONDOMINIUMS	28 QUIMBY ROAD, WEST OF CAPITAL EXPWY
13 NORTH WHITE ROAD TOWNHOUSE PROJECT	29 ABORN ROAD/RUBY AVENUE
14 THE FAIRWAYS	30 10TH STREET/VESTAL STREET MIXED USE
15 BERRYESSA ROAD/UPRR TRACKS	31 MCKEE ROAD HIGH DENSITY RESIDENTIAL
16 BERRYESSA ROAD/NORTH KING ROAD	32 NORTH 11TH AND EAST HEDDING

FIGURE VI-1

*Japantown Corporation Yard
Redevelopment Project EIR
Projects Considered
in Cumulative
Impacts Analysis*

SOURCE: GOOGLE MAPS, 2007.

I:\WDD0701 japantown\figures\Fig_VI.1.ai (11/16/07)

Table VI-1: Cumulative Projects

	Project Name/Location	Size (Acres)	Description
1	San José Flea Market, NW of the project site on both sides of Berryessa Road	120.0	Approximately 216,000 square feet of office space, up to 150,000 square feet of commercial space, up to 2,818 residential units, and 13 acres of park/open space
2	Goodwill, at North Tenth and Hedding Streets	22.0	Up to 800 residential condominium units and an approximately 11,000 square foot park
3	Downtown Strategy 2000 Phase 2, SW of the project site in Downtown San José	1,920.0	Up to 2.5 million square feet of office space, 2,500 residential units, 300,000 square feet of retail space, and 825 hotel rooms
4	Vision North San José Phase 2, NW of the project site between I-880 and US 101	4,987.0	Up to 7 million square feet industrial space and 8,000 residential units
5	Pepper Lane, SW corner of Berryessa Road and Jackson Avenue	17.5	390 single-family attached units, 25,000 square feet of retail, and 5,000 square feet of sit-down restaurant
6	BART Extension, NW of the project site along the Union Pacific Railroad line	16.3	Extend BART from Warm Springs station to Milpitas, San José, and Santa Clara
7	Household Hazardous Waste Facility, SE corner of Las Plumas Ave. and Nipper Ave.	1.8	Relocation of the household hazardous waste collection facility
8	La Pala Townhomes, SE corner of McKee Road and La Pala Drive	0.40	Up to 10 single-family attached residences
9	Fleming Avenue Residential, South side of Fleming Avenue, north of Alum Rock Ave	2.66	14 single-family detached residences
10	South King Road Residential, East side of King Road north of East San Antonio Street	3.48	14 single-family attached residential units
11	Las Brisas Residential Project/ Transit Corridor	4.0	Transit Corridor Residential (20+ DU/AC)
12	Jackson Square Condominiums, SE corner of Madden Avenue and North Jackson Avenue	2.3	159 single-family attached residences
13	North White Road Townhouse Project, East Side of North White Road, south of McKee Road	0.62	12 single-family attached residential units
14	The Fairways, East side of US 101 at the western terminus of San Antonio Court	2.19	86 affordable multi-family attached residential units
15	Both sides of Berryessa Rd west of the UPRR tracks	120.3	Transit Corridor Residential (20+ DU/AC) on 82.9 acres and Combined Industrial/ Commercial on 6.6 acres with a Flexible Land Use Boundary
16	Southeast side of Berryessa Rd. approximately 770 feet southwest of North King Rd.	13.6	Transit Corridor Residential (20+ DU/AC)
17	Southeast corner between Interstate 880 and Brokaw Road	15.6	Combined Industrial/ Commercial on 15.6 acres, Public Park/Open Space on 0.5 acres and Private Open Space on 1.6 acres with remainder unchanged
18	Northeast corner of North King Rd. and Las Plumas Avenue	13.7	Medium High Density Residential (12-25 DU/AC) on 8.5 acres, High Density Residential (25-50 DU/AC) on 4.0 acres, and General Commercial on 0.5 acre. A portion of the former railroad spur consisting of approximately 1 acre will remain unchanged.
19	Northeast side of South First Street, approximately 165 feet northwesterly of East Alma Avenue	2.56	Transit Corridor Residential (25-50 DU/AC)

Table VI-1 *Continued*

Project Name/Location		Size (Acres)	Description
20	Area generally bounded by UPRR tracks to the north, Lincoln Ave. and Northrup St. to the east, I-280 to the south and Race Street to the west	10.64	High Density Residential (25-50 DU/AC)
21	Area generally bounded by Race St. to the west, industrial buildings on Auzerias Ave. to the north, Lincoln Ave. to the east and the UPRR tracks to the south	10.86	High Density Residential (25-50 DU/AC)
22	Southeast corner of South Third and Keyes Streets	7.98	High Density Residential (25-50 DU/AC)
23	Coleman Ave. between Hedding St. and Autumn St.	N/A	Major Arterial (115-130 feet)
24	Southwest corner of West San Carlos Street and Lincoln Avenue.	2.72	Transit Corridor Residential (20+ DU/AC)
25	Northwest corner of Tully Road and South 10th Street	114.0	Mixed Use with No Underlying Land Use Designation, High Density Residential (25-50 DU/AC) up to 500 units, and General Commercial up to 125,000 square feet
26	Northwest corner of Senter Road and Burke Street	1.8	Heavy Industrial with a Mixed Industrial Overlay
27	East side of Senter Rd. approximately 680 ft south of Wool Creek Dr.	3.62	General Commercial
28	South side of Quimby Rd. approximately 1,000 feet west of Capitol Expwy.	81.0	Mixed-Use with No Underlying Land Use Designation
29	Southwest corner of Aborn Road and Ruby Avenue	15.13	Village Center and Medium High Density Residential (12-25 DU/AC)
30	West side of North 10th Street, between Vestal Street and East Mission Street	3.24	Mixed Use #1 (Jackson-Taylor Specific Plan)
31	North side of McKee Road, approximately 400 feet northeasterly from White Road	0.96	High Density Residential (25-50 DU/AC)
32	North 11th Street and East Hedding Street in Jackson Taylor Specific Plan area.	2.2	General Plan Amendment and Specific Plan Amendment from High Density Residential (25-50 DU/AC) to Medium High Density Residential (12-25 DU/AC).
Note: The following housing projects were included in an enrollment projection study prepared by the Alum Rock Union Elementary School District and were not included in this cumulative analysis because they are considered inactive by the City, consist of only a General Plan Amendment or annexation and no planned development, duplicated a previously listed project, or were unable to be unidentified as a proposed planned development. The projects include: 100 residential units on Ludlow Way (unidentified), 100 residential units south of Alum Rock Avenue and west of Sunset Avenue (unidentified), 100 residential units near Miller School (unidentified), 500 residential units part of McKee Annexation No.132 (annexation only), seven residential units on Ocala Avenue (unidentified), 17 residential units on Rosemar Avenue (inactive), 93 residential units on the west side of McCreery (inactive), GP06-05-01 Northpoint GPA 45 residential units (GPA only), and 14 residential units on the east side of King Road near East San Antonio Street (duplicate of PD06-040). It should be noted that the 6,000 units representing the reserve capacity trips in the Transportation Development Policy (TDP) are not included as a separate project in this cumulative analysis. Some of the identified cumulative projects (i.e. San José Flea Market and Dobbin Drive) represent a portion of the 6,000 residential units associated with the TDP reserve capacity trips; however, no development is included in this cumulative analysis for the TDP other than those Planned Development zonings currently on file with the City of San José.			

Source: City of San Jose, 2007.

2. Population, Employment and Housing

a. Cumulative Impacts. As discussed in Chapter V.B., Population, Employment, and Housing, the proposed project would increase the population of the City of San Jose by between approximately 2,078 and 2,154 persons, the housing stock by 685 units and employment by approximately 93 new jobs. However, the proposed project would not significantly impact the jobs-to-housing balance within the City. Projects on the cumulative projects list would provide both jobs and housing within the project vicinity. While the proposed project and cumulative projects would contribute to the number of jobs and households in San Jose, the increase would not be substantial enough to adversely impact the projected balance between jobs and housing within the City.

In addition, there is currently no housing on the project site. Therefore, no housing or residents would be displaced if the project were constructed on the site.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative population, employment, and housing impacts.

3. Transportation, Circulation and Parking

a. Cumulative Impacts. Please refer to Section V.C, Transportation, Circulation and Parking for a detailed discussion of cumulative transportation impacts. The cumulative analysis indicates that the proposed project would cumulatively cause the total VMT and VHT to exceed the significance criteria for all roadways in Santa Clara County during both the AM and PM traffic periods, significantly increase peak direction traffic volumes across all three special subarea cordon lines and significantly increase V/C across regional screenline links.

b. Cumulative Mitigation Measures. Please refer to Section V.C, Transportation, Circulation and Parking for cumulative mitigation measures. Consistent with City policies and practice, the CUBE model used to evaluate cumulative traffic impacts includes all major transportation infrastructure projects identified in the General Plan *Land Use/Transportation Diagram*, including infrastructure that is not yet built and/or funded. Therefore, mitigation measures that would require additions to the transportation system, either added roadway or transit capacity, are not feasible to mitigate any significant cumulative transportation impacts. This impact would remain **significant and unavoidable**.

In addition, two major General Plan transportation infrastructures, the US 101/Zanker Road/4th Street interchange and the US 101/Mabury interchange, are not constructed in the proximity of the project. Although constructing the interchanges is not a mitigation measure, this project would make fair share contribution under the adopted US 101/Oakland/Mabury Transportation Development Policy toward the construction of the US 101/Mabury interchange to help alleviate the long range impacts.

4. Air Quality

a. Construction Impacts. Projects in the San Jose area that would be under construction simultaneously with the proposed project are listed in Table VI-1. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction may result in substantial short-term increases in air pollutants. The cumulative construction of projects could contribute to short-term air quality impacts. However, each individual project would be subject to the rules and regulations, and other mitigation requirements during con-

struction that are recommended by the Bay Area Air Quality Management District (BAAQMD) to reduce all construction related emissions to a less-than-significant level.

b. Regional Emissions. See Section IV.D, Air Quality for a detailed discussion of cumulative air quality impacts. Tables V.D-6 and V.D-7 show that all of the background and cumulative without and with the project 1-hour and 8-hour CO concentrations would be below the federal and State CO standards. The cumulative plus project 1-hour CO levels range from 4.3 ppm to 5.4 ppm, much lower than the State CO standard of 20 ppm. The 8-hour CO levels range from 3.2 ppm to 4.0 ppm, also much lower than the State and federal standard of 9 ppm. Modeled input values are included in Appendix C.

Results indicate that CO concentrations would increase by less than 1 ppm with implementation of the proposed project. Implementation of the proposed project would not cause an exceedance of State or federal CO standards. Therefore, the proposed project would not lead to significant CO impacts, nor would the proposed project, in combination with other cumulative development, lead to CO concentrations that exceed federal or State standards. However, as shown in Table IV.D-8, regional emissions exceed the significance thresholds for ROG and PM₁₀, therefore any project that has a significant effect on regional air quality would also have a significant cumulative effect on regional air quality.

c. Cumulative Mitigation Measures. No mitigation measures are available beyond those identified in Mitigation AIR-2 for cumulative air quality impacts. However, even with implementation of these measures, the cumulative air quality impacts would remain **significant and unavoidable**.

5. Noise

a. Cumulative Impacts. Please refer to Section IV. E, Noise for a discussion of cumulative noise impacts. On-site land uses would be exposed to traffic noise levels of up to 67.7 dBA L_{dn} under cumulative plus project conditions. On-site land uses would also be exposed to a combination of railroad and traffic noise levels of up to 62.0 dBA L_{dn} along 7th Street and Jackson Street under cumulative plus project conditions. This would result in a significant cumulative noise impact.

b. Cumulative Mitigation Measures. Please refer to Section IV.E, Noise for a discussion of cumulative noise mitigation measures. Implementation of Mitigation Measures NOI-3a and NOI-3b would reduce cumulative noise impacts to a less-than-significant level.

6. Geology, Soils and Seismicity

a. Cumulative Impacts. The proposed project would not contribute considerably to any cumulative impacts related to geology. If constructed, the proposed project could be at substantial risk for liquefaction, differential settlement, expansive soils, or settlement of project soils. In addition, implementation of the project in conjunction with other cumulative development would increase the number of people and employees that could be exposed to regional seismic risks in the seismically active San Francisco Bay Area. However, this impact is not expected to be significant with incorporation of standard geotechnical mitigation measures, and no other impact related to geology, soils or seismicity would result.

b. Cumulative Mitigation Measures. No additional mitigation measures besides those identified in Chapter V.F, Geology, Soils and Seismicity would be necessary.

7. Hydrology and Water Quality

a. Cumulative Impacts. Construction of the proposed project, in addition to other projects, could create an increase in volume of storm water runoff and contaminants carried in the runoff, adversely affecting the waters of the Guadalupe River and the San Francisco Bay. In addition, the proposed project would result in a decrease in impervious surfaces. Project-specific mitigation measures required for each of the cumulative projects would be incorporated into their design and operation so as to reduce potential impacts to a less-than-significant level.

b. Cumulative Mitigation Measures. No additional mitigation measures, besides those identified in Section V.G, Hydrology and Water Quality, would be necessary.

8. Hazards and Hazardous Materials

a. Cumulative Impacts. As discussed in Chapter V.I, Hazards and Hazardous Materials, development of the project site could expose construction workers and/or the public to hazardous materials releases during and following construction activities. In addition, development of the project could expose remediation/construction workers and/or the public to hazardous materials from contaminants in soil and groundwater, during and following site redevelopment activities. Construction activities as well as any other operations at the project site or other projects in the vicinity that use, store, or dispose of hazardous materials would be required to comply with federal, State, and local requirements for managing hazardous materials. No significant unavoidable impacts related to hazards would result from construction or operation of the proposed project and the project would not contribute to any cumulative hazards impacts.

b. Cumulative Mitigation Measures. No additional mitigation measures, besides those identified in Chapter V.H, Hazards, would be necessary.

9. Cultural and Paleontological Resources

a. Cumulative Impacts. The proposed project would include buildings that range between 6 and 14 stories tall. As described in Section V.I, Cultural and Paleontological Resources, the proposed project would stand in contrast to the historical buildings located across North 6th Street, which are all either one- or two-story structures. In addition, site clearance and construction activities could result in significant impacts to previously undiscovered human remains, archaeological resources, and historical resources specific to the San Jose Japantown Historic District. However, the proposed project would not have significant unavoidable impacts to cultural or paleontological resources. Implementation of mitigation measures proposed in Chapter V.I, Cultural and Paleontological Resources, would reduce significant impacts upon these resources to a less-than-significant level. None of the projects included in Table VI-1 are within the San Jose Japantown Historic District. Therefore, the proposed project would constitute the essential whole of impacts to cultural and paleontological resources in the area around the project site.

b. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified in Chapter V.I, Cultural and Paleontological Resources, would be necessary.

10. Biological Resources

a. Cumulative Impacts. Construction of the proposed project could result in the removal of up to 128 trees and shrubs on the existing Corporation Yard and City parking lot sites, including the removal of eight ordinance-sized trees on the Corporation Yard site. The proposed project and the cumulative projects listed in this analysis are required to develop landscape plans in conformance with the City of San Jose Landscape and Irrigation Guidelines and the City of San Jose Planning Department specifications. For private projects, the City of San Jose requires tree replacement for those trees greater than 18 inches in diameter with 24-inch box trees at a ratio of 4:1 (trees planted to trees removed). In addition, ordinance-sized trees on the project site are located in an urban area near downtown San Jose designated for redevelopment. Their removal, with implementation of Mitigation Measure BIO-1, would represent a less-than-significant cumulative impact.

The trees on or immediately adjacent to both the Corporation Yard site and the City parking lot site provide potential nesting habitat for Cooper's hawk as well as other native birds whose nests are protected under the California Fish and Game Code. The proposed project could disturb nesting birds on the site if they are present. Implementation of Mitigation Measure BIO-2 for the proposed project and conformance by other cumulative projects within the State Code would reduce potential disturbance of nesting habitats during construction to a less-than-significant level.

c. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified in Chapter V.J, Biological Resources, would be necessary.

11. Visual Resources

a. Cumulative Impacts. The proposed project could detract from the existing visual character of historic buildings located across North 6th Street from the project site. The proposed project, which would range from 6 to 14 stories in height, would stand in contrast to the adjacent historic buildings, which are all either one- or two-story structures. However, newer developments in the area are between three and six stories tall. In addition, construction of the proposed project could remove up to 128 trees and shrubs on the existing Corporation Yard and City parking lot sites, including the removal of eight ordinance-sized trees on the Corporation Yard site. Given the increasing amount of development, and the location of the project near Downtown San Jose, implementation of Mitigation Measures CULT-3a and 3b (which are contained in Mitigation Measure VIS-1), as well as Mitigation Measure BIO-1 (which is contained in Mitigation Measure VIS-2), would reduce the project's contribution to cumulative impacts to visual resources to a less-than-significant level. The project site and its vicinity offer predominantly urban views of other urban scenes (i.e., buildings, landscaping, and roadways) and its implementation along with the projects listed in Table VI-1 would not significantly contribute to an adverse cumulative effect on scenic vistas or views.

b. Cumulative Mitigation Measures. No mitigation measures besides those proposed in Section V.K, Visual Resources, would be necessary.

12. Shade/Shadow and Light/Glare

a. Cumulative Impacts. The proposed project would include outdoor safety lighting which would be visible from surrounding view corridors and at a distance. Outdoor lighting would be designed to minimize glare and spillover to surrounding properties, and is not anticipated to be of a type or level that is more intrusive than that which exists in the immediate area. The project would

use non-mirrored glass to minimize daytime glare. Lighting and building materials would be subject to design review to further ensure that light or glare does not adversely affect day or night time views or create a hazard or nuisance in the area. No significant impacts to shade/shadow or light/glare would result from the proposed project, and the project would not contribute to any cumulative shade and shadow impact.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative shade and shadow impacts.

13. Utilities

a. Cumulative Impacts. The proposed project, and those projects listed in Table VI-1, would increase the demand for water service, wastewater service, and other utilities. As described in Section V.M, Utilities, the proposed project could exceed the capacity of some sewer lines in the vicinity of the project site. However, implementation of the proposed mitigation measure identified in Section V.M would reduce the cumulative impact on utilities to a less-than-significant level. In addition, utility service providers maintain long term projections for demand for their services within the City based on the City's General Plan and have developed strategies to meet anticipated future demand level.

b. Cumulative Mitigation Measures. No mitigation measures besides the one proposed in Chapter V.M, Utilities, would be necessary.

14. Public Services and Facilities

a. Cumulative Impacts. The proposed project, in addition to the projects listed in Table VI-1, would slightly increase the demand for police, fire, school, and recreational services. These services go through an annual budgeting process during which citywide priorities are established and service levels monitored, allowing for adjustment where needed. The cumulative impact to public services and facilities would be considered less than significant.

New development within the Downtown area is anticipated to generate an estimated 2,000 to 5,000 students,¹ depending upon the unit types and sizes ultimately developed. However, the additional students within the San Jose Unified School District (SJUSD), along with the proposed project's contribution to student generation, would not constitute a significant cumulative effect. The SJUSD recently closed several schools through its School Closure and Transition Plan due to overall declining enrollment. Due to the presence of surplus schools within the SJUSD, the proposed project would not likely require the construction of new schools.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative public services and facilities impacts.

15. Energy and Mineral Resources

a. Cumulative Impacts. The development of the proposed project, in addition to the cumulative projects identified in Table VI-1, would require connection to electrical and natural gas transmission and distribution systems maintained and served by Pacific Gas & Electric (PG&E). All expansion of

¹ San Jose, City of, 2005. *San Jose Downtown Strategy 2000 Final Environmental Impact Report*. June.

electrical or natural gas facilities and services would be undertaken in accordance with Title 24 and the City's General Plan policies related to energy savings. The application of these policies would ensure that the cumulative effect of this development on energy would be less than significant.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative energy impacts.

16. Global Climate Change

a. Cumulative Impacts. As discussed in Section IV.P, Global Climate Change the greenhouse gas emissions generated by the proposed project would combine with emissions across the State, nation, and globe to cumulatively contribute to global climate change. However, the proposed project would not impede the State's ability to reach emissions standards set forth in AB 32. The project's plans for an infill, high density, mixed-use development is the type of new development that is anticipated to result in a land use pattern that supports the State's efforts to reach emission standards. The proposed project would not contribute to a cumulatively considerable impact to global climate change.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative climate change impacts.

VII. ALTERNATIVES

The *CEQA Guidelines* require analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the project's basic objectives and avoid or substantially lessen any of the significant effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.¹ CEQA states that an EIR should not consider alternatives "whose effect cannot be ascertained and whose implementation is remote and speculative."

The proposed project and the project objectives are described in detail in Chapter III, Project Description, and the potential environmental effects of implementing the proposed project are analyzed in Chapter V, Setting, Impacts and Mitigation Measures. Table VII-1, Summary of Proposed Project Impacts, summarizes each of the potential impacts that could result from implementation of the proposed project.

Table VII-1: Summary of Proposed Project Impacts

Environmental Impacts	Level of Significance	
	Without Mitigation	With Mitigation
A. LAND USE	<i>No significant impacts were identified</i>	
B. POPULATION, EMPLOYMENT AND HOUSING	<i>No significant impacts were identified</i>	
C. TRANSPORTATION, CIRCULATION AND PARKING		
TRANS-1: When measured against the City of San Jose level of service impact criteria, three protected study intersections out of the five would be significantly impacted by the project: North 1st Street and Taylor Street (PM peak hour), North 10th Street and Hedding Street (AM peak hour) and 10th Street and Taylor Street (PM peak hour).	S	SU
TRANS-2: Based on the impact criteria for the proximity analysis, the significant increases in PM peak hour traffic volumes on the congested roadways in close proximity to the proposed GPA site constitute a significant adverse traffic impact.	S	SU
TRANS-3: Based on the results of the proposed GPA screenline analysis, the significant increases in V/C and the corresponding significant increases in traffic volumes on the congested (LOS E/F) roadways included in link set #2 during the PM peak hour constitutes a significant adverse traffic impact	S	SU
TRANS-4: The proposed project would cumulatively cause the total VMT and VHT to exceed the significance criteria for all roadways in Santa Clara County during both the AM and PM traffic periods, significantly increase peak direction traffic volumes across all three special subarea cordon lines and significantly increase V/C across regional screenline links.	S	SU
D. AIR QUALITY		
AIR-1: Demolition and construction period activities could generate significant dust, exhaust, and organic emissions.	S	LTS
AIR 2: Long-term project-related regional emissions would exceed the BAAQMD thresholds of significance for the ozone precursor ROG.	S	SU

¹ *CEQA Guidelines*, 2007, Section 15126.6.

Table VII-1 *Continued*

Environmental Impacts	Level of Significance	
	Without Mitigation	With Mitigation
E. NOISE		
<u>NOI-1</u> : Noise levels from construction activities may range up to 91 dBA Lmax at the nearest sensitive land uses to the project site.	S	LTS
<u>NOI-2</u> : Groundborne noise and vibration levels from construction activities may range up to 96 VdB Lmax at the nearest sensitive land uses to the project site.	S	LTS
<u>NOI-3</u> : The existing ambient noise environment would exceed the City of San Jose's land use compatibility guidelines.	S	LTS
F. GEOLOGY, SOILS AND SEISMICITY		
<u>GEO-1</u> : Seismically-induced ground shaking at the project could result in damage to life and/or property.	S	LTS
<u>GEO-2</u> : Structures or property at the project could be adversely affected by expansive soils or by settlement of project soils.	S	LTS
<u>GEO-3</u> : Differential settlement at the project site could result in damage to project buildings and other improvements.	S	LTS
<u>GEO-4</u> : Liquefaction at the project site could result in damage to buildings and other improvements.	S	LTS
G. HYDROLOGY AND WATER QUALITY		
<u>HYD-1</u> : Alteration of local drainage patterns could potentially result in exceedance of the capacity of downstream stormwater conveyance structures, resulting in localized flooding.	S	LTS
<u>HYD-2</u> : Construction activities and post-construction site uses could result in degradation of water quality in the receiving waters by reducing the quality of stormwater runoff.	S	LTS
<u>HYD-3</u> : Dewatering discharges may contain contaminants and if not properly managed could cause impacts to construction workers and the environment.	S	LTS
<u>HYD-4</u> : Redevelopment of the Corporation Yard site proposes below-ground parking structures which could be inundated by infiltrating groundwater and/or during extreme storm events.	S	LTS
H. HAZARDS		
<u>HAZ-1</u> : Development of the project could expose remediation/construction workers and/or the public to hazardous materials from contaminants in soil and groundwater, during and following site redevelopment activities.	S	LTS
<u>HAZ-2</u> : Improper use or transport of hazardous materials during construction activities could result in releases affecting construction workers and the general public.	S	LTS
I. CULTURAL AND PALEONTOLOGICAL RESOURCES		
<u>CULT-1</u> : Construction-related excavation may result in significant impacts to human remains.	S	LTS
<u>CULT-2</u> : Construction-related excavation (including site remediation) may result in impacts to significant archaeological resources.	S	LTS
<u>CULT-3</u> : New construction may result in significant impacts to the integrity of setting and feeling of the San Jose Japantown Historic District.	S	LTS
<u>CULT-4</u> : New construction may result in significant impacts to the integrity of design, materials, and workmanship of the San Jose Japantown Historic District.	S	LTS
<u>CULT-5</u> : New construction may result in inadvertent damage to paleontological resources.	S	LTS

Table VII-1 *Continued*

Environmental Impacts	Level of Significance	
	Without Mitigation	With Mitigation
J. BIOLOGICAL RESOURCES		
BIO-1: Construction of the proposed project could result in the removal of ordinance-size trees.	S	LTS
BIO-2: Construction activities may disturb nesting Cooper’s hawks and other native birds.	S	LTS
K. VISUAL RESOURCES		
VIS-1: The proposed project could detract from the existing visual character of historic resources located adjacent to the project site.	S	LTS
VIS-2: The removal of all ordinance sized trees from the project site would substantially damage scenic resources.	S	LTS
L. SHADE/SHADOW AND LIGHT/GLARE		
No significant impacts were identified		
M. UTILITIES		
UTIL-1: The proposed project could exceed the capacity of some sewer lines in the vicinity of the project site.	S	LTS
N. PUBLIC SERVICES AND FACILITIES		
No significant impacts were identified		
O. ENERGY AND MINERAL RESOURCES		
No significant impacts were identified		
P. GLOBAL CLIMATE CHANGE		
Not Applicable		

Note: LTS = Less Than Significant

S = Significant

SU = Significant and Unavoidable

Source: LSA Associates, Inc., 2007.

The primary objective of the proposed project is to redevelop the City's Japantown Corporation Yard and associated surface parking lot as a mixed-use development. Other objectives of the proposed project, as provided by the project applicant, are summarized as follows:

- Redevelop two underutilized sites owned by the City of San Jose to revitalize the City's Japantown Redevelopment Plan area;
- Create a vibrant mix of housing, retail, and community amenity space that will contribute to and complement the livability of the City's Downtown Frame Area and the Japantown area;
- Create a community amenity space that would reflect the diverse economic, ethnic, and cultural make-up of the City and the Japantown area;
- Provide market-rate new housing opportunities for buyers seeking housing within the City's Greater Downtown Strategy area;
- Provide affordable housing opportunities for senior citizens;
- Strengthen local-serving commercial and retail activity by providing ground floor spaces for such uses;
- Advance the goals of the Japantown Redevelopment Plan by eliminating blight, strengthening the economic base, furthering development of underutilized properties, and attracting additional private investment and employment in the Japantown Redevelopment Plan Area and adjoining areas;
- Advance the goals of the Jackson-Taylor Residential Strategy to create a mixed-use residential and commercial core that is urban in character and at a scale and density that is economically feasible;

- Further achieve the recommendation of the Jackson-Taylor Neighborhood Revitalization Plan to convert older industrial areas located in the heart of the Jackson-Taylor neighborhood to residential and neighborhood supporting commercial uses;
- Advance the goals of the City of San Jose Housing Initiative, which include encouraging high density residential and supporting mixed-use development near transit facilities;
- Create a public park/plaza or other gathering spot to serve as a focal point of interaction among neighborhood residents;
- Develop a pedestrian-friendly mix of housing and retail that is well integrated with its surroundings and encourages walkability in the neighborhood; and
- Develop a project that is both financially feasible and sustainable.

The following discussion is provided to meet the requirement of the *CEQA Guidelines* and provide the public and decision makers with information that will help them understand the adverse impacts and benefits associated with five potential alternatives to the proposed project. The five alternatives to the proposed project discussed in this chapter include the following:

1. No Development Alternative

The No Development alternative envisions the site remaining physically as it will be *after* the removal of existing structures on the Corporation Yard site, as part of a separate Redevelopment Agency project. The mixed-use development including residential units, retail space, and underground parking; the community amenity space; public park/plaza; and affordable senior housing complex would not be constructed. The demolition of the seven single-story structures on the Corporation Yard portion of the site would still occur as the demolition is a separate project that is subject to independent environmental clearance. Under this alternative, the Redevelopment Agency could conduct remediation activities but this is not currently proposed because the cost of remediation would more likely be covered as part of the development costs of a new project.

2. Existing General Plan Alternative

The Existing General Plan alternative would develop the site in accordance with existing General Plan land use designations. On the Corporation Yard site, the maximum density would be 50 units/acre with a maximum height of 65 feet. Development would cover approximately four-fifths of the Corporation Yard site with a five story building not to exceed 65 feet in height. The southerly portion of the site would be improved with an approximately one-acre park. The ground floor of the building(s) on the northern portion of the site would have up to 30,000 square feet of neighborhood-serving retail along Taylor Street, 6th Street, and 7th Street with parking on the interior of the ground floor. There would be additional underground parking on the site. The ground floor on the southerly side of the building facing the park area would provide up to 20,000 square feet of community amenity space. The four stories above the ground floor could provide a total development of approximately 585,000 square feet which could accommodate up to 210 market rate housing units (the maximum number allowed at 50 units/acre), 52 affordable senior-housing units, and 80,000 square feet of office use. For the surface parking lot site, the maximum residential density would be 25 units/acre. The surface parking lot site would be developed with 14 market rate housing units.

3. Reduced Density Alternative

The Reduced Density alternative would develop the site as follows: the building footprint would be reduced by 25 percent which would also reduce the number of residential units (all of which would be market rate) on the Corporation Yard site to 350. The park would be relocated to the northerly end of the Corporation Yard parcel and increased in size from one to two acres. There would continue to be up to 30,000 square feet of ground floor retail, 20,000 square feet of community amenity space and underground parking. By reducing the number of units on the Corporation Yard parcel from 624 to 350, the significant impact to the North 10th Street/Hedding Street intersection would be reduced to a less-than-significant level. (Even the smallest amount of development on the project site would result in a significant impact to the North 1st Street/Taylor Street and North 10th Street/Taylor Street intersections.²) As a result, the building footprint(s) could be reduced by approximately 25 percent to reduce potential impacts to undisturbed archeological resources and increase the size of the public park/plaza. The development of 85 units of affordable senior housing on the surface parking lot parcel would remain unchanged. A General Plan amendment and rezoning would still be required to allow greater density and height on both portions of the site.

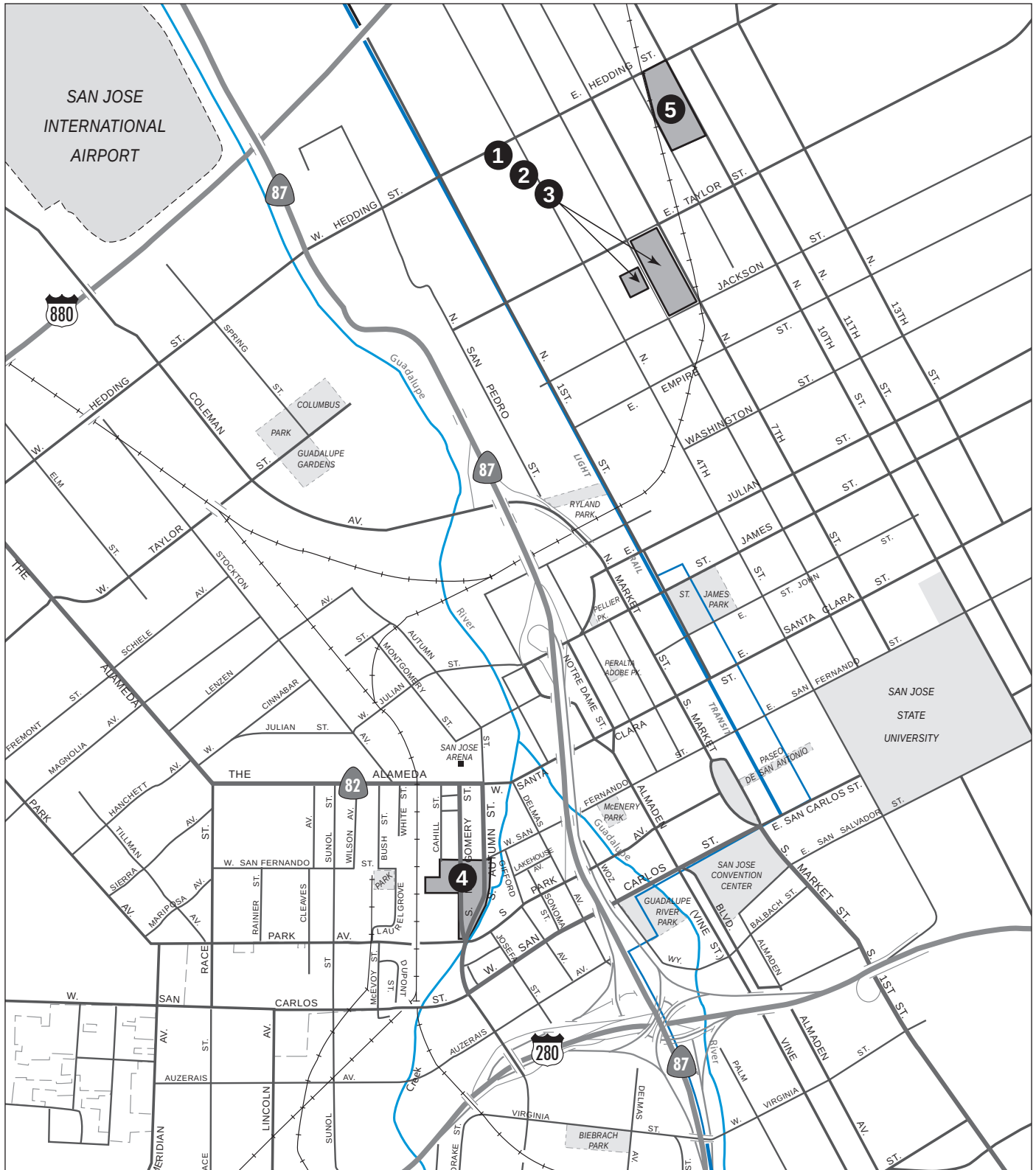
4. Diridon Area Alternative

The Diridon Area off-site alternative is a 5.49 acre site located along the western edge of the greater downtown area of San Jose, in the Burbank/Del Monte Strong Neighborhoods Initiative Area. It is situated between West San Fernando Street and Park Avenue, west of the Southern Pacific Railroad tracks and east of Los Gatos Creek, as shown on Figure VII-1, Project and Alternative Locations. The existing uses within the project site are commercial, with the exception of one single-family residence. The total square footage of existing buildings is approximately 120,085 square feet. The proposed development for this off-site alternative is the same as the proposed project: 15,000 to 30,000 square feet of ground floor commercial, 600 market-rate residential units, up to 24 live-work units, 85 affordable senior housing units, 1 acre of parkland and 20,000 square feet of community amenity space. (The range of commercial square footage and the live-work units are included to accommodate a variation on the proposed project - up to 15,000 square feet of retail space could be replaced with up to 24 live/work units.)

5. North 10th Street Alternative

The North 10th Street off-site alternative is a 5.38 acre site located two blocks north and two blocks east of the project site in the Jackson-Taylor Planned Residential Community. The site is bounded by Hedding Street to the north, North 10th Street to the east, East Mission Street to the south, and the Union Pacific Railroad tracks on the west, as shown in Figure VII-1. The existing uses on this alternative site include industrial and warehousing uses. The proposed development for this off-site alternative is the same as the proposed project: 15,000 to 30,000 square feet of ground floor commercial, 600 market-rate residential units, up to 24 live-work units, 85 affordable senior housing units, 1 acre of parkland and 20,000 square feet of community amenity space. (The range of commercial

² As described in Chapter V.C, when measured against the City of San Jose level of service impact criteria, three protected study intersections would be significantly impacted by the project: North 1st Street and Taylor Street (PM peak hour); North 10th Street and Hedding Street (AM peak hour); and North 10th Street and Taylor Street (PM peak hour). Protected Intersections are not required to maintain a Level of Service D, which is the City of San Jose standard, and any level of service degradation at these intersections is considered acceptable despite the significant impact. However, the Reduced Density alternative has been developed to reduce impacts to the protected intersections.



LSA

FIGURE VII-1

LEGEND

- 1 2 3** PROJECT LOCATION
EXISTING GENERAL PLAN ALTERNATIVE
REDUCED DENSITY ALTERNATIVE
- 4** DIRIDON AREA ALTERNATIVE
- 5** NORTH 10TH STREET ALTERNATIVE



0 800 1600
FEET

*Japantown Corporation Yard
Redevelopment Project EIR
Project and Alternative Locations*

SOURCE: CALIFORNIA STATE AUTOMOBILE ASSN., 2005; LSA ASSOCIATES, INC., 2007

I:/WDD0701 japantown/figures/Fig_VII.1.ai (1/2/08)

square footage and the live-work units are included to accommodate a variation on the proposed project - up to 15,000 square feet of retail space could be replaced with up to 24 live/work units.)

Table VII-2, Comparison of Development Alternatives, compares the proposed project land use type and amount to each alternative.

Table VII-2: Comparison of Development Alternatives

Development	Project Proposal	Development Alternatives			
		Existing GP	Reduced Density	Diridon Area Off-Site	North 10th Street Off-Site
Ground Floor Commercial (in square feet)	15,000 to 30,000 ^a	30,000	30,000	15,000 to 30,000 ^a	15,000 to 30,000 ^a
Market-Rate Housing (in units)	600	210	350	600	600
Live-work (in units)	0 to 24 ^a	0	0	0 to 24 ^a	0 to 24 ^a
Affordable Senior Housing (in units)	85	52	85	85	85
Office (in square feet)	0	80,000	0	0	0
Parkland (in acres)	1	1	1 to 2 ^b	1	1
Community Amenity Space (in square feet)	20,000	20,000	20,000	20,000	20,000

^a The project application includes the opportunity to replace up to 15,000 square feet of the 30,000 square feet of commercial development with up to 24 live-work units. For the purposes of this table, the commercial and the live-work units are both shown as a range to reflect this potential shift of square footage between two types of development.

^b As a result of the decrease in residential units, the building height on the Corporation Yard parcel could be reduced from a maximum of 14 stories and 175 feet in height, to a maximum of 6 stories and 65 feet in height; or the building footprint(s) could be reduced by approximately 25 percent to reduce potential impacts to archeological resources and increase the size of the public park/plaza.

Source: LSA Associates, Inc. 2007

For each alternative, a brief discussion of its principal characteristics is followed by an analysis of its anticipated environmental impacts. The emphasis of the analysis is on the alternative's relative adverse effects compared to the proposed project and a determination of whether or not the alternative would reduce, eliminate, or create new significant impacts.

A. NO DEVELOPMENT ALTERNATIVE (NO PROJECT)

1. Description of No Development Alternative

The No Development alternative envisions the site remaining physically as it will be *after* the removal of existing structures on the Corporation Yard site, proposed as part of a separate Redevelopment Agency project. The mixed-use development including residential units, retail space, and underground parking; the community amenity space; public park/plaza; and affordable senior housing complex would not be constructed. The demolition of the seven single-story structures on the Corporation Yard portion of the site would still occur. Under this alternative, the Redevelopment

Agency could conduct remediation activities but this is not currently proposed because the cost of remediation would more likely be covered as part of the development costs of a new project.

The No Development alternative would not meet or achieve any of the project's objectives. It would not promote redevelopment of the under-utilized former Corporation Yard parcel and the surface parking lot parcel. Neither would it contribute to the revitalization of the City's Japantown Redevelopment Plan area. No mixed-use development would occur, no park with a community amenity space would be provided and there would be no affordable senior housing complex. The No Development alternative would not implement the goals, policies and objectives of the General Plan, the Japantown Redevelopment Plan, the Jackson-Taylor Neighborhood Revitalization Plan, or the City of San Jose Housing Initiative. Lastly, the No Development alternative would not serve to strengthen local-serving commercial and retail activity by providing ground floor spaces for such uses.

2. Analysis of No Development Alternative

For the purposes of CEQA, environmental impacts are determined by assessing the change in the physical environment from the baseline condition for the project site. Since the No Development alternative maintains the baseline condition of the property, there are, by definition, no environmental impacts. It should be noted that the existing site soil contamination would remain, unless and until addressed as a separate project.

Thus, the No Development alternative would be environmentally superior in the technical sense that the impacts listed above in Table VII-1 would not occur. However, as discussed in the previous section, this alternative would fail to achieve any of the project's objectives summarized at the beginning of this chapter.

B. EXISTING GENERAL PLAN ALTERNATIVE

1. Description of the Existing General Plan Alternative

The Existing General Plan alternative would develop the site in accordance with existing General Plan standards. On the Corporation Yard site, the maximum density would be 50 units/acre with a maximum height of 65 feet. Development would cover approximately four-fifths of the Corporation Yard site with a five-story building not to exceed 65 feet in height. The southerly portion of the site would be improved with an approximately one-acre park. The ground floor of the building(s) on the northern portion of the site would have up to 30,000 square feet of neighborhood-serving retail along Taylor Street, 6th Street, and 7th Street with parking on the interior of the ground floor. There would be additional underground parking on the site. The ground floor on the southerly side of the building facing the park area would provide up to 20,000 square feet of community amenity space. The four stories above the ground floor could provide a total development of approximately 585,000 square feet which could accommodate up to 210 market rate housing units and 52 affordable senior-housing units (the maximum number of residential units allowed at 50 units/acre³), and 80,000 square feet of office use. For the surface parking lot site, the maximum density would be 25 units/acre. The surface parking lot site would be developed with 14 market rate housing units. A rezoning would still be required to allow greater density and height on both portions of the site.

³ The maximum number of units was calculated as follows: 50 x 5.23 acres = 261.5 units, rounded up to 262.

The Existing General Plan alternative would achieve some of the project's objectives. It would promote redevelopment of the under-utilized former Corporation Yard parcel and the surface parking lot parcel and contribute to the revitalization of the City's Japantown Redevelopment Plan area. A mixed-use development would be created, a park with a community amenity space would be provided and there would be an affordable senior housing. This alternative would be consistent with and fulfill the goals, policies and objectives of the General Plan, the Japantown Redevelopment Plan, the Jackson-Taylor Neighborhood Revitalization Plan, and the City of San Jose Housing Initiative. The local-serving commercial and retail activity would be strengthened by providing ground floor spaces for such uses. In comparison to the proposed project, however, this alternative would not provide as many market-rate new housing opportunities, nor provide as much affordable housing for senior citizens. This alternative may not be financially feasible or sustainable because per-unit development costs in addition to current land prices would exceed the market rate for housing units developed under this alternative. Thus, this alternative would not advance the goals of the Jackson-Taylor Residential Strategy to create a mixed-use residential and commercial core that is economically feasible.

2. Analysis of Existing General Plan Alternative

a. Land Use. Similar to the proposed project, this alternative would not result in any significant land use impacts. Implementation of the Existing General Plan alternative would not physically divide an existing community. The residential, commercial, office, parkland and community facility uses that would be developed as part of this alternative would be compatible with mix of uses within the area adjacent to the site. As discussed in Chapter V, Section A. Land Use, the mix of uses in the vicinity includes dwelling units ranging from single family homes to apartment, townhome and condominium complexes; ground floor commercial and retail uses; outdoor storage; and vacant land. The alternative 65 foot maximum height would be more similar to the adjacent one- to four-story buildings but height dissimilarities, in and of themselves, are not a land use impact.

b. Population, Employment and Housing. Similar to the proposed project, this alternative would not result in any significant population, employment or housing impacts. The Existing General Plan alternative would develop the site with up to 274 residential units, increasing the population on the site by 816 people (224 units x 3.18 persons/unit, and 52 senior housing units x 2 persons/unit). This would be approximately 1,259 people fewer than the proposed project. This increase in population would be within the population growth assumed for the City of San Jose and would be a less-than-significant impact. As the site is a vacant industrial site, this alternative would not displace existing housing or residents within the project site.

c. Transportation, Circulation and Parking. Development of up to 30,000 square feet of neighborhood-serving retail, up to 20,000 square feet of community amenity space, up to 274 housing units and 80,000 square feet of office use would generate fewer daily trips compared to the proposed project and would lead to a decrease of peak period effects on intersection congestion and freeway segments. (Even the smallest amount of development on the project site would result in a significant impact to the North 1st Street/Taylor Street and North 10th Street/Taylor Street intersections; adding only 1 vehicle trip to the I-880 freeway segment would worsen the operation of that segment to an unacceptable LOS F). Implementation of this alternative would generally reduce impacts when compared to the proposed project; however, the significant cumulative impact would remain with any residential development on the site.

As this alternative would not require a General Plan Amendment it would not be subject to the City's GPA CUBE model analysis and would not result in the associated long-range impacts.

d. Air Quality. The Existing General Plan alternative would result in slightly less construction activity within the project site than the proposed project. Mitigation measures would reduce air quality impacts during construction to less-than-significant levels. The Existing General Plan alternative would increase vehicular trips in San Jose, but to a lesser extent than the proposed project. The Existing General Plan alternative would result in increased pollutant emissions over existing conditions, but less of an increase than the proposed project. The operational emissions from the Existing General Plan alternative would not exceed the BAAQMD thresholds of significance and therefore have a less-than-significant effect on regional air quality.

e. Noise. Construction activity would expose surrounding land uses to short-term noise levels and vibration. Mitigation measures for the proposed project would reduce the noise and vibration impacts for this alternative to less-than-significant levels. Similar to the proposed project, mitigation measures would be implemented for the Existing General Plan alternative to reduce noise from local traffic on the proposed residential uses to a less-than-significant level. Because the proposed park would be located at the southerly end of the project site, farther from traffic noise on Taylor Street, noise impacts on outdoor recreational activities would be below the exterior noise threshold established by the City for parks. Building placement would not be necessary as a mitigation measure to reduce potential noise impacts. However, building placement could still be used to further reduce noise within the park. Like the proposed project, with implementation of mitigation measures, the Existing General Plan alternative would not result in significant noise impacts.

f. Geology, Soils and Seismicity. Any development on the site would be subject to seismic hazards, impacts from expansive soils, settlement related to non-uniformly compacted imported fill previously placed on the site, or liquefaction during a seismic event. The same mitigation measures which would reduce the potential impacts for the proposed project would also reduce these potential hazards to less-than-significant levels for the Existing General Plan alternative.

g. Hydrology and Water Quality. Similar to the proposed project, the Existing General Plan alternative would not be subject to impacts from coastal flooding hazards, seiches, or dam failure. The project does not include the alteration of an established stream or river, and the amount of impervious surface would be similar to or slightly less than what exists on the project site today, with little change in the amount of runoff. However, the drainage patterns may be somewhat modified locally from existing conditions, but these modifications would result in less-than-significant impacts. Similar to the proposed project, the Existing General Plan alternative could result in changes in local drainage patterns which could exceed the capacity of downstream stormwater conveyance structures; degrade the water quality of receiving waters because of the reduced quality of stormwater runoff related to construction activities and post-construction site uses; impact the environment and construction workers from contaminants in dewatering discharges; and inundate the below-ground parking structures by infiltrating groundwater and/or by extreme storm events. The mitigation measures identified for the proposed project would also reduce the impacts of the Existing General Plan alternative to a less-than-significant level.

h. Hazards and Hazardous Materials. Similar to the proposed project, the Existing General Plan alternative would not be subject to significant impacts related to the transport and use of hazardous

materials; emit hazardous emissions within one-quarter mile of an existing or proposed school; impair or interfere with an adopted emergency response or evacuation plan; cause exposure to wildland fire hazards; or cause exposure to aviation hazards. However, similar to the proposed project, the Existing General Plan alternative could expose remediation or construction workers, and/or the general public to hazardous soil and groundwater contaminants during construction or afterwards; and the improper use or transport of hazardous materials during construction could release hazardous materials and affect construction workers and/or the general public. Mitigation measures identified for the proposed project would reduce these significant impacts for the Existing General Plan alternative to a less-than-significant level.

i. Cultural and Paleontological Resources. The potential for impacts on cultural resources from the Existing General Plan alternative would be similar to the impacts from the proposed project. Site clearance and construction-related excavation could result in impacts to human remains, significant archaeological resources, and/or inadvertent damage to paleontological resources. Site clearance and new construction could result in significant impacts to the integrity and feeling of the Japantown Historic District. Under the Existing General Plan alternative, the open space would be located on the south portion of the project site; Buildings 8 through 11 would be across North 6th Street from a proposed public open space and Buildings 12 through 16 would be across the street from proposed buildings. Vibration associated with site clearance and new construction could result in adverse impacts to the integrity of design, materials and workmanship of buildings associated with the Japantown Historic District. The same mitigation measures identified for the proposed project would reduce the cultural resource impacts of the Existing General Plan alternative to a less-than-significant level.

j. Biological Resources. The project site is developed and unvegetated except for ornamental trees and shrubs. The Existing General Plan alternative would have similar impacts on resources as the proposed project and mitigation measures identified for the proposed project would also reduce these impacts to less-than-significant levels.

k. Visual Resources. The Existing General Plan alternative would develop the site in a manner similar to the proposed project, although with a lower building height and open space on the southern end of the site. Similar to the proposed project, the Existing General Plan alternative would not have any significant impacts on existing views, visual character, or the integrity of a neighborhood. However, it could have significant impacts on the visual character of historic resources and have an impact on scenic resources because of the removal of all ordinance-sized trees from the project site. The same mitigation measures which would reduce the impacts of the proposed project to less-than-significant levels would also reduce the impact of the Existing General Plan alternative to less-than-significant levels.

l. Shade/Shadow and Light/Glare. The Existing General Plan alternative would limit the maximum height of the buildings to 65 feet where the proposed project could be as tall as 175 feet. Similar to the proposed project, the Existing General Plan alternative would not cause any significant shade or shadow impacts, or light or glare impacts.

m. Utilities. The Existing General Plan alternative would create a mixed-use development similar to the proposed project and infrastructure would need to be extended onto the site to service the building(s). Demand on the water supply and waste water systems would be less than the proposed

project, and the impacts would be about the same or less compared with the proposed project. Impacts on water supply, sewage treatment capacity, solid waste services, natural gas, telecommunication and cable television services also would be less than significant. However, similar to the proposed project, the Existing General Plan alternative may generate sewage flows in excess of the capacity of the 8-inch sewer lines in North 7th Street and in North 6th Street. The mitigation measure identified for the proposed project would also reduce this potential impact for the Existing General Plan alternative to a less-than-significant level.

n. Public Services and Facilities. The Existing General Plan alternative would develop the site with less intensity than the proposed project. The potential impact to public services, including police, fire and schools, would be less than significant for the Existing General Plan alternative, which is also the case for the proposed project.

o. Energy and Mineral Resources. Similar to the proposed project, the Existing General Plan alternative would not have a significant impact on energy. Additionally, because the project site has no known mineral resources on site and a low likelihood of mineral resources being present on site, the Existing General Plan alternative would have a less-than-significant impact on mineral resources.

p. Global Climate Change. As discussed in Section V.F., Global Climate Change, there are no established thresholds of significance for determining when a project's contribution of greenhouse gas emissions is considered significant, or cumulatively considerable. Additionally, the relationship between land use projects and climate change is not yet understood or capable of being modeled at a scale that is meaningful for the evaluation of a particular development project. The Existing General Plan alternative would have slightly less development in comparison to the proposed project, and would have less greenhouse gas emissions when compared with the proposed project. Like the proposed project, the Existing General Plan alternative would be a higher-density, mixed-use development on an infill site in an area served by public transit, which reduces the project's contribution to greenhouse gas emissions. At this time, the Existing General Plan alternative's impact on global climate change is too speculative to determine.

C. REDUCED DENSITY ALTERNATIVE

1. Description of Reduced Density Alternative

The Reduced Density alternative would develop the site as follows: the number of residential units (all of which would be market rate) on the Corporation Yard site would be reduced to 350. As a result, the building height on the Corporation Yard parcel could be reduced from a maximum of 14 stories and 175 feet in height, to a maximum of 6 stories and 65 feet in height; or the building footprint(s) could be reduced by approximately 25 percent to reduce potential impacts to archeological resources and increase the size of the public park/plaza. The park would be relocated to the northerly end of the Corporation Yard parcel and the size of the park could be increased from one acre to two acres. There would continue to be up to 30,000 square feet of ground floor retail, 20,000 square feet of community amenity space and underground parking below the proposed structures. By reducing the number of units on the Corporation Yard parcel from 624 to 350, the significant impact to the North 10th Street/Hedding Street intersection would be reduced to a less-than-significant level. (Even the smallest amount of development on the project site would result in a significant impact to the North 1st Street/Taylor Street and North 10th Street/Taylor Street intersections.) The development of 85 units of affordable senior housing on the surface parking lot parcel would remain unchanged. A

General Plan amendment and rezoning would still be required to allow greater density and height on both portions of the site.

The Reduced Density alternative would achieve most of the project's objectives. It would promote redevelopment of the under-utilized former Corporation Yard parcel and the surface parking lot parcel and contribute to the revitalization of the City's Japantown Redevelopment Plan area. A mixed-use project would be developed, a park with a community amenity space would be provided and an affordable senior housing complex would be created. This alternative would be consistent with the overall goals, policies and objectives of the General Plan (although a General Plan amendment would be required), the Japantown Redevelopment Plan, the Jackson-Taylor Neighborhood Revitalization Plan, and the City of San Jose Housing Initiative. The local-serving commercial and retail activity would be strengthened by providing ground floor spaces for such uses. However, this alternative would not meet the project objectives related to the creation of high density residential uses to the same extent as the proposed project. Further, this alternative may not be financially feasible given the lower density, the cost per unit to develop, the current price of land, and recent market trends. This alternative may not advance the goals of the Jackson-Taylor Residential Strategy to create a mixed-use residential and commercial core that is economically feasible. Thus, this alternative may not ultimately advance the goals of the Japantown Redevelopment Plan by not attracting additional private investment and employment in the Japantown Redevelopment Plan area.

2. Analysis of the Reduced Density Alternative

a. Land Use. Similar to the proposed project, this alternative would not result in any significant land use impacts. Implementation of the Reduced Density alternative would not physically divide an existing community. The residential, ground floor commercial, parkland and community facility uses that would be developed as part of this alternative would be compatible with mix of uses within the area adjacent to the site. As discussed in Chapter V, Section A. Land Use, the mix of uses in the vicinity includes dwelling units ranging from single family homes to apartment, townhome and condominium complexes; ground floor commercial and retail uses; outdoor storage; and vacant land. Reducing the building footprint could provide more parkland which is needed in this area of San Jose. However, less residential units would result in less funds for park improvements under the City's Parkland Dedication Ordinance. More parkland could be created, but there would be fewer funds to improve or maintain the parkland under this alternative.

b. Population, Employment and Housing. Similar to the proposed project, this alternative would not result in any significant population, employment, or housing impacts. The Reduced Density alternative would develop the site with up to 435 residential units: 350 market-rate units on the Corporation Yard portion of the site, and 85 affordable senior housing units on the former parking lot portion of the site. This would increase the population on the site by 1,283 persons (350 units x 3.18 persons/unit, and 85 senior housing units x 2 persons/unit), approximately 965 people fewer than the proposed project. This increase in population is within the population growth assumed for the City of San Jose and would be a less-than-significant impact. As the site is a vacant industrial site, this alternative would not displace existing housing or residents within the project site.

c. Transportation, Circulation and Parking. Development of up to 30,000 square feet neighborhood-serving retail, up to 20,000 square feet of community amenity space, and up to 435 housing units use would decrease the number of daily trips and would decrease peak period effects on intersection congestion and freeway segments in comparison with the proposed project. By reducing the number of units on the Corporation Yard parcel from 624 to 350, the significant impacts to the

North 10th Street/Hedding Street intersection would be reduced to less-than-significant levels. (Even the smallest amount of development on the project site would result in a significant impact to the North First Street/Taylor Street and 10th Street/Taylor Street intersections; adding only 1 vehicle trip to the I-880 freeway segment would worsen the operation of that segment to an unacceptable LOS F). Implementation of this alternative would reduce impacts when compared to the proposed project; however, the significant cumulative impact would remain with any residential development on the site.

d. Air Quality. The Reduced Density alternative would result in slightly less construction activity within the project site than the proposed project. Mitigation measures would reduce air quality impacts during construction to less-than-significant levels. The Reduced Density alternative would increase vehicular trips in San Jose but to a lesser extent than the proposed project. The Reduced Density alternative would result in increased pollutant emissions, but less than the proposed project. Similar to the proposed project, the operational emissions from the Reduced Density alternative would exceed the BAAQMD thresholds of significance and would have a significant unavoidable effect on regional air quality.

e. Noise. Construction activity for the Reduced Density alternative would expose surrounding land uses to short-term noise levels and vibration. Mitigation measures would reduce the noise and vibration impacts during construction to less-than-significant levels. Similar to the proposed project, mitigation measures would be implemented to reduce noise from local traffic on the proposed residential uses to a less-than-significant level.

The relocation of the park/plaza to the northerly end of the site would result in a significant and unavoidable noise impact. Outdoor activity areas located within 359 feet of the centerline of Taylor Street could be exposed to noise levels exceeding the 60 dBA L_{dn} exterior noise threshold established by the City for parks. It would not be possible to reduce outdoor noise to City standards using standard mitigation measures such as sound walls or berms, while still providing access into the park/plaza from surrounding streets. Because the buildings on the site would be located to the south of the park/plaza, they would not provide any acoustical shielding from the noise from Taylor Street.

f. Geology, Soils and Seismicity. Any development on the site would be subject to seismic hazards, impacts from expansive soils, settlement related to non-uniformly compacted imported fill previously placed on the site, or liquefaction during a seismic event. The same mitigation measures which would reduce the potential impacts for the proposed project would also reduce these potential hazards to less-than-significant levels for the Reduced Density alternative.

g. Hydrology and Water Quality. Similar to the proposed project, the Reduced Density alternative would not be subject to impacts from coastal flooding hazards, seiches, or dam failure. The project does not include the alteration of an established stream or river, and the amount of impervious surface would be similar or slightly less than what exists on the project site today, with little change in the amount of runoff. However, the drainage patterns may be somewhat modified locally from existing condition, but these modifications would result in less-than-significant impacts. Similar to the proposed project, the Reduced Density alternative could result in changes in local drainage patterns which could exceed the capacity of downstream stormwater conveyance structures; degrade the water quality of receiving waters because of the reduced quality of stormwater runoff related to construction activities and post-construction site uses; impact the environment and construction workers from contaminants in dewatering discharges; and inundate of the below-ground

parking structures by infiltrating groundwater and/or by extreme storm events. The mitigation measures identified for the proposed project would also reduce the impacts on the Reduced Density alternative to a less-than-significant level.

h. Hazards and Hazardous Materials. Similar to the proposed project, the Reduced Density alternative would not be subject to significant impacts related to the transport and use of hazardous materials; emit hazardous emissions within one-quarter mile of an existing or proposed school; impair or interfere with an adopted emergency response or evacuation plan; cause exposure to wildland fire hazards; or cause exposure to aviation hazards. However, similar to the proposed project, the Reduced Density alternative could expose remediation or construction workers, and/or the general public to hazardous soil and groundwater contaminants during construction or afterwards; and the improper use or transport of hazardous materials during construction could release hazardous materials and affect construction workers and/or the general public. Mitigation measures identified for the proposed project would reduce these significant impacts for the Reduced Density alternative to a less-than-significant level.

i. Cultural and Paleontological Resources. The potential for impacts on cultural resources from the Reduced Density alternative would be similar to or slightly less than the impacts from the proposed project. Construction-related excavation could result in impacts to human remains, significant archaeological resources, and/or inadvertent damage to paleontological resources. However, by siting the open space on the northerly end of the site, the area of greatest archaeological sensitivity, impacts to archaeological resources could be reduced. New construction could result in significant impacts to the integrity and feeling of the Japantown Historic District. With the open space on the northern end of the site, Buildings 8 through 16 would be across North 6th Street from proposed buildings. Vibration associated with site clearance and new construction could result in adverse impacts to the integrity of design, materials and workmanship of buildings associated with the Japantown Historic District. The same mitigation measures identified for the proposed project would reduce the cultural resource impacts of the Reduced Density alternative to a less-than-significant level.

j. Biological Resources. The project site is developed and unvegetated except for ornamental trees and shrubs. The Reduced Density alternative would have similar impacts on resources as the proposed project and mitigation measures identified for the proposed project would also reduce these impacts to less-than-significant levels.

k. Visual Resources. As a result of the reduction of residential units under Reduced Density alternative, the building height on the Corporation Yard parcel could be reduced from a maximum of 14 stories and 175 feet in height, to a maximum of 6 stories and 65 feet in height; or the building footprint(s) could be reduced by approximately 25 percent to reduce potential impacts to archaeological resources and increase the size of the public park/plaza to be located on the northerly end of the Corporation Yard parcel. Similar to the proposed project, the Reduced Density alternative would not have any significant impacts on existing views, visual character, or the integrity of a neighborhood. However, the Reduced Density alternative could have significant impacts on the visual character of historic resources and have an impact on scenic resources because of the removal of all ordinance-sized trees from the project site. The same mitigation measures which would reduce the impacts of the proposed project to less-than-significant levels would also reduce the impacts of the Reduced Density alternative to less-than-significant levels.

l. Shade/Shadow and Light/Glare. Similar to the proposed project, the Reduced Density alternative would not cause any significant shade or shadow impacts, or light or glare impacts.

m. Utilities. The Reduced Density alternative would create a mixed use development similar to the proposed project and infrastructure would need to be extended onto the site to service the buildings. Demand on the water supply and waste water systems would be less than the proposed project, and the impacts would be about the same or less compared with the proposed project. Impacts on water supply, sewage treatment capacity, solid waste services, natural gas, telecommunication and cable television services also would be less than significant. However, similar to the proposed project, the Reduced Density alternative may generate sewage flows in excess of the capacity of the 8-inch sewer lines in North 7th Street and in North 6th Street. The mitigation measure identified for the proposed project would also reduce this potential impact for the Reduced Density alternative to a less-than-significant level.

n. Public Services and Facilities. The Reduced Density alternative would develop the site with slightly less intensity than the proposed project. The potential impacts to public services, including police, fire and schools, would be less than significant for the Reduced Density alternative, which is also the case for the proposed project. In addition, the Reduced Density alternative could include up to 2 acres of parkland, slightly more than would be provided by the proposed project. However, as discussed above, fewer residential units would result in fewer funds for park improvements or for park maintenance.

o. Energy and Mineral Resources. Similar to the proposed project, the Reduced Density alternative would not have a significant impact on energy. Additionally, because the project site has no known mineral resources on site and a low likelihood of mineral resources being present on site, the Reduced Density alternative would have a less-than-significant impact on mineral resources.

p. Global Climate Change. As discussed in Section V.F., Global Climate Change, there are no established thresholds of significance for determining when a project's contribution of greenhouse gas emissions is considered significant, or cumulatively considerable. Additionally, the relationship between land use projects and climate change is not yet understood or capable of being modeled at a scale that is meaningful for the evaluation of a particular development project. The Reduced Density alternative would have slightly less development in comparison to the proposed project, and would have less greenhouse gas emissions when compared with the proposed project. Like the proposed project, the Reduced Density alternative would be a higher-density, mixed-use development on an infill site in an area served by public transit. At this time the Reduced Density alternative's impact on global climate change is too speculative to determine.

D. DIRIDON AREA ALTERNATIVE

1. Description of the Diridon Area Alternative. In order to most clearly distinguish the trade-off in potential impacts – both *beneficial* and *adverse* – two alternate locations for the project have been selected. The Diridon Area alternative evaluates the same development program as the proposed project, but at another location within the City of San Jose. This section describes the Diridon Area existing and surrounding land uses and the development proposed under this alternative.

a. Diridon Area Location. The Diridon Area off-site alternative is a 5.49 acre site located along the western edge of the greater downtown area of San Jose, in the Burbank/Del Monte Strong

Neighborhoods Initiative Area and within the Midtown Planned Community. It is situated between West San Fernando Street and Park Avenue, west of the Southern Pacific Railroad tracks and east of Los Gatos Creek, as shown on Figure VII-1. The site is divided into three parcels by South Montgomery Street and South Autumn Street, as summarized in Table VII-3 below and shown in Figure VII-2, The Diridon Area Off-Site Alternative with Building Locations. The City of San Jose Redevelopment Agency owns the area west of Autumn Street, while the area east of Autumn Street is privately owned.

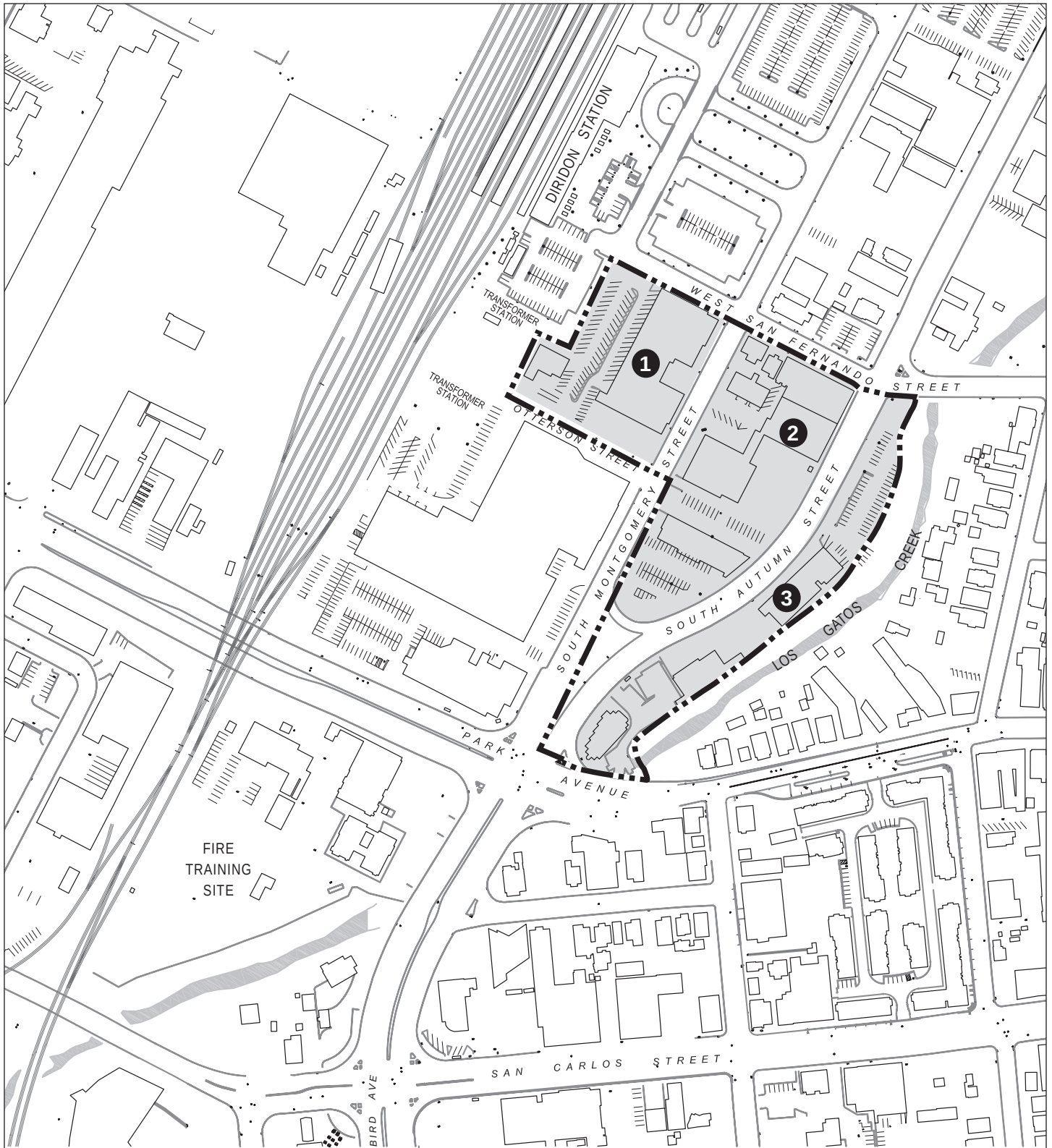
Table VII-3: Parcels and Existing Uses on the Diridon Site

Current Land Uses	Address	APNs	Site Acreage	Building Area (Sq. Ft.)
Parcel 1			1.0	
Former Stephen's Meat Products (demolished December 2007)	105 S. Montgomery St.	261-35-007, -003, -010, and -006	1.0	27,200
Parcel 2			2.75	
Patty's Inn and single-family residence	102 S. Montgomery St. and 530 W. San Fernando St.	259-48-012	0.15	2,900
Amtrak offices	510 W. San Fernando St. 114 S. Montgomery St. and 115 S. Autumn St.	259-48-011, and -013	1.0	22,964
Arc Gas Products	140 S. Montgomery St.	259-48-052	0.6	12,300
Pacific Blue Traders garden store	150 S. Montgomery St.	259-48-053	1.0	9,710
Parcel 3			2.74	
Creative Security Concepts Inc. Alliance for Community Care	150 and 150A S. Autumn St.	259-48-071, -074	1.0	28,314
CarQuest	170 S. Autumn St.	259-48-060	0.35	12,197
Multi-tenant office building	595 Park Avenue	259-48-073, and -057	0.55	4,500
Amtrak parking lot	115 S. Autumn St.	259-48-011	0.84	---

Source: City of San Jose and LSA Associates, Inc., 2007.

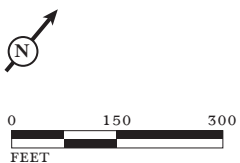
Development in the vicinity of the alternative site includes a mix of single- and multi-family residential units, commercial, office, and light industrial land uses. The uses within the project site are commercial, with the exception of one single-family residence. The total square footage of existing buildings is approximately 120,085 square feet. Surrounding land uses include the following:

- Vicinity to the North.** W. San Fernando Street, a two-lane road, forms the northern boundary of the project site. North of W. San Fernando Street are commercial, light industrial, and transportation related uses including under- and above-ground light rail lines and Diridon Station, which is on the National Register of Historic Places. Uses along W. San Fernando Street in the vicinity of the project site include a restaurant, commercial establishments, and a two-story tri-plex residence at the corner of W. San Fernando Street and S. Montgomery Street. Beyond these uses, north of the underground light rail line, are large expanses of surface parking lots serving the area, as well as the 17,000 seat HP Pavilion, which is approximately a ¼-mile from the Diridon Area site. The Norman Y. Mineta San Jose International Airport, which is located approximately 1½ miles northwest of the Diridon Area site.



LSA

FIGURE VII-2



*Japantown Corporation Yard
Redevelopment Project EIR
Diridon Area Off-Site Alternative*

- **Vicinity to the East.** Los Gatos Creek forms the eastern boundary of the Diridon Area site. The Delmas Park neighborhood is located immediately east of and adjacent to the creek. The Delmas Park neighborhood consists predominantly of low- to medium-density residential uses, mixed with some general commercial and some light industrial uses southeast of Park Avenue. Farther to the east, SR 87 runs in a north-south direction, separating the Diridon Area from the Core Area of Downtown San Jose.
 - **Vicinity to the West. The Diridon Area site is bordered on the west by railroad tracks running** south of Diridon Station. There are approximately seven sets of tracks at the station's widest point; the right of way ranges from 120 to 290 feet. These lines continue southeast of the project site and accommodate Caltrain, Altamont Commuter Express (ACE), and Amtrak trains, which run frequently through the area. Diridon Station is also a light rail stop and the Vasona Corridor light rail lines parallel the rail-road tracks south to W. San Carlos Street where they continue in a southwestern direction. Immediately west of the tracks, and north of Park Avenue, medium-density residential townhomes are currently being constructed. Interstate 880 (I-880), runs in a north/south direction approximately 2 miles west from the project site.
 - **Vicinity to the South.** The southern boundary of the Diridon Area site is formed by Park Avenue and two properties containing historic resources. Immediately south of the alternative site is 145 South Montgomery, the Sunlite Baking Company building, now used by SBC Communications as an installation and repair facility. At the corner of Park Avenue and S. Montgomery Street is the former KNTV Television Studio, addressed as 645 Park Avenue. This building is currently vacant. South, across Park Avenue is the City's Fire Training facility. Land uses south of Park Avenue and west of Bird Avenue consist of industrial, commercial and residential uses. Interstate 280 (I-280) curves in a northeast/southwest direction approximately a ½-mile south of the project site.
- b. Diridon Area Site Development.** The development of the off-site alternative would demolish the existing buildings and redevelop the site as a mixed-use project including the following:
- Up to 30,000 square feet of ground floor commercial facing West San Fernando Street. Up to 15,000 square feet of retail space could be replaced with up to 24 live/work units (northern portions of Parcels 1 and 2).
 - Above the ground floor commercial space, up to 600 market rate residential units would be constructed in buildings ranging from 6 to 14 stories (Parcels 1 and 2).
 - 85 units of affordable senior housing in a six-story building would be constructed on the northern portion of the block east of South Autumn Street (Parcel 3).
 - 20,000 square feet of community amenity space would be constructed on the southern portion of the block east of South Autumn Street. This would place the community amenity space across Park Avenue from the fire training facility which is intended to be redeveloped as a neighborhood park with playing fields (Parcel 3).
 - Up to 940 underground/surface parking spaces would be provided throughout the site.
 - One acre of the site which is adjacent to Los Gatos Creek would be improved as a neighborhood park (Parcel 3).

The General Plan designation for the Diridon Area alternative site is provided by the Midtown Specific Plan which designates most of the site as Mixed Use, and designates the easterly edge of the site as General Commercial. The site is zoned Light Industrial (LI) except for the portion of the site at the corner of Park Avenue and Autumn Street adjacent to Los Gatos Creek. This portion of the alternative site is zoned General Commercial (CG). The Diridon Area alternative may be consistent with the sites existing General Plan land use designation, but the site would have to be rezoned from Light Industrial to a designation allowing the mixed-use project which includes residential units.

The Diridon Area alternative would achieve few of the project's objectives. This alternative would provide market-rate new housing opportunities and would provide affordable housing opportunities for senior citizens. However, it would not promote redevelopment of the under-utilized former Corporation Yard parcel and the surface parking lot parcel nor contribute to the revitalization of the City's Japantown Redevelopment Plan area. While the mix of housing, retail, and community amenity would contribute to and complement the Greater Downtown Strategy Area, it would not do so for Japantown. This alternative would not advance the goals of the Japantown Redevelopment Plan or the Jackson-Taylor Neighborhood Revitalization Plan.

2. Analysis of Diridon Area Alternative

a. Land Use. The Diridon Area alternative site is subject to development policies from the following policy documents:

- San Jose 2020 General Plan and the Midtown Specific Plan.
- The Downtown Strategy 2000, San Jose Greater Downtown Strategy for Development.
- Diridon/Arena Area Strategic Development Plan.
- Burbank/Del Monte Neighborhood Improvement Plan.

The Midtown Specific Plan (MSP) provides the land use designation for the alternative site and the nearby area. The goal of the MSP is to create a mixed-use community that includes high-density commercial and residential areas that are geared towards transit, while maintain existing service and industrial uses in the area. In particular, the MSP calls for intensification of development immediately adjacent to the Diridon Station and the West San Carlos Light Rail Transit Station with a wide range of housing choices.

The Downtown Strategy 2000, San Jose Greater Downtown Strategy for Development, provides a conceptual framework for redevelopment that support the revitalization of the traditional downtown by allowing higher density infill development and replacement of underutilized uses. The alternative site is within the Greater Downtown Area.

The Diridon/Arena Area Strategic Development Plan includes strategies to complete the Downtown Riverfront Park, expand the Diridon Station to serve as a significant transit station, enhance existing residential neighborhoods, reinforce downtown living with additional high density residential development, provide a variety of commercial and mixed-used development opportunities, and create a lively pedestrian environment with excellent connectivity to the downtown and regional transit. The alternative site is within this plan area.

The alternative site is in the northeast corner of the Burbank/Del Monte Neighborhood Improvement Plan area. The Plan seeks positive changes in the neighborhood related to developing parks and open space, providing community facilities, encouraging a pedestrian-friendly environment, strengthen economic development, and improve circulation, transportation and parking.

The proposed Diridon Area alternative would be in compliance with these development policies by developing an infill site with a mixed-use project in proximity to the Downtown and to transit. Additionally, the ground-floor commercial development would contribute to creating pedestrian activity on the street, and the alternative includes the provision of community facilities and enhancement of Los Gatos Creek with additional open space. Thus, the Diridon Area alternative would be consistent with the City's General Plan and other development policy documents. Similar to the proposed project, this alternative would not result in any significant land use impacts. Implementation of the Diridon Area alternative would not physically divide an existing community. The residential, commercial, parkland and community facility uses that would be developed as part of this alternative would be compatible with the mix of uses that exists in the area adjacent to the site which includes light industrial uses, ground floor commercial and retail uses; surface parking lots, and dwelling units ranging from single family homes to apartment, townhome and condominium complexes.

b. Population, Employment and Housing. Similar to the proposed project, this alternative would not result in any significant population, employment or housing impacts. The Diridon Area alternative would develop the site with up to 600 market-rate residential units, 85 senior housing units, and up to 24 live-work units, increasing the population on the site by 2,154 people (624 units x 3.18 persons/unit, and 85 senior housing units x 2 persons/unit). This is the same as the proposed project. This increase in population would be within the population growth assumed for the City of San Jose and would be a less-than-significant impact. There is only one single family house on the alternative site that would be displaced.

c. Transportation, Circulation and Parking. The alternative site is well served by transit because it is adjacent to the Diridon train station which is served by numerous bus, Light Rapid Transit (LRT), and commuter rail routes. Development of 685 residential units, up to 30,000 square feet of neighborhood-serving retail, up to 20,000 square feet of community amenity space, and a park would increase the number of daily trips from the site and would lead to an increase in peak period effects on intersection congestion and freeway segments. Based on analysis included in the Baseball Stadium in the Diridon/Arena Area EIR,⁴ implementation of this alternative could result in significant impacts to three intersections: Autumn Street/Santa Clara Street, Delmas Avenue/Park Avenue, and Delmas Avenue/San Fernando Street. Implementation of this alternative may also result in significant impacts to SR 87. In addition, the significant cumulative impact would remain with any residential development in the area.

d. Air Quality. The Diridon Area alternative would result in similar levels of construction activity as the proposed project although, under this alternative, demolition activities would also occur. However, the same or similar standard mitigation measures identified for the construction impacts on air quality also would reduce air quality impacts for this alternative to less-than-significant levels. The Diridon Area alternative would increase vehicular trips in San Jose, to the same extent as the

⁴ San Jose, City of, 2007. *Baseball Stadium in the Diridon/Arena Area Final EIR*. March

proposed project. The Diridon Area alternative would result in increased pollutant emissions over existing conditions to the same extent as the proposed project. Similar to the proposed project, the operational emissions from the Diridon Area alternative would exceed the BAAQMD thresholds of significance and therefore have a significant unavoidable effect on regional air quality.

e. Noise. The Diridon Area is subject to noise from the adjacent railroad tracks, from the San Jose International Airport located approximately 1.7 miles northwest of the project site, and from vehicle traffic noise from State Route 87, Interstate 280, West San Carlos Street, Park Avenue, West San Fernando Street, and South Autumn Street. The closest off-site sensitive noise receptors would be the residential land uses located approximately 120 feet to the east of this alternative project site, across Los Gatos Creek.

Demolition and construction activities would expose surrounding land uses to short-term noise levels and vibration. Mitigation measures for the proposed project could be implemented to reduce the noise and vibration impacts of this alternative to less-than-significant levels. Similar to the proposed project, mitigation measures could be implemented that would reduce noise from local traffic on the proposed residential uses to a less-than-significant level.

The proposed development of residential units and outdoor active use areas on the site, would establish new sensitive receptors in an area with existing high ambient noise levels. The alternative site is located outside of the 65 dBA CNEL noise contour for the San Jose International Airport, so aircraft noise would be considered a less-than-significant impact. The noise levels from the existing commuter trains and trolleys would significantly impact sensitive land uses proposed for the Diridon Area site. However, noise levels from the nearby streets and state routes would also exceed the City's normally acceptable land use compatibility standards for new residential developments. Design features are available which could reduce these transportation noise levels to comply with the City's residential interior noise standard of 45 dBA L_{dn} . These features include the use of window and wall assemblies of sufficient sound transmission class ratings to comply with the City's interior noise standards. Similar to the propose project, additional mitigation measures would require the provision of an alternate form of ventilation, such as an air conditioning system, in order to ensure that windows can remain closed for a prolonged period of time. Outdoor residential areas, if screened by buildings, may also be able to comply with the City's noise standards. Finally, the park area along Los Gatos Creek would be subject to project related transportation and operational noise levels in excess of 60 dBA L_{dn} . Placing the residential and community amenity buildings to provide shielding from surrounding roadways would provide some noise attenuation for this recreational area, however, it is likely that the park would be exposed to noise in excess of 60 dBA L_{dn} , which is a condition the General Plan recognizes as acceptable for uses Downtown and near major transportation sources.

f. Geology, Soils and Seismicity. Any development on the site would be subject to seismic hazards, impacts from expansive soils, settlement related to non-uniformly compacted imported fill previously placed on the site, or liquefaction during a seismic event. The Diridon Area site is located within a State of California-defined Liquefaction Hazard Zone with a moderate liquefaction rating based on the Association of Bay Area Governments studies.⁵ The site is relative flat so there are not

⁵ ABAG, 2003. *Liquefaction Hazard Map for San Jose, Scenario: Entire San Andreas, Magnitude 7.9 Earthquake*, accessed 12/13/05 www.abag.ca.gov/cgi-bin/pickmapliq.pl.

slope stability impacts. The same mitigation measures which would reduce the potential impacts for the proposed project would also reduce these potential hazards to less-than-significant levels for the Diridon Area alternative.

g. Hydrology and Water Quality. Similar to the proposed project, the Diridon Area alternative site would not be subject to impacts from coastal flooding hazards, seiches, or dam failure, and it is not within a 100-year flood hazard zone. The project would not include the alteration of an established stream or river, and the amount of impervious surface would be similar to or slightly less than what exists on the project site today, with little change in the amount of runoff. Drainage patterns may be somewhat modified locally from existing conditions, but these modifications would result in less-than-significant impacts. This alternative would have the same potential impacts as the proposed project including:

- exceeding the capacity of downstream stormwater conveyance structures, resulting in localized flooding;
- construction activities and post-construction uses could result in degradation of water quality by reducing the quality of stormwater runoff;
- dewatering of the site may contain contaminants that could cause impacts to construction workers and the environment if not properly managed; and
- below-ground parking structures could be inundated by infiltrating groundwater and/or during extreme storm events.

The same mitigation measures which would reduce the potential impacts for the proposed project would also reduce these potential hazards to less-than-significant levels for the Diridon Area alternative.

h. Hazards and Hazardous Materials. Similar to the proposed project, the Diridon Area alternative would not be subject to significant impacts related to the transport and use of hazardous materials; emit hazardous emissions within one-quarter mile of an existing or proposed school; impair or interfere with an adopted emergency response or evacuation plan; cause exposure to wildland fire hazards; or cause exposure to aviation hazards. Similar to the proposed project, the applicant would be required to obtain a No Hazard Determination from the FAA to allow 175 foot buildings on the site. In addition, similar to the proposed project, the Diridon Area alternative could expose remediation or construction workers, and/or the general public to hazardous soil and groundwater contaminants during construction or afterwards; and the improper use or transport of hazardous materials during construction could release hazardous materials and affect construction workers and/or the general public.

The majority of the buildings currently on the project site were constructed prior to 1980 and may contain lead-based paint, asbestos containing building materials, and/or other common hazardous materials. Exposure to these materials during demolition may potentially result in serious health risks to construction workers and the nearby public. Federal, State, and local requirements govern the abatement of lead-based paint and removal of asbestos or suspected asbestos-containing materials, including special construction worker health and safety standards for sites where lead and/or asbestos may be present. Other regulations require the proper handling and disposal of hazardous wastes.

These requirements are promulgated by federal and State agencies and the Bay Area Air Quality Management District (BAAQMD).

Impact ALT HAZ-1: Demolition of any structures containing lead-based paint, asbestos-containing building materials, or other hazardous materials could release airborne particles of hazardous materials, which may affect construction workers and the public.

Mitigation Measure ALT HAZ-1: As a condition of approval for any demolition permit for a structure at the project site, a lead-based paint and asbestos-containing material survey shall be performed at the structure by a qualified environmental professional. Based on the findings of the survey, identified asbestos hazards shall be abated by a certified asbestos abatement contractor in accordance with the regulations and notification requirements of the BAAQMD. Federal and State construction worker health and safety regulations shall be required during renovation or demolition activities. If loose or peeling lead-based paint are identified, they shall be removed by a qualified lead abatement contractor and disposed of in accordance with existing hazardous waste regulations. Other hazardous wastes generated during demolition activities, such as fluorescent light tubes, mercury switches, and computer displays, shall be managed and disposed of in accordance with existing hazardous waste regulations.

Implementation of this measure would reduce this impact to a less-than-significant level. Mitigation measures identified for the proposed project would reduce the other significant hazardous materials impacts for the Diridon Area alternative to a less-than-significant level.

i. Cultural and Paleontological Resources. Two buildings located south and west of the Diridon Area alternative site (the former Sunlite Baking Company and KNTV Broadcast Facility buildings) appear to be eligible for listing in the California Register and candidates for City Landmark status. Diridon Station, located to the north and west of the alternative site is listed in the national Register of Historic Places. These historic resources would be affected by the demolition of existing buildings and redevelopment of the site which would alter the context for the historic resources. This impact to the Diridon Station could be significant and would be mitigated by designing the new development in conformance with the Secretary of the Interior's Standards. The site may also contain unknown buried archaeological resources, paleontological resources, or human remains. However, the archaeological sensitivity of the Diridon Area site is well below that of the Japantown Corporation Yard site. Mitigation measures identified for the proposed project would reduce the significant impacts for the Diridon Area alternative to a less-than-significant level.

j. Biological Resources. The Diridon Area alternative site is developed with buildings, asphalt pavement, parking lots and concrete surfaces and mostly unvegetated except for ornamental trees and shrubs. There are no potential wetlands on the project site. No special status species are present on the site or likely to use the site, with the exception of Cooper's hawk. There are 24 ordinance-sized trees within the alternative site. Many of these are located along Montgomery Street and Autumn Street and may not need to be removed for the alternative project. Similar to the proposed project, implementation of the mitigation measure requiring the replacement of ordinance sized trees would reduce this impact to a less than significant level. A portion of the Los Gatos Creek is immediately adjacent to the alternative site's eastern boundary and has a riparian corridor along the creek, primarily comprised of cottonwood trees, which may provide suitable nest sites for Cooper's hawks and other raptors such as red-shouldered hawk. Although none of the trees will be removed during construction of the alternative project, construction activities adjacent to the riparian corridor (i.e.,

demolition of existing buildings, construction of new facilities) could disturb nesting pairs of these birds, causing nest abandonment, loss of young, or reduced nesting success. Similar to the proposed project, implementation of the mitigation measure requiring specific timing for construction work or preconstruction surveys would reduce this potential impact to a less than significant level.

k. Visual Resources. The Diridon Area site is developed with one- to three-story buildings, and is generally flat with limited vegetation and is visible from the public streets and sidewalks along West San Fernando Street; Park Avenue, a major collector street; and from West San Carlos Street and Bird Avenue, both major arterials. The site is also visible to passengers in trains running on the nearby railroad tracks. The built-up character of the area surrounding the alternative site limits more distant off-site views of the site. Interstate-280 (I-280) and State Route 87 (SR87) are both designated scenic urban thoroughways within one mile of the project site. There are three significant historic resources adjacent to the alternative site.

Redevelopment of the alternative site with the mixed-use development containing ground floor commercial with residential towers above of 6 to 14 stories, and an affordable senior housing project of 6 stories, and a one-to two-story community amenity would result in a substantial change in the visual character of the site. However, there are no significant public views across the site so the alternative would have a less-than-significant impact on existing views. The alternative site can be seen from elevated vantage-points such as I-280 and SR 87; however, these views are relatively distant views, and the development in the Diridon Area alternative would blend with the existing City skyline. No scenic vistas would be significantly affected. Similar to the proposed project, although the Diridon alternative would be a substantial change in development on the alternative site, it would not degrade the existing visual character of the neighborhood nor detract from the integrity of the neighborhood. The ground floor commercial would provide street level building orientation and activity, and the design of the Diridon Area alternative would be sensitive to the neighborhood context. While the removal of ordinance-sized trees could significantly damage scenic resources, the mitigation identified for the proposed project to address removal of trees would also mitigate the potential impact on the alternative site to a less-than-significant level.

The Diridon Area alternative has the potential to alter the visual character and setting of the three historic resources, including the former Sunlite Baking Company and KNTV Broadcast Facility, and most importantly for the Diridon Station. New construction would be required to meet the Secretary of the Interior's Standards to provide an appropriate setting for the historic structures.

l. Shade/Shadow and Light/Glare. Similar to the proposed project, the Diridon Area alternative would not cause any significant shade or shadow impacts, or light or glare impacts. The lighting within the alternative project would be similar to the lighting used in the surrounding area. The buildings on the alternative site may be as tall as 175 feet; however, there are no major open space areas adjacent to the site and the Los Gatos Creek corridor shaded by existing vegetation.

m. Utilities. The Diridon Area alternative would redevelop an infill site with a mixed-use development. Utilities would need to be reconfigured and extended onto the site to service the proposed development. Demand for utility services would be the same as for the proposed project. Impacts on sewage treatment capacity, sanitary collection system, natural gas, telecommunication and cable television services would be less than significant. However, the project would include the demolition of existing buildings on the alternative site. Implementation of the following mitigation measure would reduce this impact to a less-than-significant level.

Impact ALT UTIL-1: The solid waste generated during the demolition, land clearing and construction could interfere with waste diversion goals mandated by the California Integrated Waste Management Act.

Mitigation Measure UTIL-1: Prior to the demolition of any structure on the site, the project applicant shall prepare a waste management plan for the recycling of construction and demolition materials. The waste management plan shall ensure that a minimum of 50 percent (by weight) of construction, demolition, and land clearing waste is recycled or salvaged.

n. Public Services and Facilities. The Diridon Area alternative would develop the alternative site with the same types and amounts of development as the proposed project. Similar to the proposed project, the Diridon Area alternative would not have any significant impacts on police protection services, fire and emergency medical services, park and recreation facilities, or schools.

o. Energy and Mineral Resources. Similar to the proposed project, the Diridon Area alternative, would not have a significant impact on energy. Additionally, because the project site has no known mineral resources on site and a low likelihood of mineral resources being present on site, the Diridon alternative will have a less-than-significant impact on mineral resources.

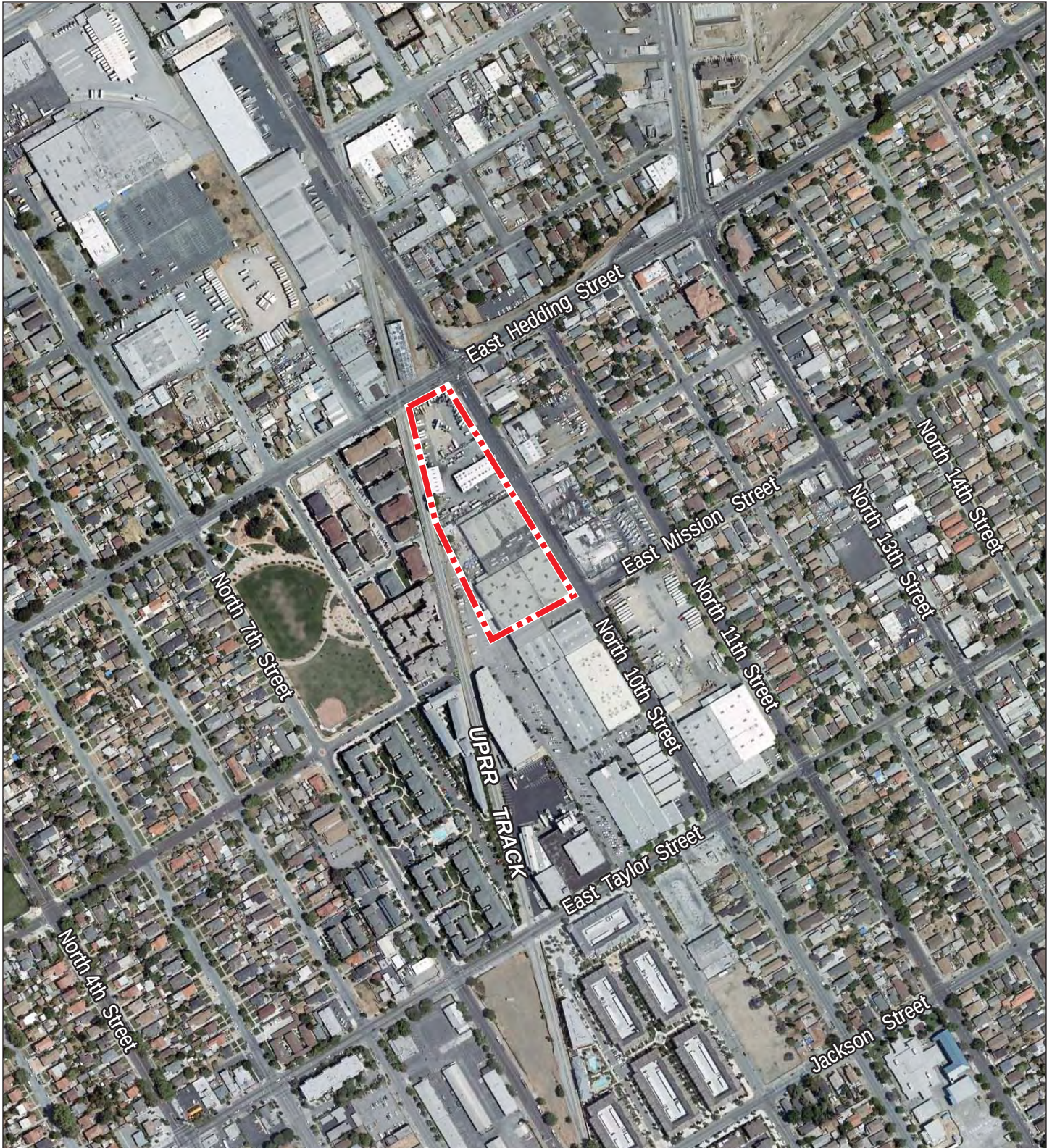
p. Global Climate Change. As discussed in Section V.F., Global Climate Change, there are no established thresholds of significance for determining when a project's contribution of greenhouse gas emissions is considered significant, or cumulatively considerable. Additionally, the relationship between land use projects and climate change is not yet understood or capable of being modeled at a scale that is meaningful for the evaluation of a particular development project. The Diridon Area alternative would have the same amount of development as the proposed project. Like the proposed project, the Diridon Area alternative would be higher-density, mixed-use development on an infill site in an area served by public transit, which reduces a project's contribution to greenhouse gas emissions. At this time, the Diridon Area alternative's impact on global climate change is too speculative to determine.

E. NORTH 10TH STREET ALTERNATIVE

1. Description of the North 10th Street Alternative

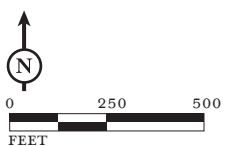
The North 10th Street off-site alternative is a 5.38-acre site located at the northwest corner of North 10th Street and East Mission Street, within the Jackson-Taylor Planned Residential Community. The site is bounded by North 10th Street to the east, East Mission Street to the south, North 9th Street and the railroad tracks to the west, and East Hedding Street to the north. Please refer to Figure VII-3, North 10th Street Off-Site Alternative. In the vicinity of this alternative site, North 9th Street and East Mission Street have been abandoned by the City and half of these adjacent rights-of-way are part of the alternative site. These former rights-of-way are improved and used for parking.

The site is generally flat with a minimum amount of landscaping. The northerly part of the site is currently occupied by San Jose Diesel Pump & Injector Service, which operates a diesel truck maintenance and repair facility. The southerly portion of the site is developed with a one- and two-story, 93,875 square foot warehouse, primarily used for furniture storage for the *La-Z-Boy* furniture company. The remaining portions of the building are leased to various businesses for storage,



LSA

FIGURE VII-3



SITE BOUNDARY

*Japantown Corporation Yard
Redevelopment Project EIR
North 10th Street Off-Site Alternative*

SOURCE: GOOGLE EARTH PRO, 2007.

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including produce cold storage, marble and tile work, furniture storage, a tree trimming business, and a movie business office. To the south of the building is outdoor storage of vehicles and other materials. The site is privately owned.

The surrounding land uses include light industrial uses to the north, east and south of the site (there is one single family residential to the east of the alternative site on North 10th Street). The industrially zoned adjacent properties are developed with one-story light industrial warehouse buildings to the north, south and east. A catering truck parking area is also located to the east. To the west are the railroad tracks and residential development beyond that. Multi-family residential uses are located west of the project site, on the west side of the railroad tracks.

The site is designated as High Density Residential (25-40 dwelling units per acre) with a maximum allowable building height of 45 feet in the City's General Plan. Surrounding properties directly to the west, east, and south are also designated for High Density Residential use and Medium Density Residential to the east. Properties to the north are outside of the Jackson-Taylor Planned Community boundaries and are designated for Light Industrial Use in the General Plan. The project site is currently zoned Light Industrial (LI). The Jackson-Taylor Planned Community identifies the southern portion of the project site as a possible location for a public park. It also identifies the block immediately south of the project site for Mixed Use.

Similar to the proposed project, the North 10th Street alternative would require an amendment to the Jackson-Taylor PRC to change the land use designation from High Density Residential to a Mixed Use #2A designation, a new land use designation in the City's General Plan. This new designation would allow the ground floor commercial, residential, community amenity space and park uses, to increase the density to allow up to 685 residential units and 24 live work units, and to increase the height to up to 14 stories to accommodate the density. The Jackson-Taylor Residential Strategy, which provides the policy framework for the Jackson-Taylor PRC would also have to be revised so that the Residential Strategy and the General Plan would continue to be consistent with each other. The alternative site would also have to be rezoned from LI to a Planned Development district with an alternative base zoning district of Agriculture (A[PD]) to allow the mix of uses, density and height proposed in this alternative.

The development of this off-site alternative would demolish the existing buildings and redevelop the site as a mixed-use project including the following:

- Up to 30,000 square feet of ground floor commercial oriented to East Hedding Street. Up to 15,000 square feet of the commercial space could be replaced with up to 24 live/work units.
- Above the ground floor commercial space, up to 600 market rate residential units would be constructed in buildings ranging from 6 to 14 stories. Additionally, 85 units of affordable senior housing in a six-story building would be constructed with a separate entrance.
- 20,000 square feet of community amenity space would be constructed mid-block, adjacent to the park on the southerly portion of the site.
- One acre of the southerly portion of the site would be improved as a neighborhood park.
- Up to 940 underground/surface parking spaces would be provided throughout the site.

The North 10th Street Alternative would achieve few of the project's objectives. This alternative would provide market-rate new housing opportunities and would provide affordable housing opportunities for senior citizens. It would advance the goals of the Jackson-Taylor Neighborhood Revitalization Plan. However, it would not promote redevelopment of the under utilized former Corporation Yard parcel and the surface parking lot parcel nor contribute to the revitalization of the City's Japantown Redevelopment Plan area. While the mix of housing, retail, and community amenity would contribute to and complement the Greater Downtown Strategy Area, it would not do so for Japantown. This alternative would not advance the goals of the Japantown Redevelopment Plan.

2. Analysis of the North 10th Street Alternative

a. Land Use. The North 10th Street site is in an area that is in transition from industrial uses to residential-oriented development, particularly to the south of the site. The site and surrounding properties are designated for high- and medium-high density residential uses, and a mix of high-density residential, commercial/retail, and office uses. Currently, the land west of the site is under construction with high-density residential uses. The properties north, east, and south of the project site, however, have not yet redeveloped and are currently occupied with light industrial uses.

Developing the proposed residential uses near these existing light industrial could result in near term land use compatibility issues. The interfaces between the proposed residential and existing industrial uses could trigger complaints and subsequent limitations being placed on industrial businesses in the project area. However, there are existing residential uses in the area (e.g., along North 11th, North 8th, East Mission, and Hedding, and Taylor Streets). The proposed residences would be separated from light industrial uses to the east by North 10th Street, a three-lane roadway with on-street parking that is approximately 60 feet wide. The proposed residences would be separated from the light industrial uses to the south by the proposed park and the abandoned stretch of East Mission Street (a total of approximately 97 feet in separation). The nearest proposed residential area to the alternative site would be separated from the railroad tracks by the abandoned stretch of North 9th Street.

The one-acre park would be compatible with the mixed-use development on the rest of the alternative site. It would be developed as a passive park with benches, pedestrian paths and children's play areas. No night lighting of play areas or amplified sound systems are contemplated. The park would generally serve the immediate neighborhood. The park would be separated from adjacent light industrial uses by North 10th Street and the abandoned East Mission Street right-of-way.

The proposed change in land use on the project site from industrial to residential would intensify development in the area, but would not introduce substantial new hazards, noise, or other nuisances that would adversely affect existing surrounding residences or commercial/industrial businesses. Additionally, the North 10th Street alternative would implement the goals of the Jackson-Taylor PRC by providing high-density housing and supportive mixed uses in the central area of the City and in close proximity to transit. Therefore, the alternative would be consistent with the General Plan and the Jackson-Taylor PRC, although the resulting project would have a greater height and density than originally established for the North 10th Street site.

b. Population, Employment and Housing. Similar to the proposed project, this alternative would not result in any significant population, employment or housing impacts. The North 10th Street

alternative would develop the site with up to 600 residential units, 85 senior housing units, and up to 24 live-work units, increasing the population on the site by 2,154 people (624 units x 3.18 persons/unit, and 85 senior housing units x 2 persons/unit). This is the same as the proposed project. This increase in population is within the population growth assumed for the City of San Jose and would be a less-than-significant impact. As the site is developed with commercial and industrial uses, this alternative would not displace existing housing or residents.

c. Transportation, Circulation and Parking. Development of 685 residential units, up to 30,000 square feet neighborhood-serving retail, up to 20,000 square feet of community amenity space, and a park would increase the number of daily trips from the site and would lead to an increase in peak period effects on intersection congestion and freeway segments. Implementation of this alternative would result in significant impacts at the same three protected intersection locations. Also, due to this site's location, more traffic would be added to the US 101/Oakland Ramps than would be added by the proposed project. Since the Oakland/Mabury/101 TDP has been adopted by the City Council, the project would be required to pay a fair share contribution toward the planned interchange improvements. As stated in the Draft TIA, the proposed fee is \$30,000 per each new PM peak hour vehicle trip that would be added to the US 101/Oakland interchange. In order to estimate a fee amount, a more detailed analysis of this alternative site location would be required. It is likely that development on this site would generate more vehicle trips than the proposed project, as it is further from light rail and other transit opportunities as well as retail and services in the Japantown Neighborhood Business District. This alternative would not be expected to result in any significant freeway impacts. In addition, the significant cumulative impact would remain with any residential development in the area.

d. Air Quality. The North 10th Street alternative would result in similar levels of construction activity as the proposed project although, under this alternative, demolition activities would also occur. However, the same or similar standard mitigation measures identified for the proposed project would reduce air quality impacts for this alternative to less-than-significant levels. The North 10th Street alternative would increase vehicular trips in San Jose to the same extent as the proposed project. The North 10th Street alternative would result in increased pollutant emissions over existing conditions to the same extent as the proposed project. Similar to the proposed project, the operational emissions from the North 10th Street alternative would exceed the BAAQMD thresholds of significance and therefore have a significant unavoidable effect on regional air quality. This adverse effect is likely to be greater than the proposed project as it would likely create more vehicle trips as described above, and therefore contribute to higher regional emissions than the proposed project.

e. Noise. The North 10th Street alternative would be subject to noise and groundborne vibration from vehicular traffic along Hedding Street and 10th Street and from trains along the Union Pacific railroad tracks west of the site. Because of the site's proximity to the Mineta San Jose International Airport, the site would also be subject to aircraft noise. Finally, the existing commercial and industrial uses in the vicinity are also sources of noise.

Based on the contour maps prepared for the San Jose International Airport in 2004 and 2005, the alternative site is located beyond the 65 dBA CNEL airport noise contour. Thus airport noise would be considered a less-than-significant impact for this alternative site.

Noise and vibration studies were conducted for the alternative site in the Initial Studies prepared for the Tenth and Mission Multi-Family Development (File No. GP07-03-02/GPT 07-03-02 and ODC 06-069) and the 10th Street and Hedding Street Residential Project (File No. PDC 07-025). These studies found that the site would be subject to significant noise and vibration impacts. The highest level of noise on the site is in proximity to Hedding Street and North 10th Street because of vehicular and railroad noise sources. Noise readings in these locations were in excess of 70 dBA L_{dn} . The southerly portion of the site receives slightly less noise, around 61 dBA to 63 dBA L_{dn} . However, these noise levels still exceed the City's normally acceptable land use compatibility standards for new residential development. Additionally, the alternative site would be exposed to a significant level of groundborne vibration from the adjacent railroad operations. The westerly portion of the site experiences vibration levels of 77 VdB to 79 VdB at 55 feet from the centerline of the track.

Design features are available which could reduce railroad and vehicular noise levels to comply with the City's residential interior noise standard of 45 dBA L_{dn} . These features include the use of window and wall assemblies of sufficient sound transmission class ratings to comply with the City's interior noise standards. Similar to the propose project, additional mitigation measures would require the provision of an alternate form of ventilation, such as an air conditioning system, in order to ensure that windows can remain closed for a prolonged period of time. Outdoor residential areas, if screened by buildings, may also be able to comply with the City's noise standards. Finally, the park area along the southerly portion of the alternative site would be subject to project related transportation and operational noise levels in excess of 60 dBA L_{dn} . Placing the residential and community amenity buildings to provide shielding from surrounding roadways would provide some noise attenuation for this recreational area, however, it is likely that the park would not comply with the City's land use compatibility standard for new park development of 60 dBA L_{dn} . The North 10th Street alternative would not result in significant noise impacts, with the exception of the noise impacts on outdoor active use areas.

The impacts of groundborne vibration on the residential uses can be reduced to less-than-significant levels with a minimum set back of 50 feet from the edge of the railroad track. Alternatively, residential units may be sited within the 50 foot setback provided that a comprehensive site specific vibration study is performed which includes specific foundation and building design recommendations that would provide adequate vibration isolation of buildings to reduce vibration to acceptable levels.

The North 10th Street alternative may affect nearby existing development because of demolition and construction noise. Construction activity would expose surrounding land uses to short-term noise levels and vibration. Mitigation measures for the proposed project would reduce the construction noise and vibration impacts for this alternative to less-than-significant levels.

f. Geology, Soils and Seismicity. The project is located on a relatively flat site at an elevation of approximately 61 feet above mean sea level. The local topography is relatively flat. The area surrounding the subject property is underlain by deposits of the San Jose Plain, which consist of unconsolidated floodplain sediments. The North 10th Street site is located within the seismically active San Francisco Bay Area. Significant earthquakes that occur in the Bay Area are generally associated with the San Andreas Fault system, located about eight miles southwest of the site. Other active faults in the area are the Hayward Fault (southeast extension), about nine miles northeast of the site; the Calaveras Fault, about nine miles northeast of the site; and the Monte Vista-Shannon Fault,

about 14 miles southwest of the site. The project is not located on any faults; therefore the potential for fault rupture on the site is low. In addition, the project is not mapped within an Alquist-Priolo Earthquake Fault Zone or a Santa Clara County Fault Hazard Zone. The site is located within the State of California Seismic Hazard Zone for Liquefaction, Zone of Required Investigation. The site includes highly expansive soils which could potentially damage future development on the site.

Any development on the site would be subject to seismic hazards, impacts from expansive soils, settlement related to non-uniformly compacted imported fill previously placed on the site, or liquefaction during a seismic event. The same mitigation measures which would reduce the potential impacts for the proposed project would also reduce these potential hazards to less-than-significant levels for the North 10th Street alternative.

g. Hydrology and Water Quality. The North 10th Street alternative site is level and does not contain any natural watercourses or bodies of water. It is well above sea level. It is not located within a 100-year flood plain, based on the FEMA Insurance Rate Maps. The site is largely covered with impervious surfaces. The alternative development would not be subject to impacts from coastal flooding hazards, seiches, or dam failure. The project does not include the alteration of an established stream or river, and the amount of impervious surface would be similar to or slightly less than what exists on the site today, with little change in the amount of runoff. Drainage patterns may be somewhat modified locally from existing conditions, but these modifications would result in less-than-significant impacts. Similar to the proposed project, the North 10th Street alternative may degrade the water quality of receiving waters because of the reduced quality of stormwater runoff related to construction activities and post-construction site uses; impact the environment and construction workers from contaminants in dewatering discharges; and inundation of the below-ground parking structures by infiltrating groundwater and/or by extreme storm events. The same mitigation measures identified for the proposed project would also reduce the impacts of the North 10th Street alternative to a less-than-significant level.

h. Hazards and Hazardous Materials. Similar to the proposed project, the North 10th Street alternative would not be subject to significant impacts related to the transport and use of hazardous materials; emit hazardous emissions within one-quarter mile of an existing or proposed school; impair or interfere with an adopted emergency response or evacuation plan; cause exposure to wildland fire hazards; or cause exposure to aviation hazards. The alternative includes the demolition of on-site buildings, which could contain asbestos and lead-based paint. Because of a history of industrial uses on the site and in the vicinity, there is soil contamination on site and reported hazardous materials spills and releases nearby have the potential to affect the site. Additionally, there are several hazardous materials users in the vicinity and the alternative site could be exposed to accidental releases from those operations. Finally, because of the age of development on the site, it is possible that there may have been septic systems used on-site.

Impact ALT HAZ-1: Demolition of any structures containing lead-based paint, asbestos-containing building materials, or other hazardous materials could release airborne particles of hazardous materials, which may affect construction workers and the public.

Mitigation Measure ALT HAZ-1: As a condition of approval for any demolition permit for a structure at the project site, a lead-based paint and asbestos-containing material survey shall be performed at the structure by a qualified environmental professional. Based on the findings of

the survey, identified asbestos hazards shall be abated by a certified asbestos abatement contractor in accordance with the regulations and notification requirements of the BAAQMD. Federal and State construction worker health and safety regulations shall be required during renovation or demolition activities. If loose or peeling lead-based paint are identified, they shall be removed by a qualified lead abatement contractor and disposed of in accordance with existing hazardous waste regulations. Other hazardous wastes generated during demolition activities, such as fluorescent light tubes, mercury switches, and computer displays, shall be managed and disposed of in accordance with existing hazardous waste regulations.

Implementation of this measure would reduce this impact to a less-than-significant level.

Development of the North 10th Street site could expose remediation/construction workers and/or the public to hazardous materials from contaminants in the soil. A mitigation measure similar to HAZ-1 related to site remediation and/or encapsulation of the on-site soil contamination would be required to reduce these potential impacts to a less-than-significant level. In addition, a site-specific health risk assessment shall be prepared in accordance with Regional Water Quality Control Board guidelines to ensure that construction and remediation workers would not be affected by hazardous materials on site.

Development of the North 10th Street site could result in accidental release of hazardous materials. A mitigation measure similar to HAZ-2 related to proper use and transport of hazardous materials during construction would also be required to reduce the potential impact from hazardous materials to a less-than-significant level.

i. Cultural and Paleontological Resources. The North 10th Street alternative site contains a commercial/industrial structure that dates to 1938. Although this structure is over 50 years old, it consists of a garage-type structure that appears to have been used historically for vehicle maintenance activities and retains little architectural integrity. The other structure on-site is a typical warehouse structure, constructed circa 1956. The project site and existing warehouse are not registered or listed as a local, state, or federal historic resource. The building on the site is not considered significant in terms of its architecture and/or engineering, and the site is not considered historically significant in terms of present or past uses on the site. For these reasons, the buildings are not considered unique or eligible for listing in either the California Register of Historical Resources or the City of San Jose's Historical Resource Inventory.

The project site is located at an infill location within an urbanized area of San Jose. There are no recorded archaeological sites or reported cultural resources located at the project site. According to an archaeological sensitivity map for San Jose, the project site has low potential for the discovery of archaeological resources and is not considered archaeologically sensitive.

Previously unknown resources could be discovered during grading and excavation on the alternative site, such as human remains or paleontological resources. Mitigation measures CULT-1 and CULT-5 identified for the proposed project would reduce the potential impacts on cultural resources for the North 10th Street alternative to less than significant.

j. Biological Resources. The North 10th Street alternative site is developed and unvegetated except for ornamental trees and shrubs. The site does not contain appropriate habitat for the special-

status plants and animals because the site does not contain freshwater marsh, salt marsh or aquatic habitats and does not have the appropriate plant communities for the special-status species that might use upland habitat in the vicinity, such as the burrowing owl, tricolored blackbird and song sparrow. While there are 19 trees on the site, only one qualifies as an ordinance-size-tree under San Jose's Tree Ordinance. This tree is located on the westerly edge of the project site about halfway between East Hedding Street and East Mission Street. If it does need to be removed to accommodate the alternative project, this would require a tree removal permit and the provision of replacement trees as provided for by Ordinance. The North 10th Street alternative would have a less-than-significant impact on biological resources.

k. Visual Resources. The North 10th Street site is currently developed with industrial uses and is located within an urbanized area of San Jose. The site is not within any city or state-designated scenic routes. Development of the site would not impact any scenic vistas; the site and the surrounding area are developed so there are long distance reviews across the project site. There are no scenic resources on the alternative site itself.

The North 10th Street alternative would demolish the existing buildings and replace them with buildings 6 to 14 stories tall. The alternative project would be of greater mass, density and height than the development now on the site and in the site's vicinity. However, the adjacent blocks are designated for mixed use of high density residential, commercial/retail and office uses in multi-story buildings up to 65 feet in height. The alternative is not expected to significantly degrade the existing visual character of the site because the scale and character are consistent with the intended redevelopment of the area. The alternative project would also generally improve the aesthetic quality of the site by replacing the light industrial uses with new mixed-used development with landscaping, and a new park at the southerly end of the block.

l. Shade/Shadow and Light/Glare. Similar to the proposed project, the North 10th Street alternative would not cause any significant shade or shadow impacts, or light or glare impacts. Bernal Park is nearby at North 7th Street and East Hedding Street but it is sufficiently distant that it would not be shaded by this alternative.

m. Utilities. The North 10th Street alternative would create a mixed-use development similar to the proposed project and infrastructure would need to be extended onto the site to service the buildings. Impacts on water supply, sewage treatment capacity, sanitary sewer system, natural gas, telecommunication and cable television services also would be less than significant. However, the project does include the demolition of existing buildings on the alternative site. The solid waste generated during the demolition, land clearing and construction could interfere with waste diversion goals mandated by the California Integrated Waste Management Act. Implementation of the following mitigation measure would reduce this impact to a less-than-significant level.

Impact ALT UTIL-1: The solid waste generated during the demolition, land clearing and construction could interfere with waste diversion goals mandated by the California Integrated Waste Management Act.

Mitigation Measure UTIL-1: Prior to the demolition of any structure on the site, the project applicant shall prepare a waste management plan for the recycling of construction and

demolition materials. The waste management plan shall ensure that a minimum of 50 percent (by weight) of construction, demolition, and land clearing waste is recycled or salvaged.

n. Public Services and Facilities. The North 10th Street alternative would develop the alternative site in a configuration similar to the proposed project. This alternative would have a less than significant impact to public services, including police, fire, schools, and recreation, which would also be the case for the proposed project.

o. Energy and Mineral Resources. Similar to the proposed project, the North 10th Street alternative would have a less than significant impact on energy. Additionally, because the project site has no known mineral resources on site and a low likelihood of mineral resources being present on site, the North 10th Street alternative would have a less-than-significant impact on mineral resources.

p. Global Climate Change. As discussed in Section V.F., Global Climate Change, there are no established thresholds of significance for determining when a project's contribution of greenhouse gas emissions is considered significant, or cumulatively considerable. Additionally, the relationship between land use projects and climate change is not yet understood or capable of being modeled at a scale that is meaningful for the evaluation of a particular development project. The North 10th Street alternative would have the same amount of development as the proposed project, and would have similar greenhouse gas emissions when compared with the proposed project. Like the proposed project, the North 10th Street alternative would be higher-density, mixed-use development on an infill site in an area served by public transit, which would reduce the project's contribution to greenhouse gas emissions. At this time, the information about the North 10th Street alternative's impact on global climate change is too speculative to determine the significance level.

F. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of the environmentally superior alternative in an EIR. The No Development alternative is considered the environmentally superior alternative in the strict sense that environmental impacts associated with its implementation would be the least of all the scenarios examined (including the proposed project). To maintain the project site at baseline conditions would avoid each of the significant impacts that would result from the proposed project. It is also important to note that while this alternative would be environmentally superior in the technical sense that contribution to these aforementioned impacts would not occur, the No Development alternative would also fail to achieve any of the project's objectives. Redevelopment of these underutilized sites with a high density mix of uses, including a park and neighborhood amenity space, would contribute to the revitalization of the City's Japantown Redevelopment Plan area; the No Development alternative would not. Redevelopment of the sites would be consistent with the overall goals, policies and objectives of the General Plan, the Japantown Redevelopment Plan, the Jackson-Taylor Neighborhood Revitalization Plan, and the City of San Jose Housing Initiative; the No Development alternative would not.

In cases like this where the No Development alternative is the environmentally superior alternative, CEQA requires that the second most environmentally superior alternative be identified. This determination is often a complicated one to make and this EIR is no exception. Comparison of the environmental impacts associated with each alternative as described above, indicates that each of the

other “build” alternatives (i.e., Existing General Plan, Alternate Location) would lead to a complex mix of impacts that would be greater and/or lesser than the proposed project, depending on the topic.

In some specific environmental terms the Existing General Plan alternative would generally represent the next-best alternative in terms of the fewest impacts. Development of this alternative would generally result in the same impacts as the proposed project; however, some of these impacts would be slightly less adverse since the overall density of development would be less. This alternative would result in the same impacts to traffic and transportation, including a significant unavoidable impact in the cumulative condition.

VIII. SIGNIFICANT UNAVOIDABLE EFFECTS

The proposed project would result in the following significant unavoidable impacts:

- The level of service would drop below acceptable levels for three protected intersections: North 1st Street/Taylor Street during the PM peak hour, North 10th Street/Hedding Street during the AM peak hour, and 10th Street/Taylor Street during the PM peak hour;
- Traffic volumes on congested roadways in close proximity to the project site (which requires a General Plan Amendment) would increase during the PM peak hour;
- The volume to capacity ratio and traffic volumes on congested roadways included in parallel facilities located south of SR 87 and I-880 (Link Set #2: SR 87, North First Street, North Fourth Street, and North Tenth Street) would increase during the PM peak hour;
- Total vehicle miles traveled and vehicle hours traveled would exceed the significance criteria for all roadways in Santa Clara County during both the AM and PM traffic periods, significantly increase peak direction traffic volumes across all three special subarea cordon lines and significantly increase the volume-to-capacity ratio across regional screenline links in the cumulative condition; and
- Long-term regional project emissions would exceed the Bay Area Air Quality Management District thresholds of significance for reactive organic gasses.

IX. GROWTH-INDUCING IMPACTS

A project is considered growth-inducing if it would directly or indirectly foster substantial economic or population growth or the construction of additional housing.¹ Examples of projects likely to have significant growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or industrial parks in areas that are currently only sparsely developed or are undeveloped. Typically, redevelopment projects on infill sites that are surrounded by existing urban uses are not considered growth-inducing because redevelopment by itself usually does not facilitate development intensification on adjacent sites.

Implementation of the proposed project would result in finite population growth that is not substantial in the context of population growth projected to occur in the City of San Jose. Project-associated population growth would occur as a result of the construction of up to 685 (plus up to 24 live/work units) housing units within the project site. As described in Section IV.B., Population, Employment and Housing, population growth that would result from this housing construction would be between 2,078 and 2,154 persons. This increase in population represents less than one percent of the City's current (2005) and projected (2010) population. This anticipated population growth is within the growth projected by the City. The proposed project would also develop up to 30,000 square feet of retail space and approximately 10,000 square feet of community space. The proposed retail and community space would create approximately 93 new jobs on the project site. (As a variation on the proposed project, up to 15,000 square feet of retail space may be replaced with up to 24 live/work units, which would slightly reduce the jobs on the project site.) This job growth represents less than one percent of the overall job growth projected for the City through 2035. The proposed project would neither directly nor indirectly lead to substantial population growth.

In addition, the proposed project would occur on an infill site in an existing urbanized area in the City of San Jose; it would not result in the extension of utilities or roads into undeveloped areas, and would not directly or indirectly lead to the development of greenfield sites in the Santa Clara Valley. The project site is located within an existing urbanized area and is near transit lines; anticipated growth could benefit the existing transit system and could reduce adverse impacts associated with automobile use, such as air pollution. In addition, the provision of additional housing in the City of San Jose would allow more people to live in an existing urbanized area and could reduce development pressures on farmland and open space in unincorporated Santa Clara County. Therefore, the growth that would occur as a result of project implementation would not be considered substantial or adverse and would not induce additional growth of any substantial magnitude.

¹ *CEQA Guidelines*, 2007. §15126.2(d).

X. SIGNIFICANT IRREVERSIBLE CHANGES

An EIR must identify any significant irreversible environmental changes that could result from implementation of a proposed project. These may include current or future uses of non-renewable resources, and secondary or growth-inducing impacts that commit future generations to similar uses. CEQA dictates that irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.¹ The *CEQA Guidelines* describe three distinct categories of significant irreversible changes: 1) changes in land use that would commit future generations; 2) irreversible changes from environmental actions; and 3) consumption of nonrenewable resources.

A. CHANGES IN LAND USE WHICH WOULD COMMIT FUTURE GENERATIONS

As described throughout this EIR, the Japantown Corporation Yard Redevelopment Project would allow for the redevelopment and intensification of land uses on an underutilized site. This land use change would occur in the form of infill development of already urbanized parcels. In the same manner that the current uses and structures are being proposed for redevelopment after years of usefulness, so too could a mixed use development undergo renovation of change after another 50 to 100 years. In this way, the proposed project would commit 2 to 3 generations to this land use change. Such a commitment would not constitute a significant adverse effect.

B. IRREVERSIBLE CHANGES FROM ENVIRONMENTAL ACTIONS

No significant irreversible environmental damage, such as what could occur as a result of an accidental spill or explosion of hazardous materials, is anticipated due to redevelopment activities associated with implementation of the proposed project. Compliance with federal, State and local regulations, and the mitigation measures identified in Section V.H, Hazards and Hazardous Materials, would reduce to a less-than-significant level the possibility that hazardous substances within the project site would cause significant environmental damage.

No other irreversible changes - such as those which might result from construction of a large-scale mining project, a hydroelectric dam project, or other industrial project - would result from development of the proposed project.

C. CONSUMPTION OF NONRENEWABLE RESOURCES

Consumption of nonrenewable resources includes increased energy consumption, conversion of agricultural lands to urban uses, and lost access to mineral reserves. No agricultural lands would be converted and no access to mining reserves would be lost with construction of the proposed project. The project site is located within the Greater Downtown Area of San Jose, an urbanized area. While this would require additional energy of several types for construction and for on-going use, it would

¹ *CEQA Guidelines*, 2007. §15126.2(c).

not require the construction of major new lines to deliver energy, and service providers anticipate being able to provide the capacity to serve these levels of development. Furthermore, to the extent that growth throughout San Jose is partly an expression of regional demand, the redevelopment of existing neighborhoods would represent a more efficient allocation of non-renewable resources than would growth on the urban periphery.

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XII. REFERENCES AND CONTACTS

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