# INITIAL STUDY
## FOR
# PEPPER LANE
# PD REZONING

File: PDC07-033

**CITY OF SAN JOSE**

**March 2008**

# Table of Contents

Chapter 1. Background Information ..... 1

Chapter 2. Project Description ..... 2

Chapter 3. Environmental Setting, Impacts and Mitigation ..... 15

A. Aesthetics ..... 15
B. Agricultural Resources ..... 16
C. Air Quality ..... 17
D. Biological Resources ..... 23
E. Cultural Resources ..... 28
F. Geology ..... 37
G. Hazardous Materials ..... 40
H. Hydrology & Water Quality ..... 44
I. Land Use ..... 49
J. Mineral Resources ..... 51
K. Noise ..... 52
L. Population & Housing ..... 57
M. Public Services ..... 58
N. Recreation ..... 62
O. Transportation ..... 62
P. Utilities & Service Systems ..... 76
Q. Mandatory Findings of Significance ..... 77

Chapter 4. References ..... 79

## List of Tables

Table 1. Projected Daily Project Emissions ..... 19
Table 2. Predicted 8-Hour CO Concentrations with Project ..... 20
Table 3. Tree Summary ..... 24
Table 4. Pervious and Impervious Surfaces ..... 46
Table 5. Intersection Level of Service Summary ..... 68
Table 6. Project Trip Generation ..... 71

## List of Figures

Figure 1. Regional Map ..... 5
Figure 2. Assessor's Parcel Map ..... 6
Figure 3. Aerial of Project Area ..... 7
Figure 4. Site Photos ..... 8

Figure 5. Site Plan ..... 9
Figure 6a. Retail Elevations ..... 11
Figure 6b. Retail Elevations ..... 12
Figure 7a. Residential Elevations ..... 13
Figure 7b. Residential Elevations ..... 14
Figure 8. Storm Water Control Plan ..... 48
Figure 9. Roadway Network & Study Intersections ..... 66

**Appendices**

Appendix A Air Quality Analysis
Appendix B Burrowing Owl Surveys
Appendix C Arborist Report
Appendix D Historic Evaluation
Appendix E Geotechnical Investigations
Appendix F Phase 1 Environmental Assessment
Appendix G Noise Analysis
Appendix H Traffic Analysis

# Chapter 1. Background Information

1. **Project Title:** Pepper Lane (file PDC07-033)

2. **Lead Agency Name and Address:** City of San Jose Planning, Building and Code Enforcement, 200 E. Santa Clara Street, San Jose, CA 95113 Contact: Reena Mathew (408) 535-7800 reena.mathew@sanjoseca.gov

3. **Project Location:** The project site is located on 20.5 acres on the southeast corner of Jackson Avenue and Berryessa Road in San Jose. The site is located on Assessor's Parcel Number's 254-015-031, -032, -063, -064, -066, -067, -072, -073, and -074.

4. **Project Proponent**: Pulte Homes Corporation, 6210 Stoneridge Mall Road, Pleasanton, CA 94588 Contact: Erika Salum (925) 249-3200

5. **Project Description:** Construction of 379 attached residential units and approximately 30,000 square feet of retail space.

6. **Environmental Consultant**: Denise Duffy & Associates, Inc. Main Office: 947 Cass Street, Monterey, CA 93940 Contact: Leianne Humble (831) 373-4341

**DETERMINATION**
**On the basis of this initial study:**

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Date

Signature
Preparer: Leianne Humble, DD&A

# Chapter 2. Project Description

## INTRODUCTION

This Initial Study has been prepared pursuant to the requirements of the California Environmental Quality Act (CEQA). The purpose of an Initial Study is to determine whether the proposed project could significantly affect the environment, requiring the preparation and distribution of an Environmental Impact Report. Based on the following analysis, it appears that the environmental impacts would be less-than-significant with mitigation, making the project eligible for a Mitigated Negative Declaration.

## PROJECT LOCATION

The project site is located on approximately 20.5 acres at the southeast corner of Jackson Avenue and Berryessa Road, within the corporate limits of San Jose in Santa Clara County. The site is located on Assessor's Parcel Number's (APNs) 254-015-031, -032, -063, -064, -066, -067, -072, -073, and -074 (refer to Figures 1 and 2).

The site is bordered by Berryessa Road on the west, Jackson Avenue on the south, and residential development on the east and north. The southern portion of the project site is vacant. The north/northeast portion of the site contains farmhouses, a remnant orchard, barns, and storage buildings. An aerial of the project area is provided in Figure 3, and photos of the existing site are presented in Figure 4.

## PROJECT DESCRIPTION

The project proponent is applying for a Planned Development (PD) zoning and site development permit to allow a mixed-use development of 379 residential units and approximately 30,000 square feet of retail space. The site plan for the project is presented in Figure 5, and building elevations are provided in Figures 6 and 7.

The residential component consists of three-story townhouses contained in 50 buildings, with up to eight units per building. The townhouses would be a mix of two-, three-, and four-bedroom units with individual garages. The townhouse buildings would range from 39 to 42 feet in height. Four common open space areas are proposed within the residential complex, as shown in the site plan in Figure 5.

The retail component may include a drug store, retail shops, and restaurant contained in three buildings at the northwest corner of the site. Building heights for the commercial center would be up to approximately 20 feet.

**Parking and Access**. Access to the proposed residential development would be provided via a private street extending between Jackson Avenue and Berryessa Road. Several small neighborhood streets would provide access to the proposed townhouses. Parking would be furnished in private garages (two cars per unit). Additional parking would be provided in outdoor open parking areas. The project proposes a total of 1,015 parking spaces for the residential component.

Access to the commercial center will be provided from a driveway on Jackson Avenue and a driveway on Berryessa Road. Parking for 187 vehicles will be provided in a surface lot.

**Landscaping**. The project includes landscaping on the site's perimeter, along proposed streets, and in common areas.

**Lighting**. Exterior lighting is proposed for security and access at the residential development and commercial center. All outdoor lighting would conform to the City's Outdoor Lighting policy.

**Utilities**. The project includes the provision of services and utilities to serve the proposed residential and commercial uses, including water, storm drainage, wastewater, and solid waste. A storm water control plan is proposed that includes landscaping, bioswales, and underground treatment units to manage runoff from the site.

**Demolition**. Development of the site would require the demolition and removal of all existing buildings, barns, and other structures. A demolition plan would be implemented during construction, including a program to safely remove any hazardous materials and salvage/recycle waste during demolition activities. The project would also require the removal of 14 landscape trees on the property and a remnant orchard.

**Grading**. Development of the project would require the import of 70,000 cubic yards of material to elevate the site above the floodplain.

**Public Improvements.** The project includes construction of new sidewalks and curb-gutter along the project frontages.

## PROJECT SCHEDULE

The project is scheduled to break ground July 2009. Construction would be completed in 2011, with occupancy planned for later that year.

## PROJECT OBJECTIVES

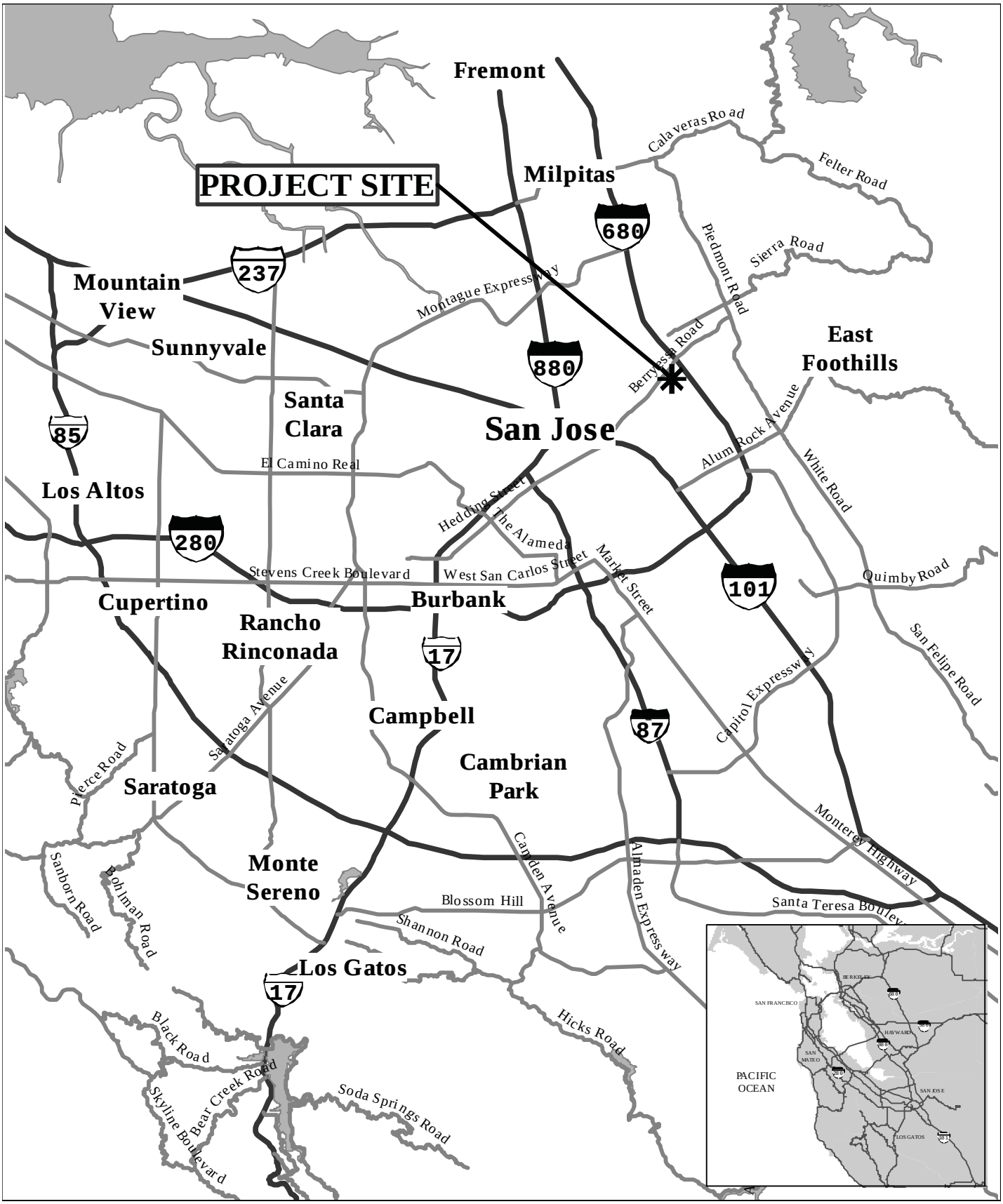
The objectives of the project are as follows:

- Construct housing to help meet the demand for townhouse-style residential development in the City of San Jose that is compatible with the surrounding residential neighborhoods.
- Provide a commercial retail center to meet the local demand for neighborhood-serving commercial uses
- Integrate pedestrian access and encourage neighborhood interaction.

## REQUIRED APPROVALS

It is the intent of this Initial Study to provide the City of San Jose and the general public with the relevant environmental information to use in considering the project. The project will require the following approvals:

- City of San Jose – Environmental Clearance (Negative Declaration)
- City of San Jose – PD rezoning, PD permit, grading permit, tentative and final map, tree removal permit, etc.

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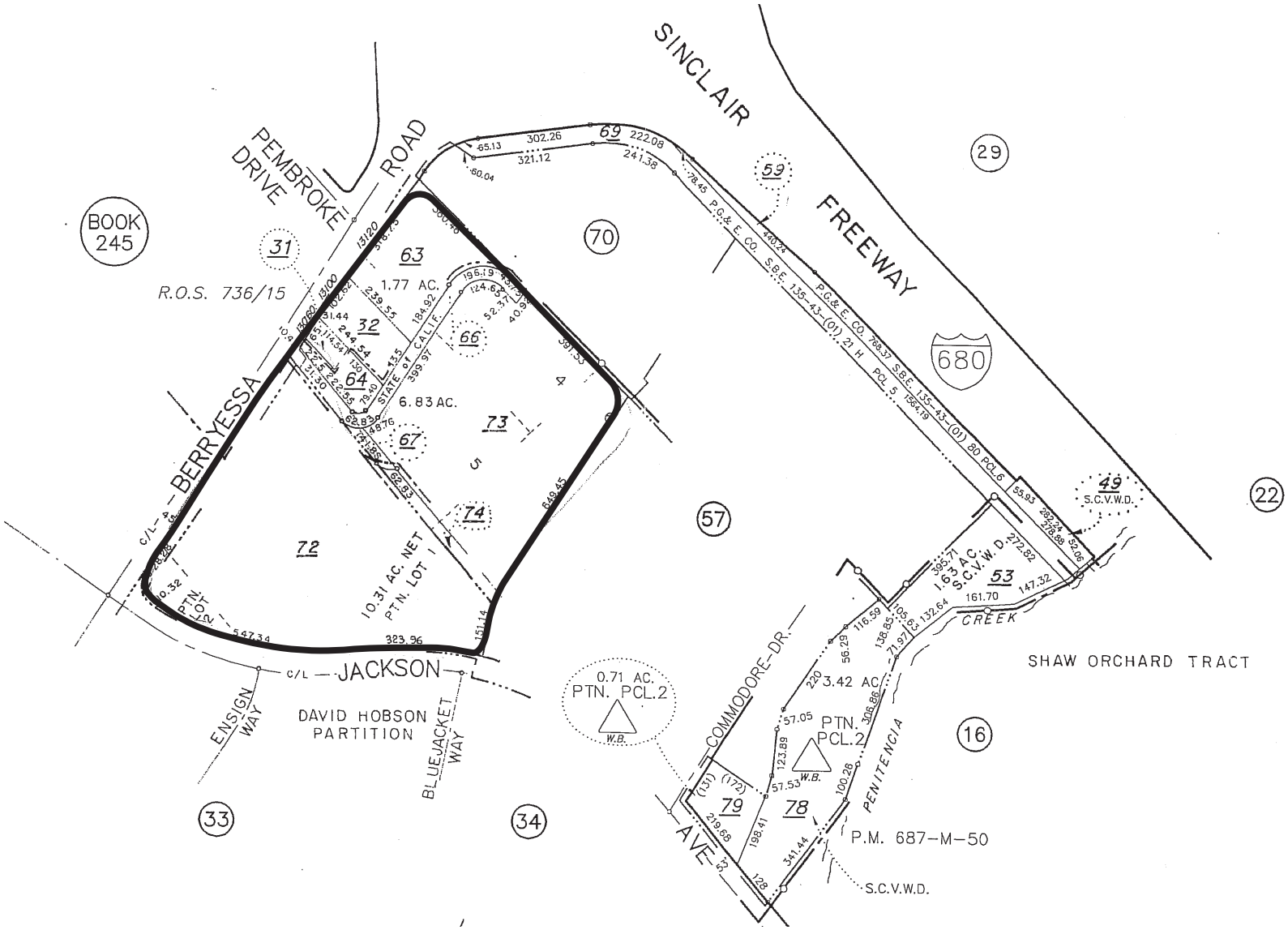
Regional Map

Figure 1




Project Boundaries

N

# Assessor's Parcel Map

Figure 2

N

Aerial Photograph

Figure 3

Photo 1. View of site from Jackson Avenue looking east.

Photo 2. View of site from Berryessa Road looking southeast, showing the existing residences and fruit stand.

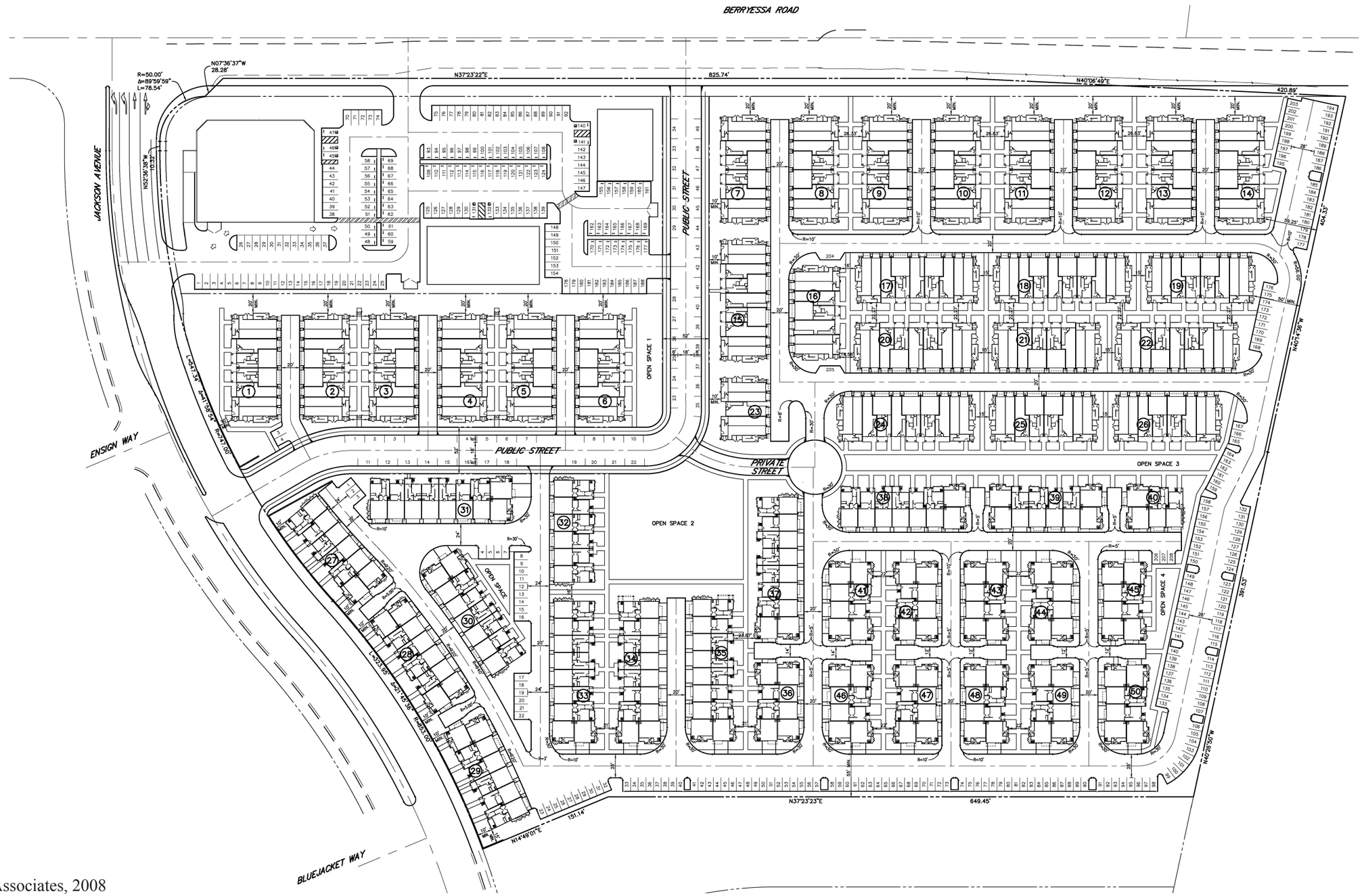
Photo 3. View of site from Jackson Avenue looking northeast.

Photo 4. View of central portion of site looking north/northeast.

N

# Site Photos

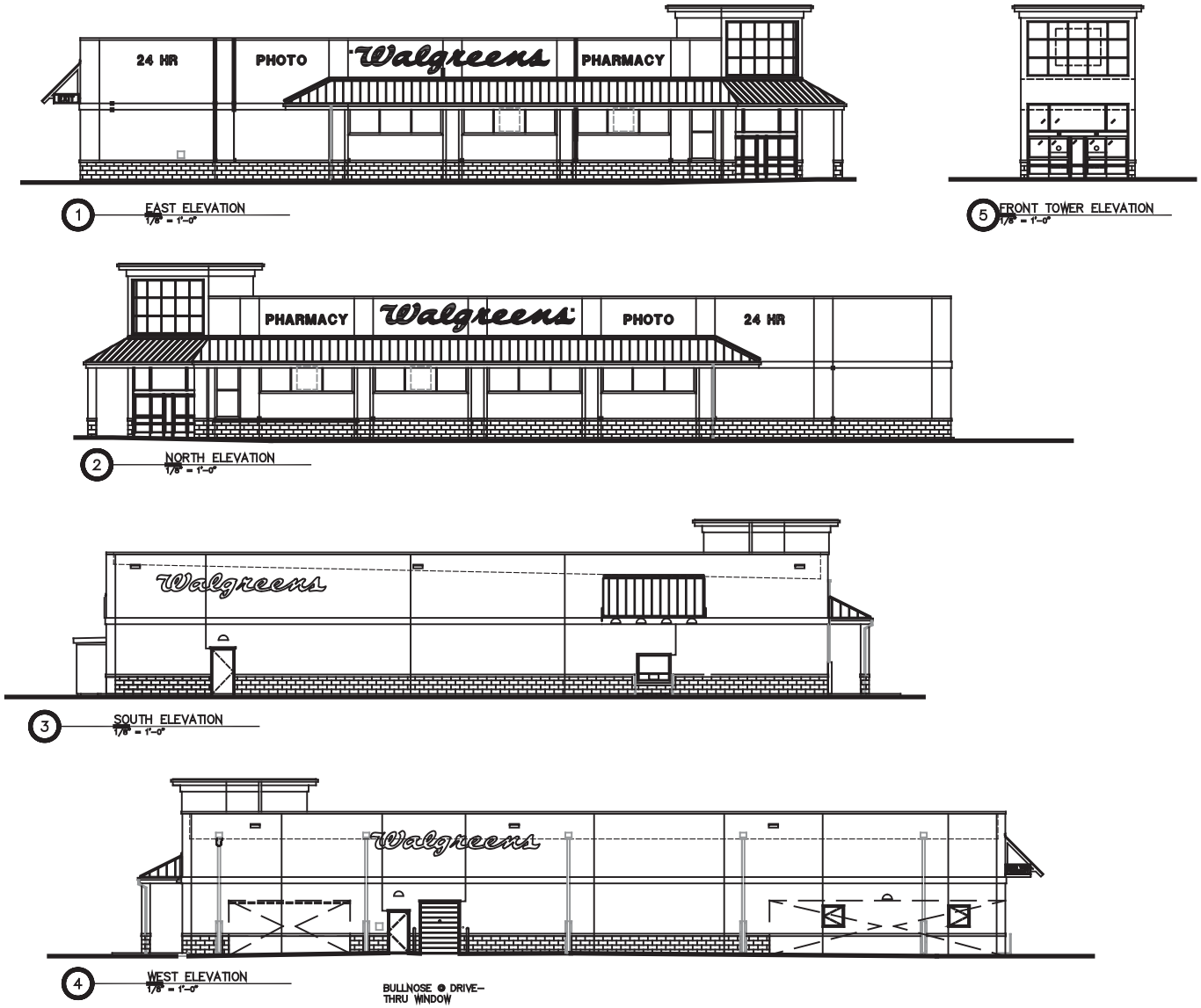
Figure 4




Source: CEA Associates, 2008

Site Plan

Figure 5




Source: DEVCON, 2007

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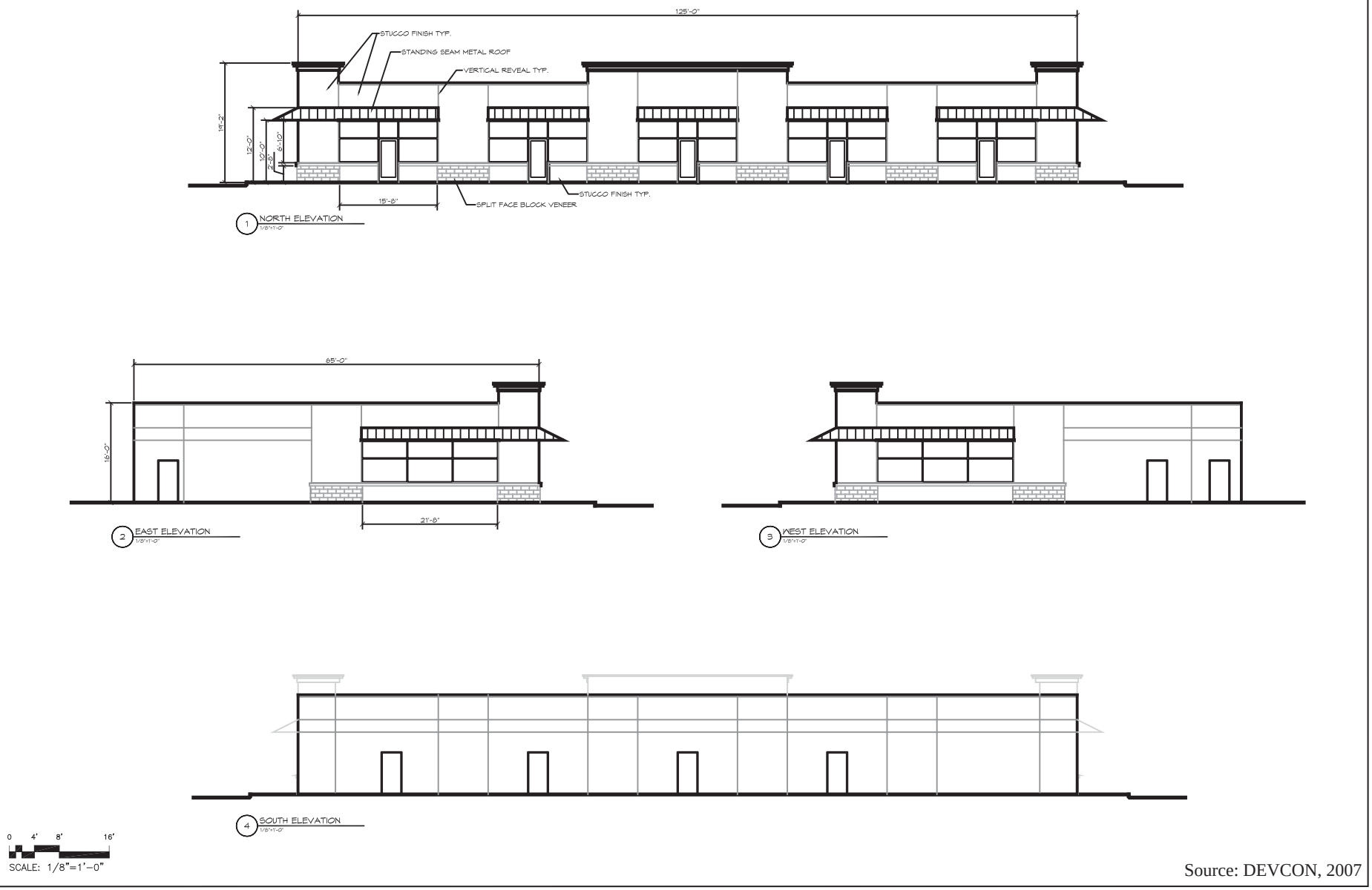
# Retail Elevations (Typical)

Figure 6a




Source: DEVCON, 2007

N

# Retail Elevations (Typical)

Figure 6b

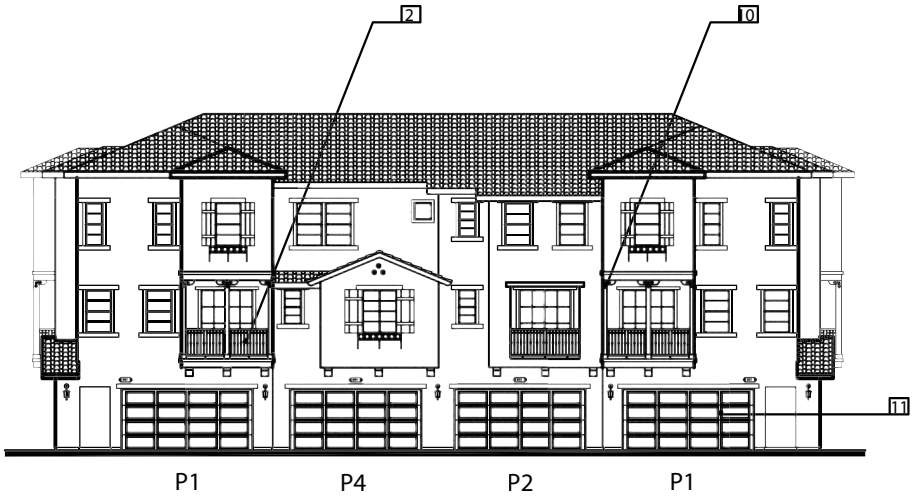
Source: KTGY Group, 2007

N

# Residential Elevations (Typical)

Figure 7a

FRONT ELEVATION




REAR ELEVATION

TYP. SIDE ELEVATION

Source: KTGY Group, 2007

N

# Residential Elevations (Typical)

Figure 7b

# Chapter 3. Environmental Setting, Impacts and Mitigation

## INTRODUCTION

The following section describes the environmental setting, and identifies the environmental impacts anticipated from the proposed project. The criteria provided in the CEQA environmental checklist were used to identify potentially significant environmental impacts associated with the project. Mitigation is presented for significant impacts. Sources used for analysis of potential impacts are cited in the checklist and provided in Chapter 4.

## A. AESTHETICS

### Setting

The project site consists of a former agricultural property. The visual character of the site is that of a disturbed site with residential and farm-related development, open fields, and some landscaping. The visual landscape of the larger project area is urban, consisting of varying densities of residential development. There are no notable scenic resources on the project site or in the project area. Photos of the project site are presented in Figure 4.

### Impacts and Mitigation

#### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|---|
| 1. | AESTHETICS. Would the project: | | | | | |
| a) | Have a substantial adverse effect on a scenic vista? | | | | X | 1, 2, 3 |
| b) | Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | X | 1, 2, 3 |
| c) | Substantially degrade the existing visual character or quality of the site and its surroundings? | | | X | | 1, 2 |
| d) | Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? | | | X | | 1, 2 |
| e) | Increase the amount of shade in public or private open space on adjacent sites? | | | | X | 1, 2 |

### Discussion

#### *Visual Resources*

The project site is located in central San Jose and is not within any City or state-designated scenic

routes. The project would not impact any scenic vistas or scenic resources.

The proposed project would alter the existing visual character of the site and its surroundings by removing most of the existing residential and farm-related buildings and replacing the primarily undeveloped site with 379 residential units and a commercial retail center. The proposed residential complex would consist of 50, three-story buildings approximately 42 feet in height. The commercial retail buildings would be one to two-stories and up to about 20 feet in height. Landscaping is proposed on the perimeter of the site, along proposed streets, and in common areas.

The proposed residential buildings are generally of a traditional or Mediterranean design and would use materials including stucco, cement siding, glass, and metal railings. Buildings would be painted earth tones. Balconies and/or patios are provided for the residential units. Elevations showing the commercial buildings are presented in Figure 6, and elevations of the residential structures (showing the two architectural types) are provided in Figure 7.

The project would increase the intensity of development on the site, which is primarily vacant with the exception of some farmhouses and agricultural development. The site is surrounded by streets and two-story residential development. The project is not expected to significantly degrade the existing visual character of the site since its scale and mass are generally compatible with existing two-story residential development in the area. The street and parking layout of the proposed residential complex provides a buffer along the boundaries adjacent to existing residential development to further minimize visual impacts. The project would not result in significant visual impacts.

### *Lighting and Glare*

Exterior lighting is proposed for security and access for the residential and commercial components of the project. Outdoor lighting would comply with the City's outdoor lighting requirements. The project does not propose any major sources of glare. The project would not result in significant lighting/glare impacts.

### Standard Measures

- Design of the project shall conform to the City's *Residential Design Guidelines* and *Commercial Design Guidelines.*

- Lighting on the site shall conform to the City's Outdoor Lighting Policy (4-3).

## B. AGRICULTURAL RESOURCES

### Setting

In California, agricultural land is given consideration under CEQA. According to Public Resources Code §21060.1, "agricultural land" is identified as prime farmland, farmland of statewide importance, or unique farmland, as defined by the U.S. Department of Agriculture land inventory and monitoring criteria, as modified for California. CEQA also considers impacts on lands that are under Williamson Act contracts.

The project site is located on fallow agricultural land that was previously used for cultivation of orchards and row crops. The project site is designated as "urban" on the Santa Clara County Important Farmlands Map (2006). The site does not contain any important or prime farmland.

### Impacts and Mitigation

#### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| 2. AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project: | | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | | X | 2 ,4 |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | X | 1, 2 |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? | | | | X | 1, 2 |

### Discussion

The project site is currently fallow and has not been used for agricultural purposes for several years. The project is not located on property identified as important or prime farmland on the Santa Clara County Important Farmlands Map. In addition, the site is not under Williamson Act contract and does not involve any agricultural uses. The project, therefore, would not impact agricultural land or resources.

## C. AIR QUALITY

### Setting

The following discussion is based on an air quality assessment prepared for the project by Illingworth & Rodkin, Inc., this report is contained in Appendix A. The project is located within the San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is the local agency authorized to regulate stationary air quality sources in the Bay Area. The BAAQMD develops and enforces air quality regulations for non-vehicular sources, issues permits, participates in air quality planning, and operates a regional air quality monitoring network. The Federal Clean Air Act and the California Clean Air Act mandate the control and reduction of specific air pollutants. Under these Acts, the U.S. Environmental Protection Agency and the California Air Resources Board (CARB) have established ambient air quality standards for specific "criteria" pollutants, designed to protect public health and welfare. Primary criteria pollutants include carbon monoxide (CO), reactive

organic gases (ROG), nitrogen oxides ($NO_X$), particulate matter ($PM_{10}$), sulfur dioxide ($SO_2$), and lead (Pb). Secondary criteria pollutants include ozone ($O_3$), and fine particulate matter.

The Federal Clean Air Act and the California Clean Air Act require that the state air resources board designate portions of the state where the federal or state ambient air quality standards are not met as "nonattainment areas," based on air quality monitoring data. Due to differences between the national and state standards, the designation of nonattainment areas varies under federal and state legislation. The Bay Area Air Basin is currently classified as a non-attainment area for the state ozone standard. For particulate matter less than 10 micrometers in diameter ($PM_{10}$) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), the Bay Area Air Basin is currently designated as a non-attainment area for the state standard. All other pollutants are designated as attainment or unclassified for federal standards and as attainment for the state standard.

The BAAQMD monitors air quality conditions at over 30 locations throughout the Bay Area. The monitoring stations closest to the project site are in San Jose. The highest air pollutant concentrations measured in any one year at the station closest to the project are provided in the air quality analysis in Appendix A.

The BAAQMD defines sensitive receptors as facilities where sensitive population groups are likely to be located. These land uses include residences, schools, child care centers, convalescent homes, and medical facilities. Sensitive receptors in the project area consist of existing residential uses. The nearest residences are located adjacent to the site to the east and south.

## Impacts and Mitigation

### *Thresholds per CEQA Checklist*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| 3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | | X | 5, 6 |
| b) Violate any air quality standard or contribute to an existing or projected air quality violation? | | X | | | 5, 6 |
| c) 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)? | | | X | | 5, 6 |
| d) Expose sensitive receptors to substantial pollutant concentrations? | | X | | | 5, 6 |
| e) Create objectionable odors affecting a substantial number of people? | | | | X | 1 |

## Discussion

The project area is governed by the BAAQMD. The most recent update to the BAAQMD CEQA Air Quality Guidelines was prepared to guide assessment of air quality impacts of a project. Together with the Air Quality Management Plan, it provides guidelines to determine compliance with state and federal air quality standards and requirements for CEQA analysis (*BAAQMD CEQA Guidelines*, 1999).

### *Regional Emissions*

The Bay Area is considered a non-attainment area for ground-level ozone under both the federal and state Clean Air Acts. The area is also considered non-attainment for $PM_{10}$ and $PM_{2.5}$ under the California Clean Air Act, but not the Federal Act. The area has attained both state and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and $PM_{10}$, the BAAQMD has established thresholds of significance for air pollutants. These thresholds are for ozone precursor pollutants (reactive organic gases and nitrogen oxides) and $PM_{10}$.

The traffic analysis for the project indicates that the proposed development would generate about 4,500 new daily traffic trips, leading to increased air pollutant emissions. Emissions of air pollutants associated with the project were predicted using the URBEMIS2007 model (Version 9.2). Predicted daily emissions from the project are shown in Table 1 below and compared against the BAAQMD thresholds.

**Table 1**
**Projected Daily Project Emissions (lbs/day)**

| Scenario | Reactive Organic Gases (ROG) | Nitrogen Oxides (NOx) | Respirable Particulates ($PM_{10}$) |
|---|---|---|---|
| Project Area Sources | 22.7 | 3.3 | <1.0 |
| Project Operation Sources | 35.3 | 41 | 59.1 |
| Project Total Sources | 58 | 44.3 | 62.9 |
| ***BAAQMD Thresholds*** | *80* | *80* | *80* |

Buildout of the project is not anticipated to result in the construction or modification of stationary air pollutant sources. If such sources are included in the project at a later time, they may require permits from the BAAQMD. Such sources could include combustion emissions from boilers used for heating and cooling or standby emergency generators. These sources would normally result in minor emissions compared to those from traffic generation reported above. Sources of air pollutant emissions complying with all applicable BAAQMD regulations are not generally considered to have a significant air quality impact.

Emissions associated with the project would not exceed BAAQMD thresholds and the project would have a less-than-significant impact on regional air quality.

### *Localized Emissions*

Carbon monoxide (CO) generated by project traffic is the pollutant of greatest concern at the local level. Congested intersections with large traffic volumes have the greatest potential to cause high localized concentrations of CO. Air pollutant monitoring data indicate that CO levels have been at healthy levels (i.e., below state and federal standards) in the Bay Area since the early 1990s. As a result, the region has been designated as attainment for the standard.

The contribution of project-generated traffic to these levels was predicted using a screening procedure based on the Caline4 Line-Source Dispersion Model. The intersection of Brokaw Road/Old Oakland Road is considered the worst intersection in terms of elevated CO levels that will receive additional traffic from the project. The intersection of Berryessa Road/Jackson Avenue would be the busiest intersection that is most affected by the project. Future CO levels were predicted near these intersections using traffic projections from the traffic analysis. The results are presented in Table 2 below.

**Table 2**
**Predicted 8-Hour CO Concentrations with Project**

| Intersection | 2006 Existing | 2010 Background | 2010 Project | Cumulative Plus Project (2020) |
|---|---|---|---|---|
| Brokaw Road/Old Oakland Road | 6.5 ppm | 6.1 ppm | 6.1 ppm | 4.4 ppm |
| Berryessa Road/Jackson Avenue | 6.1 ppm | 5.3 ppm | 5.4 ppm | 4.2 ppm |
| BAAQMD Thresholds: California ambient air quality standard that is 9.0 ppm | | | | |

CO concentrations in the near term future with background conditions would be below ambient air quality standards. Vehicle emission rates are predicted by the model to decrease substantially as newer cleaner vehicles replace older vehicles; thus, future CO concentrations would be lower than existing levels. The highest 8-hour concentration with the project in place is predicted to be 6.1 ppm over an 8-hour averaging period. The results of the screening analysis indicate that CO levels would be below the California ambient air quality standards (used to judge the significance of the impact) of 9.0 ppm and the impact would be less-than-significant.

***Exposure of Sensitive Receptors to Air Pollutants***

Operation of the project is not expected to cause any localized emissions that could expose sensitive receptors to unhealthy air pollutant levels. Construction activities would result in localized emissions of dust and diesel exhaust that could result in temporary impacts to adjacent residential uses. The project is located over 700 feet from Interstate 680, so future residences would not be exposed to substantial air pollutant levels from freeway traffic.[1]

**Construction Dust**. During grading and construction activities, dust would be generated. Most of the dust would be generated during demolition and grading activities. The amount of dust generated would be highly variable and dependent on the size of the area disturbed, amount of activity, type of

[1]CARB recommends a generic setback of 500 feet between new residences and freeways (CARB, 2005).

materials disturbed, and meteorological conditions. Typical winds during late spring through summer are from the northwest. Residences along the east and south boundaries of the site would be immediately adjacent to construction sites. If uncontrolled, $PM_{10}$ (dust) levels downwind of actively disturbed areas could possibly exceed State standards. In addition, dustfall on adjacent residences could create a nuisance. The BAAQMD CEQA Guidelines recommend that measures to reduce $PM_{10}$ be included with all construction projects, as set forth in the mitigation below.

**Construction Equipment Exhaust**. Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known Toxic Air Contaminant. Diesel exhaust poses both a health and nuisance impact to nearby receptors. Diesel exhaust is also a substantial source of NOx emissions that affect regional ozone levels. Construction activities are expected to occur during a relatively short time, and the impacts are considered less-than-significant if reasonable available control measures are applied. Implementation of the measures recommended by the BAAQMD listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level.

**Mitigation Measures**

The contractor for the project shall implement the following measures during all phases of construction:

- Water all active construction areas at least twice daily and more often during windy periods to prevent visible dust from leaving the site. Active areas adjacent to existing uses shall be kept damp at all times or shall be treated with non-toxic stabilizers or dust palliatives.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water at least three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily (or more often if necessary) all paved access roads, parking areas, and staging areas at construction sites to prevent visible dust from leaving the site, preferably with water sweepers; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality.
- Sweep streets daily (or more often if necessary) if visible soil material is carried onto adjacent public streets, preferably with water sweepers.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (i.e., previously-graded areas that are inactive for 10 days or more).
- Enclose, cover, water at least twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.) to prevent visible dust from leaving the site.
- 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 wheel washers for all existing trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.
- Suspend excavation and grading activities when winds have instantaneous gusts that exceed 25 mph.
- Limit the area subject to excavation, grading, and other construction activities at any one time.

- Clearly post signs at the construction site indicating that diesel equipment standing idle for more than five minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate, or other bulk materials. Rotating drum concrete trucks could keep their engines running continuously as long as they were onsite.
- Stage construction equipment away from any sensitive uses.
- Install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g., compressors).
- A "disturbance coordinator" will be assigned to the project when active construction is occurring within 200 feet of residences. This coordinator will confirm that all air quality construction mitigation measures are enforced. In addition, the coordinator will respond to complaints from the public regarding air quality issues in a timely manner. The contact information for the coordinator shall be posted in plain view at the project site.

***Odor***

The project uses are typical of those in suburban and urban areas, which do not usually result in odor complaints. During construction the various diesel powered vehicles and equipment in use on the site would create localized odors. These odors would be temporary and not likely to be noticeable for extended periods of time much beyond the project's boundaries. The potential for diesel odor impacts is less-than-significant.

***Consistency with Clean Air Plan***

The most current Clean Air Plan (CAP), the *2005 Bay Area Ozone Strategy*, was adopted by BAAQMD on January 4, 2006. This plan is based on population projections through 2020 compiled by the association of Bay Area Governments (ABAG). The 2005 Ozone Strategy uses population projections that extend beyond the City's General Plan build out year of 2020. The City estimates that the population of San Jose at General Plan buildout would be approximately 1.27 million, which is higher than the 1.15 million population projected for San Jose by 2025 used for the CAP. The City's estimate, however, is consistent with the figures from ABAG of 1.34 million by 2030. BAAQMD staff has indicated that the next update of the CAP would utilize the latest available population projections from ABAG.

The project includes rezoning of the site, but no General Plan amendments. A General Plan amendment was approved for most of the site in 2006, which found that changing the land use designations would not generate substantial new traffic trips (and associated air pollution emissions) relative to the existing designation, since the project would reduce overall development density by eliminating commercial uses on the site. Therefore, the proposed project would not conflict with current clean air planning efforts.

The 2005 Bay Area Ozone Strategy includes 20 transportation control measures (TCMs), of which seven require participation at the local level. The set of adopted TCMs, which identify local governments as implementing agencies, are listed by the BAAQMD in their CEQA Guidelines. Future development, primarily residential, associated with the project cannot individually implement the listed measures. Although most TCMs would be implemented through City policy, mitigation measures would be required to ensure appropriate TCM implementation. Implementation of the measures listed

below would reduce vehicle use and vehicle miles traveled consistent with the current Clean Air Plan.

**Mitigation Measures**

- At the PD Permit stage, the applicant shall submit plans that indicate the following:

  - Provision of bicycle amenities including secure residential and employee bicycle parking, bicycle racks for retail customers and visitors, and bike lane connections. (The project shall provide one bicycle space for every four residential units as per the City's Zoning Ordinance.)
  - Pedestrian facilities that include easy access and signage to bus stops and roadways that serve the major site uses (e.g. retail and residential uses).
  - Traffic calming measures in traffic circulation and roadway connection designs.

## D. BIOLOGICAL RESOURCES

**Setting**

The project site consists of a disturbed property that has been developed with residential and agricultural-related uses. The majority of the site has been regularly disked. No rare and endangered plant or animal species have been observed or are anticipated on the site, with the possible exception of burrowing owls and raptors.

***Vegetation***

The project site consists of a disked field and three residences, farm-related structures, and landscaping (including shrubs and trees). The majority of the vegetation on the project site is characterized as ruderal (weedy) non-native grasses. Ruderal vegetation within the project site includes common weed species such as wild oats (*Aven fatua*), rip-gut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum leporinum*) Italian ryegrass (*Lolium multiflorum*), bristly ox-tongue (*Picris echiodes*), broadlead filaree (*Erodium botrys*), sour clover (*Melilotus indica*), and fiddleneck (*Amsinckia* sp.). A few coyote brush bushes (*Baccharis pilularis*) are also located on the site. The northeast portion of the property was formerly an orchard and contains remnant fruit trees.

***Wildlife***

Western burrowing owls (*Athene cunicularia hypugaea*) are listed as a species of special concern by the California Department of Fish & Game (CDFG). Burrowing owl surveys were completed for the project site by Monk & Associates (M&A) in 2006 and 2007; these reports are contained in Appendix B. Surveys were conducted on May 10 and 12, 2006 and July 16-17, 2007 to search for direct and/or indirect evidence of burrowing owl occupation. Evidence of occupation includes the presence of molt feathers, white wash, pellets, or prey remains. Survey methods included walking systematic, parallel transects over the site. All California ground squirrel (*Spermophilus beechyi*) burrows were checked for evidence of burrowing owl use.

M&A did not observe any burrowing owls on or surrounding the project site, nor did they find any evidence of burrowing owl use. Although ground squirrel burrows were present onsite, M&A

concluded that burrowing owls do not currently use the project site due to lack of any evidence or observation of individuals.

Trees on the project site may provide suitable habitat for nesting raptors (birds of prey). Raptors and their nests are protected under the Migratory Bird Treaty Act of 1918 and CDFG Code.

With the exception of burrowing owls and raptors, the project site has a relatively low habitat value for wildlife due to the disturbed nature of the property and lack of significant vegetation. Miscellaneous bird species observed during the site surveys included turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), black phoebe (*Syornis nigricans*), house finch (*Carpodacus mexicanus)*, morning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), Anna's hummingbird (*Calypte anna*), killdeer (*Charadrius vociferous*). Mammalian species observed included California ground squirrel.

### *Trees*

Ordinance-sized trees are considered sensitive resources. The City of San Jose's Municipal Code (13.32.20.I) serves to protect all trees, including any live or dead woody perennial plant, having a main stem or trunk 56 inches or more in circumference (i.e., 18 inches in diameter) at a height of 24 inches above the natural grade slope. A tree survey was completed for the project site by Arbor Resources (September 2007) indicating the size, species, and location of trees on the property. The results of the tree survey are presented in Table 3 below. As shown in this table, six trees on the site are ordinance-size, although they are characterized as being in fair to poor condition. In addition to the trees listed below, the project site contains remnants of a former orchard, consisting of 177 cherry trees and 25 other fruit trees. The vast majority of the orchard trees are dead or dying (Arbor Resources, 2007).

Any tree found by the City to have special significance can be designated as a heritage tree, regardless of tree species or size. City-designated heritage trees are considered sensitive resources. It is unlawful to vandalize, mutilate, remove or destroy heritage trees. There are no City-designated heritage trees in the project study area, as per the City's heritage tree list (City of San Jose, 2004).

**Table 3**
**Tree Summary**

| No. | Scientific Name | Common Name | Size (Diameter) | Native? | Condition |
|---|---|---|---|---|---|
| **1** | ***Juniperus c.* 'Torulosa'** | **Hollywood Juniper** | **26"** | **No** | **Fair** |
| **2** | ***Ulmus pumila*** | **Siberian Elm** | **28"** | **No** | **Poor** |
| **3** | ***Taxus baccata*** | **English Yew** | **30"** | **No** | **Fair** |
| **4** | ***Taxus baccata*** | **English Yew** | **22"** | **No** | **Fair** |
| 5 | *Cupressus sempervirens* | Italian Cypress | 12" | No | Good |
| 6 | *Cupressus sempervirens* | Italian Cypress | 12" | No | Good |
| 7 | *Cupressus sempervirens* | Italian Cypress | 12" | No | Good |
| 8 | *Cupressus sempervirens* | Italian Cypress | 10" | No | Good |
| 9 | *Cupressus sempervirens* | Italian Cypress | 10" | No | Good |

| Table 3<br>Tree Summary | | | | | |
|---|---|---|---|---|---|
| **No.** | **Scientific Name** | **Common Name** | **Size (Diameter)** | **Native?** | **Condition** |
| 10 | *Cupressus sempervirens* | Italian Cypress | 11” | No | Good |
| 11 | *Cupressus sempervirens* | Italian Cypress | 12” | No | Good |
| 12 | *Magnolia grandiflora* | Southern Magnolia | 14” | No | Good |
| **13** | ***Salix matsudana* ‘Tortuosa’** | **Corkscrew Willow** | **27” (13,” 8,” 6” multi-trunk)** | **No** | **Poor** |
| **14** | ***Mimosa julibrissin*** | **Silk Tree** | **24” (14,” 10” multi-trunk)** | **No** | **Poor** |
| 15 | *Quercus agrifolia* | Coast Live Oak | 14” | Yes | Good |

Notes:
*All trees are proposed for removal with the exception of tree no. 15, which will be retained or relocated.*
Tree size measured at two feet above existing grade.
Numbers correspond to tree locations provided in Appendix C.
Ordinance sized trees (56 inches or greater in circumference or 18 inches diameter) are shown in **bold**.
As per City requirements, orchard trees are not listed.

## Impacts and Mitigation

### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|---|
| **4.** | **BIOLOGICAL RESOURCES. Would the project:** | | | | | |
| a) | Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | X | | | 7 |
| b) | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | | | X | 1, 7 |
| c) | Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | X | 1, 2 |
| d) | 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? | | | | X | 1, 2, 7 |
| e) | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | X | | 1, 2 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan? | | | | X | 1, 2 |

## Discussion

The project site is not located within, nor would not conflict with, any habitat or natural community conservation plans.

### *Wildlife*

Based on the protocol-level surveys conducted by M&A, burrowing owls are not currently using the project site. Although it appears that owls do not currently occupy the site, pre-construction surveys would be required by the City prior to any ground disturbance for the project.

Raptors and their nests are protected under the Migratory Bird Treaty Act and CDFG Code. The project proposes to remove existing trees on the site, which may provide habitat for nesting raptors. Any loss of fertile raptor eggs or nesting raptors, or any activities resulting in raptor nest abandonment, would be considered a significant impact. This impact would be reduced to a less-than-significant level with mitigation identified below.

### *Trees*

Development of the project would require the removal of 14 trees, four of which are ordinance-sized (refer to Table 3). The project may also relocate the coast live oak (#15) if it cannot be retained in-place. The trees to be removed are non-native and many are in fair to poor condition. All trees to be removed would be replaced in accordance with the City's tree replacement ratios. The proposed tree removal does not constitute a significant impact based on the City's guidelines. Where trees are retained, construction occurring in proximity to such trees could cause indirect impacts. This impact would be reduced to a less-than-significant level with the standard measures identified below.

## Standard Measures

- All trees that are to be removed from the site shall be replaced at the following ratios, as per City requirements:

| Diameter of Tree to be Removed | Type of Tree to be Removed | | | Minimum Size of Each Replacement Tree |
|---|---|---|---|---|
| | Native | Non-Native | Orchard | |
| 18 inches or greater | 5:1 | 4:1 | 3:1 | 24-inch box |
| 12-17 inches | 3:1 | 2:1 | none | 24-inch box |
| Less than 12 inches | 1:1 | 1:1 | none | 15-gallon container |

| |
|---|
| x:x = tree replacement to tree loss ratio<br>Note: Trees greater than 18" in diameter shall not be removed unless a tree removal permit, or equivalent, has been approved for the removal of such trees. |

In the event the project site does not have sufficient area to accommodate the required tree mitigation, one or more of the following measures will be implemented, to the satisfaction of the City's Environmental Principal Planner, prior to issuance of a PD permit:

- The size of a 15-gallon replacement tree can be increased to 24-inch box and count as two replacement trees.
- An alternative site(s) will be identified for additional tree planting. Alternative sites may include local parks or schools or installation of trees on adjacent properties for screening purposes to the satisfaction of the Director of the Department of Planning, Building, and Code Enforcement. Contact Todd Capurso, PRNS Landscape Maintenance Manager, at 277-2733 or todd.capurso@sanjoseca.gov for specific park locations in need of trees.
- Provide a donation of $300 per mitigation tree to Our City Forest for in-lieu off-site tree planting in the community. These funds will be used for tree planting and maintenance of planted trees for approximately three years. Contact Rhonda Berry, Our City Forest, at (408) 998-7337 x106 to make a donation. A donation receipt for off-site tree planting shall be provided to the Planning Project Manager prior to issuance of a development permit.

- At the PD Permit stage, the applicant shall retain a qualified arborist to prepare and submit a Tree Preservation Report in which the arborist reviews the final site/grading plans and identifies tree protection measures to protect trees that are to be retained during construction.

**Mitigation Measures**

- The applicant shall retain a qualified biologist to conduct a survey and prepare a report not more than one month prior to construction activities to determine the presence of burrowing owls on the site. If owls are present on the site, a mitigation program shall be developed in conformance with the requirements of the California Department of Fish and Game and the U.S. Fish and Wildlife Service. If mitigation includes relocation, owls shall not be relocated during the nesting season (March though August). Prior to the issuance of any grading or building permits, the developer shall submit a biologist's report to the City's Environmental Principal Planner to the satisfaction of the Director of Planning indicating that no owls were found on the site or that owls were present and that mitigation has been implemented in conformance with the requirements of the above regulatory agencies.

- If possible, schedule construction between October and December (inclusive) to avoid the raptor nesting season. If this is not possible, pre-construction surveys for nesting raptors shall be conducted by a qualified ornithologist to identify active raptor nests on the site. Between January and April (inclusive) pre-construction surveys shall be conducted no more than 14 days prior to the initiation of construction activities or tree relocation or removal. Between May and August (inclusive), pre-construction surveys no more than thirty (30) days prior to the initiation of these activities. The surveying ornithologist shall inspect all trees in and immediately adjacent to the construction area for raptor nests. If an active raptor nest is found in or close enough to the construction area to be disturbed by these activities, the ornithologist

shall, in consultation with the CDFG, designate a construction-free buffer zone (typically 250 feet) around the nest. The applicant shall submit a report to the City's Environmental Principal Planner indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of Planning prior to issuance of any grading or building permit.

## E. CULTURAL RESOURCES

### Setting

#### *Archaeological Resources*

Archaeological investigations were completed for the project site by Holman & Associates (May 2006 and August 2007). These investigations included an archival search and site surveys to determine the potential for archaeological resources. These reports are on-file with the City of San Jose Planning, Building, and Code Enforcement.

A prehistoric and historic site record and literature search was completed for the project area at the Northwest Information Center located at Sonoma State University (NWIC). No archaeological sites, historic or prehistoric, were recorded within or near the project property. Two previous surveys of all or part of the project site were conducted for the site, both with negative findings (i.e., no resources were identified).

A field inspection was completed for the project area by Holman Associates in May 2006 and August 2007. The surface of the project site was almost generally devoid of vegetation due to recent disking. No evidence of historic and/or prehistoric archaeological deposits was found on the project site.

#### *Historical Resources*

The northeast portion of the site contains three residences and farming structures related to former agricultural operations on the property. A historical evaluation was completed for these structures by Urban Programmers (January 2008). This evaluation is contained in Appendix D and summarized below.

Historically, the project site has been used for agricultural purposes. Since the late 1800s, the site was used primarily for grazing. In 1912, Vincent Nola acquired the Nola Ranch site and planted orchards. He was one of three Italian immigrant brothers that settled in San Jose and went into the orchard farming business. In 1920, Vincent and his wife retained local architect Charles McKenzie to design a home on the site at 13100 Berryessa Road. Up until the early 1930s, Vincent Nola raised a mixed crop of predominantly prunes, as well as cherries and apricots. This fruit was dried on the ranch and packed for shipping as Suni-Best, the Nola Packing Company label. Due to changes in market demands, the orchard was replaced with fresh fruit trees, particularly cherries, which were sold to local brokers, offered at a roadside stand, or dried on the site and sent to distributors.

In 1929, Vincent Nola's oldest son, Frank Nola, and his wife constructed a house adjacent his parents' house. The families worked together tending the orchards. Frank Nola's children grew up working on the ranch as did their cousins. After the deaths of Vincent Nola and his wife, the title to the property

was divided among the children. The fruit ranch operations extended to the next generation and Vincent Genco, Jr., grandson of Vincent Nola, constructed his home on the project site in 1950.

Even as urban development extended into the project area, the children and grandchildren of Vincent Nola continued to operate the ranch. In the late 1970s, 20 acres of the Nola Ranch was sold for residential development. After Frank Nola died in 1976, his wife Grace and her children and grandchildren continued the ranch operations, selling fresh cherries and pears from a fruit stand on the property. As the trees produced less fruit over the years, the supply was augmented with fruit from the central valley. In the mid 1990s, the family constructed a permanent fruit stand. In 2003, when Grace Nola died, the ranch consisted of 200 trees on two acres. In 2004, the fruit stand was operated by family members. As residential development surrounded the Nola property and family was dispersed, the continued use of the Nola Ranch was deemed infeasible. The houses on the site continue to be occupied by family members or are vacant. The sheds and buildings became storage areas.

Most of the orchard trees on the site have been removed and the remaining trees are dead or dying. Remaining structures associated with the Nola Ranch consist of three houses and several ancillary buildings of wood-frame construction. The locations of these structures are shown in Appendix D and summarized below.

**Vincent Genco House/Structures, 13060 Berryessa Road.** The house was constructed in 1950 by Vincent Genco, Jr. The house is a mid-century California Ranch style home. This is a wood-frame stucco house with hipped tile roof over exposed eaves. The front façade contains a concrete porch with shed roof and a large pane tripartite picture window.

Behind the house and garage is maintenance area. Two open sheds, constructed in the mid-1950s, are found behind the house that are made from recycled wood from formerly demolished structures on the site. An equipment garage is located south of the sheds. The buildings are surrounded by various equipment and vehicle parts.

**Vincent Nola House/Structures, 13100 Berryessa Road**. The house was constructed by Vincent Nola in 1920 and consists of a large California Craftsman Bungalow style home designed by noted local architect Charles McKenzie. This is a wood-frame house sheathed with stucco, with a shingle-covered roof. The front façade is composed of a projecting gable that creates a recessed front porch. Beneath the gable point is an eight-pane window centered between two of the truss-brackets. The rear façade of the home appears to be altered.

To the rear is a concrete patio with small garden areas. A small front yard contains a lawn, walkway, and small flower garden. West of the house is a modern (1960s) two-story garage. The remains of a wood-frame water tank are located near the garage. West of the garage is a shed constructed in 1962.

**Frank Nola House/Structures, 13120 Berryessa Road.** The house was constructed by Frank Nola in 1929 and is an eclectic California Bungalow style home. It is wood-frame with stucco, and has a hipped roof covered in red tile above open eaves. The front façade is divided with a projecting porch extending across two-thirds of the width. Truncated columns make up the two front corners of the porch that meet the flat arch opening that is sculpted with an arrow point in the center. Behind the house is a garage in the same style as the house. A storage building constructed in the 1960s is located

adjacent to the garage. A fruit stand, built in the 1990s, is located in front of the house near Berryessa Road.

In summary, the buildings are representative of houses and sheds that were typical for the time and used by a fruit ranching family. As the orchard land was sold, the ranch was reduced to residential sized parcels. The houses and other structures are not of high quality design. However, the Nola house, designed by noted local architect Charles McKenzie, is a good example of a Craftsman Bungalow. The condition of building and other structures on the site ranges from good to severely deteriorated.

## Impacts and Mitigation

### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| 5. CULTURAL RESOURCES. Would the project: | | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA 15064.5? | | X | | | 1, 9 |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA 5064.5? | | | X | | 1, 8 |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | | X | 1 |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | | | | X | 1 |

## Discussion

### *Archaeological Resources*

No evidence of cultural resources was found during the most recent and two previous inspections of the project site and area. The archaeology report did not recommend mechanical subsurface presence/absence testing or monitoring of construction related earthmoving activities. There remains some potential that construction may uncover unrecorded archaeological deposits buried by alluvial materials from Penitencia Creek during site clearing, grading, or trenching operations. In the event that any archaeological materials are discovered (e.g., bone, stone, artifacts), work should be halted within 50 feet of any discovery until it has been inspected by a qualified archaeologist, as set forth below. This represents a significant impact that would be reduced to a less-than-significant level with the following standard measures.

## Standard Measures

- Should evidence of prehistoric cultural resources be discovered during construction, work within 50 feet of the find shall be stopped to allow adequate time for evaluation and mitigation by a qualified professional archaeologist. If evidence of any archaeological, cultural, and/or historical deposits is found, hand excavation and/or mechanical excavation shall proceed to evaluate the deposits for determination of significance as defined by CEQA guidelines. The archaeologist shall submit reports, to the satisfaction of the City's Environmental Principal Planner, describing the testing program and subsequent results. These reports shall identify any program mitigation that the developer shall complete in order to mitigate archaeological impacts (including resource recovery and/or avoidance testing and analysis, removal, reburial, and curation of archaeological resources.)

- As required by County ordinance, this project shall incorporate the following guidelines. Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

***Historical Resources***

For the purposes of this project, a significant impact would occur if the project would have an effect on one or more properties listed on, or potentially eligible for, inclusion on the California Register of Historical Resources as a California Historical Landmark, or at the local level as a "City Landmark" or "Candidate City Landmark" in the City of San Jose Historic Resources Inventory. Such an effect could occur through demolition of or other substantial adverse change to an individually listed or eligible property, those properties contributory to a district, or through the implementation or other adverse effects as a whole or in a manner such that the district's integrity could be compromised.

The project property was evaluated using the criteria of the City of San Jose Historic Preservation Ordinance, the California Register of Historical Resources, and the National Register of Historic Places. The results of the historical evaluation are summarized below.

**City of San Jose Historic Evaluation.** The City of San Jose's Historic Preservation Ordinance contains the criteria that defines structures of historical value based on the following factors:

1. Identification or association with persons, eras or events that have contributed to local, regional, state and national history, heritage or culture in a distinctive, significant or important way;

2. 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. 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.

The San Jose Historic Landmarks Commission's *Evaluation for Significance* establishes the following tally system for determining historical significance:

| | |
|---|---|
| 67-134 | Candidate City Landmark |
| 33-66 | Structure of Merit |
| 33-66 | Contributing structure to a historic district |
| 32-0 | Non-significant |

Based on the results of the historical evaluation, the Nola Ranch site and the buildings on the former Ranch received adjusted totals as follows:

- Nola Ranch (site as a whole): 41.8
- 13060 Berryessa Road (Vincent Genco House): 24.26
- 13100 Berryessa Road (Vincent Nola House): 59.42
- 13120 Berryessa Road (Frank Nola House & ancillary buildings): 28.08
- Former fruit processing ancillary buildings : 23.2
- Equipment sheds: 19.1

Based on the City's criteria, the Nola Ranch site as a whole is considered a Structure of Merit. In addition, the 1920 ranch house at 13100 Berryessa Road was rated as a Structure of Merit, primarily due to its design by noted local architect Charles McKenzie and association with the prune ranch developed by Vincent Nola. The other properties and buildings were rated non-significant (i.e., less than 32 points).

**California Register of Historical Resources.** In order for a resource to be eligible for the California Register, a property must be significant at the local, state or national level, under one or more of the four criteria of significance listed below. These are essentially the same as National Register criteria with more emphasis on California history. A historical resource would be significant at the local, state, or national level if it meets one or more of the following criteria:

1. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the United States.

2. It is associated with the lives of persons important to the nation or to California's past.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.
4. It has the potential to yield information important to the prehistory or history of the local area, state or the nation (this criteria applies primarily to archaeological sites).

In addition to having significance, resources must have integrity. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. To be eligible for listing, the resources must retain enough of their character or appearance to be recognizable as historical resources and convey the reasons for their significance.

Nola Ranch. The Nola Ranch site has lost the integrity of an operating fruit ranch because the orchard no longer exists (most of the trees have been removed or are dying) and the pattern of operation has been destroyed by the loss of buildings that defined the operations of a fresh fruit ranch. The buildings that are over 50 years old and in their original locations consist of residential buildings oriented toward the street without elements that communicate the past fruit ranch operations. In addition, the former rural setting of the ranch is diminished by surrounding urban development. In summary, the ranch site *as a whole* does not meet the criteria of integrity defined by the California Register (refer to Appendix D).

Vincent Nola Ranch House, 13100 Berryessa Road. The Vincent Nola house is the only building on this parcel that is over 50 years old that retains integrity as per the California Register Criteria. The house was designed by noted local architect Charles McKenzie. It is also the oldest remaining ranch house of the Nola Ranch and Suni Packaged Fruit, and is associated with the growing/processing of prunes, which was an important part of the agricultural economy of the Santa Clara Valley. The house appears to be eligible for listing in the California Register of Historical Resources under Criteria 3 primarily for its design and association with architect Charles McKenzie and, to a lesser degree, for its association with the Nola Prune Ranch (although the ranch has lost its integrity). The other structures on this parcel do not appear to meet any of the other criteria of the California Register (refer to Appendix D).

Relocation of the Vincent Nola Ranch House is a required mitigation measure for the project to proceed as proposed. This historical consultant evaluated relocation options in a supplemental memo dated March 18, 2008. This supplement is attached to the historic report in Appendix D. This evaluation considered three options for the house: 1) relocate to a proposed open space park area onsite; 2) retain on the original site; and 3) relocate to a currently undetermined site. This evaluation utilized a set of criteria to identify the elements that would be required to maintain the historic significance of the house and its association with architect Charles McKenzie. The evaluation determined that options 1 and 2 would be in conformance with the *Secretary of Interior's Standards for Rehabilitating Historic Property* and would maintain the eligibility of the historic resource for listing in the California Register.

Frank Nola House, 13120 Berryessa Road**.** The parcel contains one house built in 1929 and other structures. Buildings less than 50 years old of those that have lost integrity are not considered eligible for listing in the California Register of Historic Places. The Frank Nola house is the only building

over fifty years old that retains integrity. However, the house and other structures on this parcel do not appear to meet any of the other criteria of the California Register (refer to Appendix D).

Vincent Genco House, 13060 Berryessa Road. This parcel contains a house constructed in 1950 and a garage. The Vincent Genco house is the only building over 50 years old that retains integrity. However, the house and other structures on this parcel do not appear to meet any of the other criteria of the California Register (refer to Appendix D).

**National Register of Historic Places.** Specific criteria are used to evaluate a historic property's eligibility for the National Register. To meet the National Register standards, a property must satisfy at least one of the criteria below, be associated with an important historic context, and retain the historic integrity of features that conveys its significance (National Park Service, 1992).

1. A property must be 50 years old.
2. The resource must retain architectural and historical integrity.
3. The resource must meet at least one of the following criteria:
   a. are associated with events that have made a significant contribution to the broad patterns of our history; or
   b. are associated with the lives of persons significant in our pasts; or
   c. embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinctions; or
   d. have yielded, or may be likely to yield, information important in prehistory or history.

The three properties that contain houses meet the criteria of 50 years or older. Of these, the integrity is diminished in feeling and in setting due to the surrounding contemporary residential development. Considering that the basic elements of integrity are present, the buildings were evaluated for significance. Following the findings in the San Jose Historic Preservation evaluation, and that of the California Register of Historic Resources, the buildings are not associated with people or events that have made significant individual contributions to the broad patterns of our history or that were/are significant in the history of San Jose. The buildings do not exhibit the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master in exhibiting high artistic values. The properties do not posses significance, as defined under the four criteria of the National Register of Historic Places, and are thus not eligible for listing in the National Register of Historic Places.

**Conclusion**. The Vincent Nola House at 13100 Berryessa Road appears to qualify for the California Register of Historic Resources under Criteria 3. The Vincent Nola House is also considered for listing as a Structure of Merit on the City's Historic Resources Inventory. The other buildings do not qualify for the California Register. None of the buildings on the project site that are over 50 years old and that retain integrity are eligible for the National Register. The ranch as a whole is not eligible for the California or National Registers due to its lack of integrity and loss of original setting.

Destruction of the Vincent Nola house would result in a significant impact to a historical resource that would be reduced to a less-than-significant level with the mitigation identified below.

**Mitigation Measures**

- Relocate the Vincent Nola House to a residential setting as set forth below. All relocation and rehabilitation activities shall be conducted in accordance with the *Secretary of Interior's Standards for Rehabilitating Historic Property* in order to reduce the impact to the historic resource to a less-than-significant level. Relocation plans shall be submitted to the City's Historic Preservation Officer prior to issuance of the appropriate permits as set forth below, to the satisfaction of the Director of Planning, Building and Code Enforcement and the Director of Public Works.

  - Relocate to Open Space Park Area Onsite: Relocate the house to the proposed 25,000 square foot open space area on the site and reuse as the clubhouse for the residential development, to be maintained by the homeowner's association. The house shall be sited in accordance with the plan shown in the supplemental historic evaluation in Appendix D. This option is preferred by the applicant.

  - Retain on Original Site: Retain the house at its original location onsite. Create a parcel that allows sufficient buffer area providing a setback of 25 feet on each side, 35 feet in the rear, and retaining the 30 foot setback in the front. The house shall be retained in accordance with the plan shown in the supplemental historic evaluation in Appendix D.

  - Relocate to an Underdetermined Site: Relocate the house to a site that meets the criteria for relocation and receiver sites approved by the City. This criteria is specified in the supplement to the historic report in Appendix D. This alternative would require additional evaluation, review, and environmental clearance.

- No PD permit shall be issued on the Vincent Nola House parcel (delineated in the historic supplement and shown in Appendix D) until relocation plans are approved and entitlements issued by the City of San Jose Department of Planning, Building and Code Enforcement. The City would identify triggers for the timing of final occupancy permits for the rehabilitation work.

- Prior to disposing of artifacts associated with the Nola Ranch that are not wanted by the Nola, Genco, and Territo families, the Vincent Nola house and site shall be maintained and made available for salvage. The project applicant shall coordinate a salvage tour with History San Jose, Preservation Action Council of San Jose, Victorian Preservation, and the Historic Landmarks Commission by placing the salvage tour on a Historic Landmarks Commission agenda. Representatives shall tour the site in order to identify elements that warrant salvage for public information or for reuse in other locations. The applicant shall be responsible for providing access to the site, including lighting, prior to the removal of any elements from the site, and to facilitate removal and transfer for the identified elements to the above entities. Any elements not identified through this effort for salvage shall be made available to salvage companies facilitating the reuse of historic building materials.

- Prior to any actions to relocate or remove buildings or sheds on the site, the project applicant shall

submit photographic documentation as specified by the professional staff at History San Jose. The documentation modes, level, and number/orientation of views shall be approved by the City's Historic Preservation Officer. Two copies of the completed documentation shall be submitted to the City's Historic Preservation Officer. One copy should be retained by History San Jose for their archives. The photo documentation shall conform to the City's standard requirements set forth below.

Provide selected black and white views of the existing building according to the following standards:

- *Cover sheet* – The documentation shall include a cover sheet identifying the photographer, providing the address of building, common or historic name of the building, date of construction, date of photographs, and description of photographs.
- *Camera* – A 35mm camera.
- *Lenses* – No soft focus lenses. Lenses may include normal focus length, wide angle and telephoto.
- *Filters* – Photographer's choice. Use of a pola screen is encouraged.
- *Film* – Must use black and white film; tri-X, Plus-X, or T-Max film is recommended.
- *View* – perspective view-front and other elevations. All photographs shall be composed to give primary consideration to the architectural and/or engineering features of the structure with aesthetic considerations necessary, but secondary.
- *Lighting* – Sunlight is usually preferred for exteriors, especially of the front façade. Light overcast days, however, may provide more satisfactory lighting for some structures. A flash may be needed to cast light into porch areas or overhangs.
- *Technical* – All areas of the photograph must be in sharp focus.
- *Submission of Photo-Documentation:* Provide three copies of the documentation, including the original prints and negatives, to the Historic Preservation Officer for approval and distribution to History San Jose (Jim Reed, History San Jose, 1650 Senter Road, San Jose, CA 95112-2599, (408) 287-2290), the California Room at the MLK Jr. Library (Bob Johnson, Dr. MLK Jr. Library, California Room, 150 E. San Fernando St., San Jose, CA 95112, (408) 808-2136), and the Northwest Information Center at Sonoma State University. Digital photos may be provided as a supplement to the above photo-documentation, but not in place of it. Digital photography shall be recorded on a CD and submitted with the above.

- If possible, documentation of the site should also include video of interviews with the Nola, Territo, and Genco families regarding their memories of the ranch operations and family.

- The "roadside" fruit stand shall be incorporated into the proposed development to maintain a connection with the site's past use and the history of Grace Nola and the Nola Orchard. The stand should be maintained until it is relocated on the project property (e.g., within the proposed park or retail areas).

## F. GEOLOGY AND SOILS

### Setting

The following discussion is based on geotechnical investigations prepared for the project site by TRC Lowney (April 2006) and Stevens Ferrone & Bailey (August 2006). These reports are contained in Appendix E. The TRC investigation included drilling of 11 borings and excavation of four cone penetration tests on 17.5 acres of the site. The SFB study included four borings and a corrosion potential investigation for the three remaining acres in the north portion of the site. Both studies evaluated soil/geologic characteristics of the site and provided recommendations for future development.

The project is located on a relatively flat site at an elevation of approximately 140 feet above mean sea level. Topography in the project area slopes gently to the southwest. The results of the geotechnical investigations indicate that the near-surface soils consist of soft to stiff sandy clay. Beneath the surface soils are interbedded clays, sandy clays, sandy silty clays, clayey sands, clayey silty sands, clayey sands with gravel, poorly graded sands with silt and gravel, and poorly graded gravels with silt. On the developed portions of the site (northern three acres), fill materials were also encountered to a depth of about one foot below the existing surface; these materials were weak, heterogeneous, and potentially compressible. Based on the lab test results, the near surface materials have low plasticity and a low expansion potential.

Groundwater was encountered at depths of about 30 to 40 feet below ground surface; groundwater beneath the site is expected to flow to the southwest.

The project 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 15 miles southwest of the site. Other active faults in the area are the Hayward Fault (southeast extension), 2.5 miles northeast of the site; the Calaveras Fault (south segment), about five miles northeast of the site; the main trace of the Hayward Fault, about five miles northeast of the site; the Calaveras Fault (north segment), about five miles northeast of the site, and; the Monte Vista-Shannon Fault, about 11 miles to the southwest of the site. The project site is not located on any faults; so the potential for fault rupture on the site is low. In addition, the project is not mapped within an Alquist-Priolo Earthquake Fault zone.

Strong earthquake shaking can cause non-uniform settlement, or differential compaction, if soils vary in composition both vertically and laterally. Results of the geotechnical investigation (TRC 2006) estimate total seismically-induced settlements to be on the order of three inches on portions of the project site.

The results of the geotechnical investigations identified some sand and silt layers beneath the 30-40 foot groundwater depth that may theoretically liquefiable. Liquefaction-inducted differential settlements are estimated to be on the order of approximately one inch for the site (TRC 2006).

Lateral spreading typically occurs from horizontal displacement of relatively flat-lying alluvial material toward an open or “free” face such as an open body of water, channel, or excavation. There are no free faces adjacent to the site, so the probability of lateral spreading is low.

## Impacts and Mitigation

### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| 6. GEOLOGY AND SOILS. Would the project: | | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | | |
| i) Rupture of a know 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? Refer to Division of Mines and Geology Special Publication 42? | | | X | | 10 |
| ii) Strong seismic ground shaking? | | | X | | 10 |
| iii) Seismic-related ground failure, including liquefaction? | | | X | | 10 |
| iv) Landslides? | | | | X | 10 |
| b) Result in substantial soil erosion or the loss of topsoil? | | | X | | 10 |
| c) 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 on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | | | X | | 10 |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | | | | X | 10 |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | | | | X | 1, 2 |

## Discussion

The project would require the import of approximately 70,000 cubic yards of material to construct the development above the floodplain.

From a geotechnical perspective, the project property is suitable for the proposed development as planned, provided design and construction are performed in accordance with the recommendations presented in the geotechnical reports (TRC, 2006 and SBF, 2006). The primary geotechnical concerns identified on the project site are as follows:

- Presence of loose surficial soils
- Seismically-inducted settlements, including liquefaction
- Flooding

Due to previous disking at the site, surface soils are loose. These materials have the potential for settlement and must be adequately compacted to avoid damage to proposed structures. In addition, the project site contains sandy layers that may settle during seismic shaking. Over-excavation would be required to avoid damage to proposed structures from settlement. The hazards would be avoided by construction in accordance with the geotechnical recommendations. (Note: flooding is addressed in **H. Hydrology and Water Quality**.)

Due to its location near several major faults, the project site would be subject to at least one large to severe magnitude (7.0+) earthquake causing considerable ground shaking on the site. The project site would also be subject to periodic ground shaking from small to moderate earthquakes. This would result in potential damage to future residential development on the site. Seismic impacts are minimized through design and development in accordance with project-level geotechnical investigation and compliance with the requirements of the California and Uniform Building Codes for seismic zone 4.

### Standard Measures

- The proposed structures on the site would be designed and constructed in conformance with the Uniform Building Code Guidelines for Seismic Zone 4 to avoid or minimize potential damage from seismic shaking on the site.

## G. HAZARDS AND HAZARDOUS MATERIALS

### Setting

A Phase I Environmental Site Assessment was prepared for the project site by TRC (August 2007), which is contained in Appendix F. The study included the following: 1) a site survey, 2) interview with the property owner(s), 3) review of historic maps and aerials, 4) a local agency file search, and 5) a regulatory agency database search. The Phase I also incorporated the findings of the earlier Phase I study prepared for the project by TRC in October of 2006, which included limited soil sampling/testing on much of the site.

The project site is located in a residential area. The property is vacant with the exception of development located on the north/northeast portion of the site, which consists of three residences, a former packing shed, a barn, several storage structures, a fruit stand, a former water tower, a flower stand, and remnant orchard. Five septic systems are also located on the site. Landscape trees also grow within the developed area of the property.

The site has historically been used for agricultural purposes including row crops and orchards. The site was planted with orchards as early as 1912. Three residences are present on the north portion of the site that were constructed in 1920, 1929, and 1950.

Soil and groundwater sampling and analysis were performed on the project site by various firms from 2005-2006. These studies concluded that groundwater was not contaminated. The most recent study, a Phase I and limited soil evaluation conducted by TRC in October 2006, evaluated potential residual pesticide concentrations on the southern portion of the site. A total of 16 soil samples were analyzed for organochlorine pesticides and pesticide-related metals (arsenic, lead, and mercury).

Concentrations were measured against the Environmental Screening Levels (ESLs) established by the San Francisco Bay RWQCB for residential uses. Samples were also measured against the total threshold limit concentrations (TTLCs) of Title 22 of the California Code for defining hazardous waste in California. Analysis of the surface soil samples revealed elevated levels of pesticides, primarily total DDT and dieldrin on the southern half of the site. Seven of eight samples collected in the southern portion of the site also exceeded the TTLC for total DDT, which defines it as a hazardous waste. Due to state exemptions for farm operations, the soil at the site would not likely be considered a regulated hazardous waste; however, once the soil is excavated for disposal it may be considered hazardous waste. All but one of the soil samples detected metal concentrations within the range of typical background conditions. Elevated lead levels were detected in one sample (SS-1) where elevated DDT and dieldrin concentrations were also found. A remedial work plan will be prepared and submitted to the overseeing regulatory agency as described below.

A regulatory database search was conducted to identify recorded hazardous materials incidents in the project area. This review included federal, state, and/or local lists of known or suspected contamination sites; known generators/handlers of hazardous waste; known waste treatment, storage, and disposal facilities; and permitted underground storage tank sites. The project site was not identified in any of the databases searched. There were no reported nearby hazardous material spills or releases with the potential to significantly impact the site. The database identified the presence of three former underground storage tanks (USTs) on the site installed in the 1970s; all have been reported removed, although two of the tanks were not removed under regulatory oversight.

## Impacts and Mitigation

### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|---|
| 7. | HAZARDS AND HAZARDOUS MATERIALS. Would the project: | | | | | |
| a) | Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | | X | 1, 11 |
| b) | Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | X | | 1, 11 |
| c) | Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school? | | | X | | 1, 11 |
| d) | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | | X | 1, 11 |
| e) | 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, would the project result in a safety hazard for people residing or working in the project area? | | | | X | 1, 2 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | | | | X | 1, 2 |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X | 1, 2 |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | | | | X | 1, 2 |

## Discussion

The project site is not located within an airport land use plan or within two miles of any airport, and would not be subject to hazards associated with airport operations. In addition, the project would not interfere with any emergency response plans or introduce risk of wildland fire. The project would not result in the emission of hazardous materials within ¼ mile of an existing or proposed school, as the nearest school is located more than ¼ mile from the site. In addition, the proposed residential and retail development would not use, store, or transport significant amounts of hazardous materials.

The project site was historically used for agricultural purposes involving the use of agricultural chemicals. Soil sampling was performed in 2006 to evaluate soil quality. Pesticides, primarily total DDT and dieldrin were detected on the southern half of the site in excess of residential screening levels and TTLCs. A remedial action work plan will be developed prior to occupation, as set forth in the mitigation below.

The project site formerly contained three USTs installed in the 1970s. All were reported removed from the property; however, two of the tanks were removed without appropriate permits. Previous borings on the site have not detected petroleum hydrocarbons in the soil near the former USTs in excess of residential ESLs. Oil range petroleum hydrocarbons were detected in groundwater at concentrations up to 1,400 ppb, which is above the ESL; however, because BTEX compounds and MTBE were not detected in the groundwater samples, it is anticipated that no further work associated with the former USTs is required. The project applicant will coordinate with and provide documentation to the Santa Clara Environmental Health Department to assure compliance with the Department's Local Oversight Program.

No significant quantities of hazardous materials were observed on the project site during the site inspection; however, various maintenance-related substances (e.g., lubricants, paints, cleaning compounds) were observed mainly within and near the existing shop and barn. These were stored on shelving or on the ground and typically stored in plastic or metal containers of five gallons or less. Gasoline and diesel fuel were also present in various machinery. No spills were readily observed, although the dirt and gravel ground surface near the shop and barn area appeared to be oil stained. Paint and building materials were reportedly stored in two plywood structures on the site. A Proposition 65 sign indicating the presence (or former presence) of chemicals was also posted on the door of one of the plywood structures; however, the potential for the site to have been significantly

impacted by the past storage of construction-related materials in these structures appears low based on the Phase I study. Any remaining hazardous materials on the site would be removed and properly disposed of prior to development of the site, as set forth in the mitigation below.

Due to the age of the structures on the site, they could contain asbestos containing materials (ACMs) and lead-based paint. Specific analytical testing for these materials would be conducted prior to any demolition activities, and suspect materials removed prior to demolition, as set forth in the standard measures below. In addition, the 2007 Phase I report identified a large number of painted structures in the developed area on the north portion of the site, which could have impacted soils with lead from the weathering and/or peeling of painted surfaces. This area has not been adequately sampled for pesticides, and additional soil sampling is recommended for this area to determine the potential for lead and pesticide contamination, as set forth in the mitigation below.

**Standard Measures**

- In conformance with state and local laws, a visual inspection/pre-demolition survey, and possible sampling, will be conducted prior to the demolition of the building to determine the presence of asbestos-containing materials and/or lead-based paint.

    - All potentially friable asbestos-containing materials shall be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition or renovation that may disturb the materials. All demolition activities will be undertaken in accordance with Cal/OSHA standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. Materials containing more than one percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations.
    - During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1, including employees training, employee air monitoring and dust control. Any debris or soil containing lead-based paint or coatings will be disposed of at landfills that meet acceptance criteria for the waste being disposed.

**Mitigation Measures**

- A remedial work plan shall be prepared and submitted to the overseeing regulatory agency (most likely Santa Clara County Department of Environmental Health), the Director of Planning, Building and Code Enforcement, and the Municipal Environmental Compliance Officer prior to the issuance of Public Works clearance. The plan shall be implemented to reduce contamination below Environmental Screening Levels for residential uses, assure the safety of construction workers and future site users, and assure proper management of contaminated materials in accordance with state and local regulatory requirements. This plan shall incorporate the following:

- Soil sampling in areas adjacent to painted structures for lead and pesticide residuals. If results indicate the presence of such materials in excess of the Environmental Screening Levels for residential uses, site remediation shall be completed to reduce contamination to acceptable levels.
- A soil management component to establish the management practices for handling any items encountered during construction such as buried debris, impacted soil, and/or burn pits.

- All remaining hazardous materials that may be stored on the site shall be removed and properly disposed of prior to commencement of construction activities on the site.

- The existing wells and septic systems shall be properly abandoned in accordance with all applicable regulations.

## H. HYDROLOGY AND WATER QUALITY

### Setting

#### *Drainage/Flooding*

The project is located on a relatively flat site at an elevation of approximately 140 feet above mean sea level. Topography in the project area slopes gently to the southwest. Storm water runoff from the existing site drains as sheet flow to the southwest. No drainage facilities are located on the property. Groundwater was encountered at depths of about 30 to 40 feet below ground surface; groundwater beneath the site is expected to flow to the southwest. The site does not contain any drainages or other water features. The nearest major drainage is Penitencia Creek, located about 1,300 feet to the south.

The Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (FEMA) show nearly all of the project site within the 100-year floodplain. The site is located in Zone AO, described as "areas of 100-year shallow flooding where depths are between one and three feet; average depths of inundation are shown, but no flood hazard factors are determined." A small portion of the site in the southeast portion is designated as Zone B, described as "areas between limits of the 100-year and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood."

#### *Water Quality*

San Jose is required to comply with the National Clean Water Act regulations regarding the reduction of non-point source pollutants, as mandated by the National Pollutant Discharge Elimination System (NPDES) and regulated by the RWQCB. The existing storm water program of the NPDES requires municipalities serving greater than 100,000 persons and construction activities disturbing greater than one acre to obtain a NPDES storm water permit. The NPDES permits typically establish Waste Discharge Requirements (WDRs), which include discharge prohibitions, effluent limitations, receiving water limitations, and other provisions to protect the receiving water body. The NPDES storm water

program also requires the implementation of best management practices (BMPs).

The project site is located within the watershed of the Guadalupe River, which ultimately flows into South San Francisco Bay and is within the jurisdiction of the San Francisco Regional Water Quality Control Board (RWQCB). San Jose is required to comply with the National Clean Water Act regulations regarding the reduction of non-point source pollutants, as mandated by the National Pollutant Discharge Elimination System (NPDES) and regulated by the RWQCB. The NPDES permits typically establish Waste Discharge Requirements (WDRs), which include discharge prohibitions, effluent limitations, receiving water limitations, and other provisions to protect water quality. The NPDES storm water program requires the implementation of best management practices (BMPs).

City of San Jose Policy (6-29) requires all new and redevelopment projects to implement post-construction best management practices (BMPs) and treatment control measures (TCMs) to the maximum extent practicable. This policy also establishes specific design standards for post-construction TCMs for projects that create, add, or replace 10,000 square feet or more of impervious surfaces. In addition, City of San Jose Post-Construction Hydromodification Management Policy (Policy 8-14) establishes an implementation framework 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. This policy establishes specified performance criteria for post-construction hydromodification control measures (HCMs) and identifies projects that are exempt from HCM requirements.

## Impacts and Mitigation

### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| 8. HYDROLOGY AND WATER QUALITY. Would the project: | | | | | |
| a) Violate any water quality standards or waste discharge requirements? | | | | X | 1, 2 |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (for example, the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | | X | 1, 2 |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site. | | | X | | 1, 10 |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site? | | | X | | 1, 13 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | | | X | | 1, 2 |
| f) Otherwise substantially degrade water quality? | | | X | | 1, 2 |
| g) 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? | | | X | | 1, 12 |
| h) Place within a 100-year flood-hazard area structures, which would impede or redirect flood flows? | | | X | | 1, 12 |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | X | | 1, 12 |
| j) Inundation by seiche, tsunami, or mudflow? | | | | X | 1 |

## Discussion

### *Drainage/Flooding*

The project site is currently undeveloped, with the exception of three residences, farm-related structures, paved areas, and some landscaping. Most of the site is located within Zone AO of the 100-year floodplain, as established in the FEMA flood maps, and would be subject to shallow flooding of one to three feet.

According to the National Flood Insurance Program guidelines published by FEMA (FEMA Document 467-1), proposed developments within Flood Zone AO 1 through 3 are only required to demonstrate the elevation of the ground floor above the flood elevation. Since this property is not in an identified "floodway," there is no requirement to demonstrate flood blockage and/or flood flow pathway. The addition of new structures into the floodplain would not impede or redirect flood flows, given its location in the shallow AO flood zone.

The project site is approximately 20.51 acres (893,415 square feet) in size. The property is currently covered with 37,462 square feet of impervious surfaces, in the form of existing building footprints and pavement. Approximately 855,953 square feet of the site is undeveloped (i.e., orchard trees, fallow land). As shown in Table 4, the project would create 618,116 square feet of impervious surfaces, resulting in a net increase of 580,654 square feet (69.3%) of impervious area.

**Table 4**
**Pervious and Impervious Surfaces Comparison**

| Site Surface | Existing Condition (s.f.) | % | Proposed Condition (s.f.) | % | Difference (s.f.) | % |
|---|---|---|---|---|---|---|
| **Site: 20.51 acres** | | | | | | |
| Building Footprint | 14,985 | 1.7% | 307,969 | 34.5% | 292,984 | 32.8 |

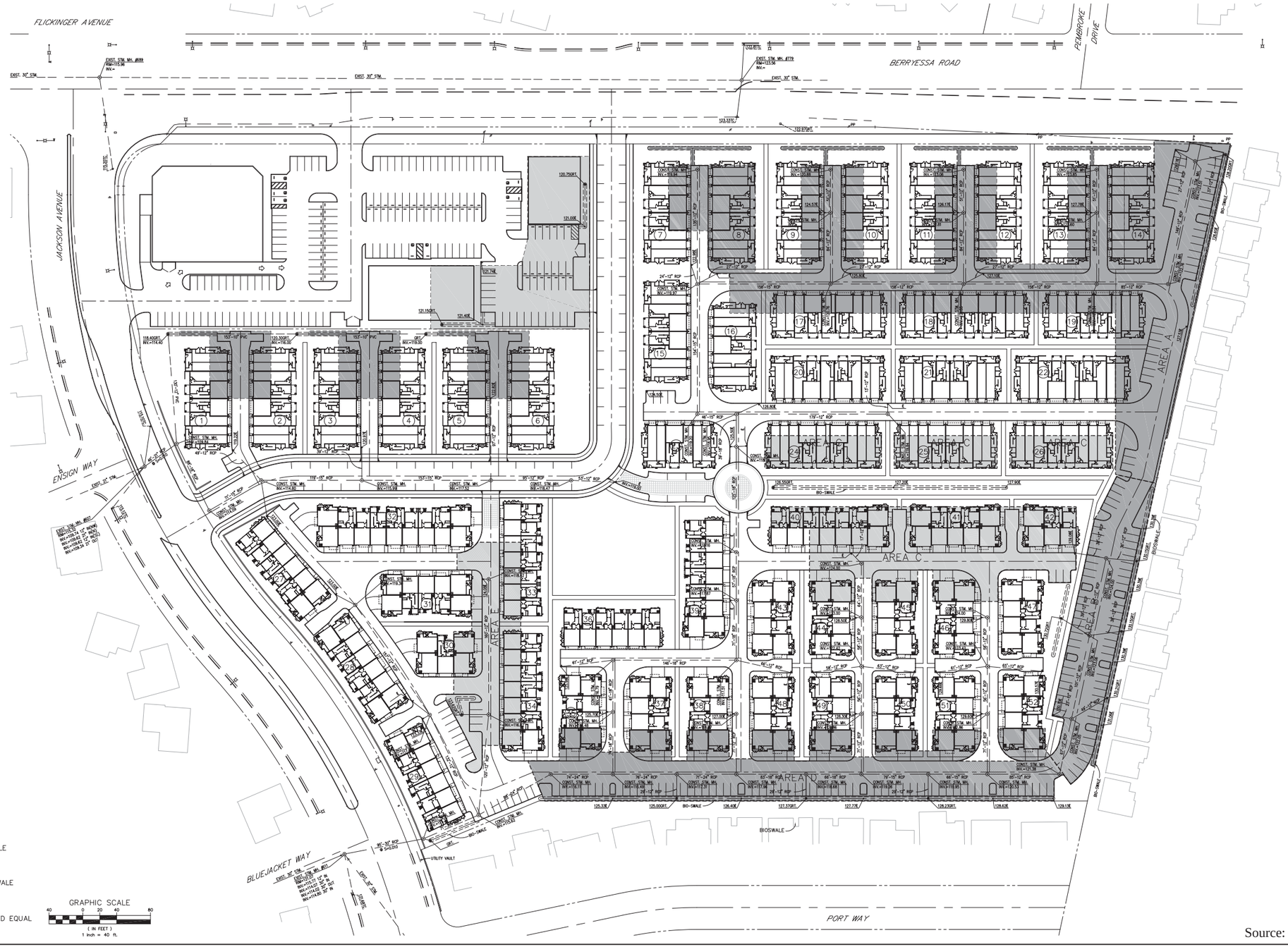
| Table 4<br>Pervious and Impervious Surfaces Comparison | | | | | | |
|---|---|---|---|---|---|---|
| **Site Surface** | **Existing Condition (s.f.)** | **%** | **Proposed Condition (s.f.)** | **%** | **Difference (s.f.)** | **%** |
| | | | | | | % |
| Parking/Driveways/ Sidewalks/Patios/Path | 22,477 | 2.5% | 242,629 | 27.2% | 220,152 | 24.6 % |
| Street Dedication (Jackson/Berryessa) | - | - | 67,518 | 7.6% | 67,518 | 7.6% |
| Landscaping and Open Space | 855,953 | 95.8% | 275,299 | 30.7% | -580,654 | - 65% |
| **Total** | **893,415** | **100%** | **893,415** | **100%** | **0** | **0%** |
| Impervious Surfaces | 37,462 | 4.2% | 618,116 | 69.3% | 580,654 | 65% |
| Pervious Surfaces | 893,415 | 95.8% | 275,299 | 30.7% | -580, 654 | - 65% |
| **Total** | **855,953** | **100%** | **855,953** | **100%** | **0** | **0%** |

A conceptual storm water control plan (SWCP) is proposed for the project site. The conceptual SWCP would utilize one or more of the following measures: landscaping, bioswales, and/or underground treatment units, as presented in Figure 8. Runoff from roofs, driveways, parking areas, and other impervious surfaces would be directed into the vegetated bioswales and/or treatment units prior to being discharged into the City's storm drain system. These facilities would be routinely maintained to insure optimum functionality.

With implementation of the conceptual SWCP, the project will not alter the existing drainage pattern in the area. The project would increase the amount of impervious surfaces on the site compared with existing conditions, resulting in an increase in storm water runoff. The project would result in a net increase in runoff from the site of 12 cubic feet per second (cfs) for the 10-year storm. The project would result in an increase in peak runoff; however, no new drainage impacts would occur, since the proposed storm drain system and the City's system have adequate capacity to accommodate the additional runoff. The project would be subject to all legal requirements for installation of appropriate drainage facilities.

### *Water Quality*

Construction of the project would require demolition and grading activities that could result in a temporary increase in erosion affecting the quality of storm water runoff. This increase in erosion is expected to be minimal, due to the flatness of the site and low erosion potential of the soils. However, surface runoff from proposed development would generate urban pollutants from parking areas that could affect water quality. These pollutants include oil, grease, and trace metals from roadway pavement, as well as sediment from rooftops.




Source: CEA Associates, 2007

# Storm Water Control Plan

Figure 8

The proposed conceptual SWCP described above includes measures to collect and treat site runoff prior to discharge into the City's drainage system, which would generally improve the water quality of runoff.

Based on the above discussion, the project would result in less-than-significant impacts to hydrology and water quality with implementation of the standard measures below.

**Standard Measures**

Construction Measures

- Obtain and comply with the NPDES General Construction Activity Storm Water Permit. Prior to construction, the developer shall file a Notice of Intent and prepare a Storm Water Pollution Prevention Plan (SWPPP).
- Restrict grading to the dry season or meet City requirements for grading during the rainy season.
- Use BMPs to retain sediment on the project site.
- Place burlap bags filled with drain rock around storm drains to route sediment and other debris away from the drains.
- Provide temporary cover of disturbed surfaces to help control erosion during construction.
- Provide permanent cover to stabilize the disturbed surfaces.

Post-Construction Measures

- Prior to the issuance of a PD Permit, the applicant shall provide details of specific Best Management Practices (BMPs) including, but not limited to, bioswales, disconnected downspouts, landscaping to reduce impervious surface area, and inlets stenciled "No Dumping – Flows to Bay" to the satisfaction of the Director of Planning, Building and Code Enforcement.
- The project shall comply with Provision C.3 of NPDES permit Number CAS0299718, which provides enhanced performance standards for the management of storm water for new development.
- The project shall comply with applicable provisions of the following City policies: 1) Post-Construction Urban Runoff Management Policy (6-29), which establishes guidelines and minimum BMPs for all projects, and 2) Post-Construction Hydromodification Management Policy (8-14), which provides for numerically sized (or hydraulically sized) TCMs.

## I. LAND USE

**Setting**

The project is located on an approximately 20.51 acre site containing undeveloped land with some residential and farm-related development on the northeast portion of the property The site is surrounded on all sides by residential uses and roadways. Residential uses abut the site to the south and east. Existing roadways provide buffers to existing single family residential uses to the west (across Jackson Avenue) and to the north (across Story Road).

The project site is currently designated in the San Jose General Plan for the following uses: *Medium High Density Residential (12-25 DU/AC)* on 14.28 acres, *Medium Density Residential (8-16 DU/AC)* on 3.23 acres, and *Neighborhood/Community Commercial* on 3.0 acres. The surrounding area is designated in the General Plan for *Medium Density Residential* to the east, and *Medium Low Density Residential (8 DU)* to the north, south, and west.

The Santa Clara Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP) Planning Agreement requires that the California Department of Fish and Game and other agencies comment on Reportable Interim Projects and recommend mitigation measures or project alternatives that will help achieve the preliminary conservation objectives and not preclude important conservation planning options or connectivity between areas of high habitat value. Although the project site is within the interim referral area, it will not adversely affect natural communities and no referral is required.

## Impacts and Mitigation

### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| 9. LAND USE AND PLANNING. Would the project: | | | | | |
| a) Physically divide an established community? | | | | X | 2, 3 |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X | 1, 3 |
| c) Conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan? | | | | X | 1, 2 |

## Discussion

### *Consistency with Land Use*

The project site is designated in the General Plan for *Medium High Density Residential (12-25 DU/AC)* on 14.28 acres, *Medium Density Residential (8-16 DU/AC)* on 3.23 acres, and *Neighborhood/Community Commercial* on 3.0 acres. The proposed 379 residential units and 30,000 square feet of commercial space conforms to the respective General Plan designations on the site.

The surrounding uses consist primarily of single-family residential uses. The proposed residential use would not divide an established community. Although the project site is within the interim referral area for the Santa Clara HCP/NCCP, it will not adversely affect natural communities and no referral is required.

The project proponent is applying for a Planned Development (PD) zoning of the site to allow the proposed uses. This Initial Study identifies potential land use impacts of the project in the areas of

cultural resources, hazardous materials, noise, and traffic. These impacts would be reduced to a less-than-significant level with measures identified in this Initial Study. The following discussion addresses the project's consistency with applicable land use plans and potential for conflicts with surrounding uses.

### *Land Use Conflicts*

Land use conflicts can arise from two basic causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere; or 2) conditions on or near the project site may have impacts on the persons or development introduced onto the site by the new project. Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project's design or scope.

The project site is surrounded by residential development. The project would introduce residential and commercial uses on approximately 20.5 acres of mostly vacant land designated in the City's General Plan for residential and commercial uses. Conversion of the property from a primarily undeveloped site into a residential community with neighborhood serving commercial uses would not introduce substantial new hazards, noise, or other nuisances that would adversely affect existing, surrounding commercial businesses and residences that cannot be avoided with identified mitigation. The project is intended to be consistent and complement the existing residential neighborhoods.

Conversely, surrounding residential uses have not been identified as posing any hazards to the site or proposed residential uses. Implementation of proposed measures, including landscaping around the perimeter of the site, the establishment of minimum 10 to 15-foot setbacks at property boundaries, siting of parking areas to provide a buffer between the development and existing residences to the east and south, and limiting building heights to three-stories, would minimize land use conflicts. The project would also be subject to the City's Residential and Commercial Design Guidelines. The project would not result in significant land use conflicts.

## J. MINERAL RESOURCES

### Setting

Extractive resources known to exist in and near the Santa Clara Valley include cement, sand, gravel, crushed rock, clay, and limestone. Santa Clara County has also supplied a significant portion of the nation's mercury over the past century. Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board has designated the Communications Hill Area (Sector EE) of San Jose as containing mineral deposits that are of regional significance as a source of construction aggregate materials.[2]

[2] The Communications Hill Area is located in central San Jose and generally bounded by the Southern Pacific railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue.

Neither the State Geologist nor the State Mining and Geology Board has classified any other areas in San Jose as containing mineral deposits that are either of statewide significance or the significance of which requires further evaluation. Other than the Communications Hill area cited above, San Jose does not have mineral deposits subject to SMARA.

### Impacts and Mitigation

#### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| 10. MINERAL RESOURCES. Would the project: | | | | | |
| a) 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? | | | | X | 1, 2 |
| b) 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? | | | | X | 1, 2 |

### Discussion

As described above, the project site is located outside of the Communications Hill area and, therefore, will not result in a significant impact from the loss of availability of a known mineral resource.

## K. NOISE

### Setting

The following discussion is based on a noise analysis prepared for the project by Charles M. Salter Associates (September 2007). This analysis is contained in Appendix G.

Noise is measured in decibels (dB), and is typically characterized using the A-weighted sound level or dBA. This scale gives greater weight to frequencies to which the human ear is most sensitive. The Noise Element of the City of San Jose General Plan contains noise guidelines for various land uses within the City, and identifies acceptable noise exposure levels for those uses in terms of the Day/Night Level (DNL) 24-hour descriptor. The DNL represents the average noise level during a 24-hour period, with a penalty of 10 dBA added to sound occurring between the hours of 10 PM and 7 AM.

#### *Regulatory Setting*

**San Jose 2020 General Plan.** The Noise Element of San Jose's 2020 General Plan identifies noise and land use compatibility standards for various land uses. Noise is measured in decibels (dB), and is typically characterized using the A-weighted sound level or dBA. This scale gives greater weight to those frequencies to which the human ear is most sensitive. The City's noise guidelines are expressed

in “day/night noise level” (or DNL). The DNL represents the average noise level during a 24-hour period, with a penalty of 10 dBA added to sound occurring between the hours of 10 PM and 7 AM.

The Noise Element identifies noise and land use compatibility standards for various land uses. Residential land uses are considered “satisfactory” up to 60 dBA DNL as the short-range exterior noise quality level, and 55 dBA DNL as the long-range exterior noise quality level. The guidelines state that where the exterior DNL is above the "satisfactory" limit (between 60 and 70 dBA DNL), and the project requires a full EIR, an acoustical analysis should be made indicating the amount of attenuation necessary to maintain an indoor level of a DNL less than or equal to 45 dBA. Noise levels exceeding 70 dBA DNL require that new development would only be permitted if uses are entirely indoors and building design limits interior levels to less than or equal to 45 dBA DNL. Outside activity areas should be permitted if site planning and noise barriers result in levels of 60 dBA DNL or less. Applicable policies in the Noise Element are as follows:

*Policy 1.* The City's acceptable noise level objectives are 55 dBA DNL as the long-range exterior noise quality level, 60 dBA DNL as the short-range exterior noise quality level, 45 dBA DNL as the interior noise quality level, and 76 dBA DNL as the maximum exterior noise level necessary to avoid significant adverse health effects. These objectives are established for the City, recognizing that the attainment of exterior noise quality levels in the environs of the San Jose International Airport, the Downtown Core Area, and along major roadways may not be achieved in the time frame of this Plan. To achieve the noise objectives, the City should require appropriate site and building design, building construction and noise attenuation techniques in new residential development.

*Policy 9.* Construction operations should use available noise suppression devices and technology.

**San Jose Municipal Code**. The City’s Municipal Code Section 20.40.600 “Performance Standards” identifies the following maximum noise level limits for commercial zoning districts affecting impinging on other land uses:

- Commercial uses adjacent to a property used or zoned for residential purposes: 55 dBA DNL
- Commercial uses adjacent to a property used or zoned for commercial or non-residential purposes: 60 dBA DNL

**2007 California Building Code**. New multi-family housing in the State of California is subject to the environmental noise limits set forth in the 2007 California Building Code (Chapter 12, Appendix Section 1207.11.2). The noise limit is a maximum interior noise level of 45 dBA DNL. Where exterior noise levels exceed 60 dBA DNL, a report must be submitted with the building plans describing the noise control measures that have been incorporated into the design of the project to meet the noise limit.

### *Existing Noise Environment*

Field noise measurements were made as part of the noise analysis to determine existing noise levels on and near the project site. Three long-term (48-hour) measurements and four short-term (15 minute) measurements were made at various locations in April 2006 (refer to Appendix G). The results of the measurements indicate that existing (long-term) noise levels in the area range from 71 DNL to 77

DNL. The primary noise sources in the area are from traffic generated along Berryessa Road and Jackson Avenue.

Sensitive receptors in the project area include residences in the immediate area. The nearest residents to the project site are those that abut the property to the south and east, along Ivy Glen Drive and Port Way.

## Impacts and Mitigation

### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| 11. NOISE. Would the project result in | | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies? | | X | | | 14 |
| b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels? | | | | X | 1 |
| c) Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | X | | | 14 |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | | X | | 14 |
| e) 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, would the project expose people residing or working in the project area to excessive noise levels? | | | | X | 1, 2 |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | | | | X | 1, 2 |

## Discussion

### *Project-Generated Noise Impacts*

The noise assessment reviewed the traffic volumes for the project under background and project conditions to determine the increase in noise along roadway segments. The results of the noise study indicate that traffic from the project would result in noise level increases of one dB or less, which would not be perceptible. This is a less-than-significant impact.

The project includes commercial development that could generate noise impacts from outdoor sources, such as mechanical equipment (HVAC systems, etc.). Specific information on the specifics of the commercial uses is not available at this time; however, the commercial uses would be subject to the City's performance standards for commercial uses. Mitigation is identified below to assure that proposed commercial uses do not impact adjacent residential uses.

### *Noise Impacts on Project*

**Outdoor-Use Areas**. The existing and future noise levels on the project site are above the City's noise standard of 60 dBA DNL for outdoor use areas. The project includes four open spaces areas, as shown in the site plan. Acoustical shielding provided by proposed project buildings would reduce noise levels at open space areas #2, 3, and 4 to 60 dB DNL or less, meeting the City's 60 dBA standard. Open space area #1 would be exposed to noise levels of 63 dB DNL, which is considered acceptable given the project's location along major roadways (Berryessa and Jackson) and the noise provisions of the City's General Plan.

The General Plan states "...areas adjacent to major roadways have been identified as special noise impact areas. Because of the nature of these special areas, it may be impossible to attain the desired outdoor noise level of 55 dBA DNL or even 60 dBA DNL in the near term without eliminating the beneficial attributes of the exterior spaces." Examples of such situations are exterior balconies that face major roadways, rear yard areas, and urban parks.

The proposed residential development also includes private balconies and patios. Balconies and patios along the Berryessa Road frontage may be exposed to maximum future noise levels up to 76 dBA DNL. Other outdoor areas would not be exposed to outdoor levels exceeding 76 dBA DNL. The exterior noise standards, typically applied to rear yards in single-family developments or common use areas in multi-family developments, are not normally applied to small patios associated with multi-family projects due to the relatively infrequent use of the space and the impracticality of mitigation. The noise levels at these locations are considered acceptable provided they are below 76 dBA DNL, given the project's location along two major roadways and the above-referenced noise provisions of the City's General Plan. Mitigation for the outdoor spaces along Berryessa Road, however, is identified below to reduce impacts to a less-than-significant level.

**Interior Areas**. The California Building Code and City of San Jose require that interior noise levels within new residential units not exceed 45 dBA DNL. Future noise levels at the setback of the most impacted residences is calculated to be 76 dBA DNL along the Berryessa Road frontage and 71 dBA DNL along the Jackson Avenue frontage, which could expose residential interiors to excessive noise levels in some locations. The noise analysis identified those locations where sound-rated windows and exterior door assemblies would be required at building facades, as well as where forced ventilation would be needed (refer to Figures 2 and 3 of Appendix G). This represents a potentially significant impact that would be reduced to a less-than-significant level with mitigation identified below.

### *Construction Impacts*

Construction of residential uses on the project site would temporarily increase noise levels at nearby receptors. Noise levels during construction would occur in phases during grading, construction of foundations, erection of new buildings, paving, and finishing. Typical hourly average construction noise levels range from 75 dBA to 85 dBA measured at a distance of 100 feet from the source (during busy construction periods). Noise levels at nearby residences would intermittently exceed 60 dBA during the construction period. At times, noise levels produced by heavy-equipment may interfere with normal residential activities indoors during busy construction periods. This represents a

potentially significant impact that would be reduced to a less-than-significant level with the standard measures below.

**Standard Measures**

- Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way should be restricted to the hours of 7 AM to 6 PM, Monday through Friday, and 8 AM to 5 PM on Saturdays. No construction activities should occur Sundays or holidays.

- Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

- Locate stationary noise generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.

- Utilize "quiet" air compressors and other stationery noise sources where technology exists.

- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with the adjacent noise sensitive facilities so that construction activities can be scheduled to minimize noise disturbance.

- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

- Should the site plan change, all common open space areas required for the residential project shall have a maximum noise level of 65 DNL, to the satisfaction of the Director of Planning, Building, and Code Enforcement.

**Mitigation Measures**

- All new multi-family housing is subject to the requirements of the 2007 California Building Code (Chapter 12, Appendix Section 1207.11.2). Since noise levels exceed 60 dBA DNL on the site, an analysis detailing the treatments incorporated in the building plans shall be submitted to the City Building Department prior to issuance of a building permit. The report shall demonstrate that the design would achieve an interior DNL of 45 or less in all habitable residential areas. Typically, where the exterior noise levels are between 60-70 dBA DNL, treatments include forced-air mechanical ventilation or air conditioning to achieve a habitat interior environment with the windows closed. The noise study for the project identified the need for sound-rated windows and exterior door assemblies for some units, as presented in Appendix G.

- Mitigation shall be provided for outdoor use areas for balconies and patios of residences exposed to noise levels of 76 dBA DNL or greater (i.e., along Berryessa Road). This could include partial height or full "greenhouse-type" noise barriers. The specific treatments shall be determined on a unit-by-unit basis. Results of the unit-by-unit acoustical analysis, including the description of the necessary noise control treatments, shall be submitted to the City with the building plans and approved prior to issuance of a building permit.[3] An acoustical analysis shall be prepared prior to issuance of PD permit.

- Prior to development of the proposed commercial uses, prepare a project-specific acoustical analysis to evaluate noise sources at the proposed retail center and implement recommendations to assure that exterior noise levels at adjacent residential uses are not exceeded, in accordance with the standards in the City's Zoning Ordinance.

## L. POPULATION AND HOUSING

### Setting

The population of the City of San Jose is 953,679 (California Department of Finance, 2006). According to the Association of Bay Area Governments (ABAG) *Projections 2007 Forecasts for the San Francisco Bay Area to the Year 2030*, the population is projected to be 1,336,900 within the City of San Jose's Sphere of Influence in 2030. The total number of households is projected at 422,720, with an average of 3.20 persons per household.

The City has been attempting to improve the jobs/housing imbalance in San Jose, consistent with the strategies, goals, and objectives of the General Plan. The City has adopted General Plan policies that allow for increased job and housing growth that are intended to improve the overall jobs/housing ratio.

### Impacts and Mitigation

#### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| 12. POPULATION AND HOUSING. Would the project: | | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | X | | 1, 2 |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | X | 1, 2 |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | | X | 1, 2 |

[3] These units do not count towards private open space per City requirements; however, the project proposes adequate open space on the site overall to meet the City's *Residential Design Guidelines.*

### Discussion

The project would not displace people or existing housing, nor would it divide an established community.

The project would result in the development of a maximum of 379 dwelling units that would accommodate about 1,092 persons (based on 2.88 persons per attached unit). The additional housing and associated population increase would represent a small percentage of the total City population of 953,679, and is well within the range of anticipated population growth for the City. The proposed 30,000 square foot retail center would provide jobs for about 60 employees (based on one job per 500 square feet). This would not induce substantial population growth. The project is also consistent with the General Plan land use and density designations for the site.

The proposed project would have a less-than-significant impact on population and housing.

## M. PUBLIC SERVICES

### Introduction

Public services are provided to the community as a whole, usually from a central location or from a defined set of locations. The resource base for delivery of these services, including the physical delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery agency can be a city, county, service or other special district. Usually, new development will create an incremental increase in the demand for these services; the amount of demand will vary depending on the type of development, the services offered, and the specific characteristics of the development.

The impact of a particular project on a public facility service is generally a fiscal impact. By increasing the demand for a type of service, a project can cause an increase in the cost of providing the service (e.g., hiring more personnel, additional equipment, etc.). This is considered a fiscal, not an environmental, impact. CEQA does not require an analysis of fiscal impacts. CEQA only requires the evaluation of the physical effects on the environment from new or altered facilities needed as a result of increased public service demands (e.g., a new school or fire station).

### Setting

**Fire Protection**: Fire protection to the project site is provided by the San Jose Fire Department (SJFD), which serves the entire City. The SJFD's response time goals are four minutes for first response and six minutes for second response. The nearest fire station to the project is Station #19, located at 1025 Piedmont Road, approximately two miles from the site.

**Police Protection**: Police protection is provided to the project site by the City of San José Police Department (SJPD). Officers patrolling the project area are dispatched from police headquarters, located at 201 West Mission Street. The response time goal for police protection is six minutes or less for 60 percent of all emergency calls and eleven minutes or less for 60 percent of non-emergency

calls. The project site is located within Beat Building Block (BBB) 57 of the SJPD's service area. The most frequent calls for service in BBB 57 from July 24, 2007 through October 22, 2007 were vehicle stop, disturbance, and alarm.

**Schools**: The project area is located in a part of San Jose serviced by two school districts: the Berryessa Union School District and the Eastside Union High School District (ESUHSD). Students in the project area would attend schools in the Berryessa Union School District and the ESUHSD. The Berryessa Union School District consists of ten elementary schools and three middle schools. During the 2005-2006 school year, the Berryessa Union School District had a total of 8,342 students. The ESUHSD is comprised of ten high schools, five continuation schools, and four charter schools. During the 2005-2006 school year, the ESUHSD had a total of 25,817 students enrolled in grades 9-12.

**Parks**: The City of San Jose provides parks, open space, and community facilities for public recreation and community services. The City Parks, Recreation and Neighborhood Services Department is responsible for the construction, operation, and maintenance of all City park and recreation facilities. The City's General Plan has established level of service benchmarks for parks and community centers. The City has a service level goal of 3.5 acres of neighborhood and community serving parkland per 1,000 residents, of which a minimum of 1.5 acres is City-owned and up to two acres is school playground/fields, all of which should be located within three-quarters of a mile walking distance of each residence. Currently, the City is providing 3.0 acres of neighborhood/community serving parklands overall, including recreational school grounds. In addition, the City seeks to provide 7.5 acres of regionally serving parkland and 500 square feet of community center space per 1,000 residents.

The site is located in Council District 4, which has 13 neighborhood parks. Council District 4 is providing 3.61 acres of neighborhood/community recreational land per 1,000 persons (1.65 acres of City parklands and 1.96 of recreational school lands), based on the 2000 U.S. Census data.

Developed parks within walking distance (¾ mile) of the project site are as follows: 1) Vinci Park, a three acre park located less than ½ mile northwest of the site and 2) portions of the Penitencia Creek Trail, a linear trail/park facility located just over ½ mile south of the site. In addition, the project would be served by the planned Commodore Park, a 3.3-acre park proposed at the southwest corner of Commodore Drive and Jackson Avenue, adjacent to Penitencia Creek Trail.
**Libraries**: The San Jose Public Library System consists of one main library and 18 branch libraries. The nearest public library is Educational Park Branch Library, located at 1770 Educational Park Drive, about a mile from the project site.

## Impacts and Mitigation

### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|

| 13. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: | | | | | |
|---|---|---|---|---|---|
| a) Fire protection? | | | X | | 1, 2 |
| b) Police protection? | | | X | | 1, 2 |
| c) Schools? | | | X | | 1 |
| d) Parks? | | | X | | 1 |
| e) Other public facilities? | | | X | | 1 |

## Discussion

**Fire and Police**: The project would be constructed in conformance with current codes, including features that would reduce potential fire hazards. The project design would also be reviewed by the SJPD to ensure that it incorporates appropriate safety features to minimize criminal activity.

The project would result in an incremental increase in the demand in fire and police protection services. The nearest fire station is located approximately two miles from the project site. Travel time to the site is expected to be within the response time goal of the SJFD of four minutes for first alarm calls. Although future residential development may increase calls for police and fire protection services, it would not interfere with the San Jose Police and Fire Departments to meet their level of service standards and response time goals.

**Schools**: Based on student generation rates for the school districts, the project would generate additional student population. Residential development on the site would generate 45 additional elementary school students and 20 middle school students in the Berryessa Union School District.[4] These students would attend Summerdale Elementary School, located at 1100 Summerdale Drive, and Piedmont Middle School, located at 955 Piedmont Road. In addition, the project would generate 76 high school students. These students would attend Independence High School in ESUHSD. The high school district could accommodate the additional students.[5]

State law (Government Code 65996) specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to issuance of the building permit. In San Jose, residential development project applicants can either negotiate directly with the affected school districts, or they can make a "presumptive payment" of $0.71 in per square foot in the ESUHD and $1.75 per square foot in the Berryessa Union School District for multi-family units.[6] The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code. The school impact fees and the school districts' methods of implementing measures specified by Government Code 65996 would partially offset the costs of serving project-related increases in student enrollment.

[4] Based on Berryessa Union School District generation rates of 0.12 elementary school students per multi-family unit and 0.052 middle school students per multi-family unit. *Facility Analysis and Impact Fee Justification*, prepared for District by Schoolhouse, April 1996.
[5] Based on East Side Union High School District generation rates of 0.2 high school students per unit. Garafalo, Alan, East Side Union High School District. Pers. com., August 18, 2006.
[6] Sandovale, Margot, Berryessa Union School District. Pers. com., August 21, 2006.

**Parks**: The project would result in the development of 379 new units. The project would result in an incremental increase in the demand for park services from the increase in residential population. The project would create the need for about three acres of additional neighborhood/community parklands. The regional open space requirements from residential development would be about six acres, and the community center space requirements of about 400 square feet.

The project would be subject to the City-required park dedication and in-lieu fee to offset impacts. The proposed project would not significantly impact existing park services or require the construction of new onsite facilities, nor would it interfere with the City's level of service goals for park and recreation.

This project would be partially served by the planned Commodore Park. Park in-lieu fees would be required from the project to augment park trust funds to finance development of the planned park. Features of the park include a multi-use play field, tot play area, youth play area, picnic trellis area, restroom, and parking lot.

**Libraries**: Residential uses would result in an incremental increase in the demand for library services. The project would not significantly impact existing library services or require the construction of new facilities, nor would it interfere with the City's level of service goals for library service.

The project would result in less-than-significant impacts on public services with implementation of the following standard measures.

### Standard Measures

- The developer shall pay a school impact fee to the School District in accordance with California Government Code §65996 to offset the increased demands on school facilities.

- The project shall conform to the City's Parkland Dedication Ordinance (PDO) and Park Impact Ordinance (PIO) (Municipal Code Chapter 19.38).

## N. RECREATION

### Setting

Developed parks within walking distance of the project site (3/4 mile) are as follows: 1) Vinci Park, a three acre park located less than ½ mile northwest of the site and 2) portions of the Penitencia Creek Trail, a linear trail/park facility located just over ½ mile south of the site. In addition, the project would be served by the planned Commodore Park, a 3.3-acre park proposed at the southwest corner of Commodore Drive and Jackson Avenue, adjacent to Penitencia Creek Trail. Please refer to **M. Public Services** for additional discussion.

### Impacts and Mitigation

#### *Thresholds per CEQA Checklist*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| 14. RECREATION. Would the project: | | | | | |
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | | X | 1 |
| b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? | | | | X | 1 |

### Discussion

The project will be subject to the City of San Jose Parkland Dedication Ordinance and Park Impact Ordinance. These mechanisms require residential developers to dedicate public parkland or pay in-lieu fees, or both, to offset the demand for neighborhood parkland created by their housing developments. Please refer to **M. Public Services** for additional discussion.

### Standard Measure

- The project shall conform to the City's Parkland Dedication Ordinance (PDO) and Park Impact Ordinance (PIO) (Municipal Code Chapter 19.38).

## O. TRANSPORTATION/TRAFFIC

### Setting

A traffic impact analysis was prepared for the project by DKS Associates (February 2008), which is contained in Appendix H. The analysis evaluated the potential transportation impacts of the project using the standards and methodologies set forth by the City of San Jose and the Santa Clara County Congestion Management Program (CMP).

Traffic conditions were evaluated using level of service (LOS) calculations for the AM and PM peak hours. Level of service is a qualitative description of operating conditions ranging from LOS A (free flow conditions with little or no delay) to LOS F (jammed conditions with excessive delays). Traffic conditions were evaluated for the following scenarios: 1) existing conditions, 2) background conditions, 3) project conditions, and 4) cumulative conditions.

The traffic study evaluated the weekday peak-hour traffic conditions for 17 signalized intersections and two unsignalized intersection in the project vicinity. The study intersections evaluated in the analysis are as follows:

1. US 101 Northbound Ramp & Old Oakland Road*
2. US 101 Southbound Ramp & Old Oakland Road*
3. Interstate 880 Northbound Ramp & Brokaw Road*
4. Interstate 880 Southbound Ramp & Brokaw Road*
5. Berryessa Road & Lundy Avenue*

6. Brokaw Road & Old Oakland Road*
7. Murphy Avenue & Lundy Avenue*
8. US 101 Northbound Ramp & McKee Road
9. US 101 Southbound Ramp & Julian Street
10. Berryessa Road & Capitol Avenue
11. Berryessa Road & Commercial Street
12. Berryessa Road & Flickinger Road
13. Commercial Street & Old Oakland Road
14. Jackson Avenue & Mabury Road
15. Jackson Avenue & McKee Road
16. King Road & McKee Road
17. Interstate 680 Northbound Ramp & Berryessa Road
(*indicates CMP intersection)

In addition to the 17 signalized intersections, two unsignalized intersections were analyzed based on signal warrant studies previously conducted by the City, as follows:

18. Jackson Avenue & Commodore Drive
19. Berryessa Road & June Song Road

The study intersections are subject to the City of San Jose LOS standards. The City of San Jose level of service methodology is TRAFFIX, which is based on the Highway Capacity Manual (HCM) 2000 method for signalized intersections. The City of San Jose LOS standard for signalized intersections is LOS D or better.

The LOS analysis procedure for signalized intersections is based on the operations analysis described in Chapter 16 of the 2000 Highway Capacity Manual (2000 HCM), which requires that signalized intersection operations be evaluated on the basis of average control delay time for all vehicles at the intersection. The unsignalized intersections were evaluated using the methodology from Chapter 17 of the 2000 HCM. At these intersections, each turning movement that yields to an opposing movement is evaluated separately and assigned a LOS. The LOS is based on the average delays of traffic on the minor approach waiting for an adequate gap in conflicting traffic flows.

Traffic-related impacts along the nearby freeways were also analyzed as part of the traffic analysis Freeway segments analyzed were as follows:

- US 101 between Yerba Buena Road and Capitol Expressway
- US 101 between Capitol Expressway and Tully Road
- US 101 between Tully Road and Story Road
- US 101 between Old Oakland Road and I-880
- US 101 between I-880 and Old Bayshore
- I-680 between N. Capitol Expressway and Hostetter Road
- I-680 between Hostetter Road and Berryessa Road
- I-680 between Berryessa Road and McKee Road
- I-680 between McKee Road and Alum Rock Avenue
- I-880 between Great Mall Parkway and Montague Expressway

- I-880 between Montague Expressway and Brokaw Road
- I-880 between US 101 and 1st Street
- I-880 between 1st Street and State Route 87

***Roadway Network***

The roadway network in the project area is presented in Figure 9 and described below.

**U.S. Highway 101 (US-101)** extends from Los Angeles, in the south, through Oregon State, and into Washington State in the north. In the vicinity of the project, US 101 runs in the north-south direction, and includes three mixed-flow lanes and one high occupancy vehicle lane in each direction. US 101 provides access to the project study area with its interchanges at Julian/McKee Roads and 13th Street/Old Oakland Road.

**Interstate 680 (I-680)** extends from the US 101 interchange to the south, to Interstate 80, to the north in Solano County. West of US 101, I-680 becomes I-280 which travels in the north-south direction between San Jose and San Francisco. In the vicinity of the project, I-680 runs in the north-south direction, and includes four mixed-flow lanes in each direction of travel. I-680 provides access to the project study area with its interchanges with Berryessa Road or at McKee Road.

**Interstate 880 (I-880)** extends from the US 101 interchange to the south, to Interstate 80, to the north in Alameda County. West of US 101, I-880 becomes State Route (SR) 17 which travels in the north-south direction between San Jose and Highway 1 in the city of Santa Cruz. In the vicinity of the project, I-880 runs in the north-south direction, and includes three mixed-flow lanes in each direction of travel. I-880 provides access to the project study area with its interchange at Brokaw Road or via US 101.

**Berryessa Road** is a two- to six-lane arterial that travels in the east-west direction. In the vicinity of the project site, there are two lanes in each direction, with bike lanes on both sides of the road, and a pedestrian sidewalk on the north side of the road. Berryessa Road provides access to I-680, east of the project site, and to US 101 via Commercial Street and Old Oakland Road.

**McKee Road** is a six-lane arterial that travels in the east-west direction south of the project site. In the vicinity of Jackson Avenue, there are sidewalks on both sides of the road. Bike lanes are not striped on either side of the road. McKee Road provides access to I-680, east of the project site, and to US 101 to the west.

**Jackson Avenue/Flickinger Road** is a four lane major collector street that travels in the north-south direction. North of Berryessa Road, Jackson Avenue becomes Flickinger Road. South of Berryessa Road, Jackson Avenue extends south of I-680 and ends at Story Road. In the vicinity of the project site, there are sidewalks on both sides (with the exception of along the project frontage, which is currently vacant). Bike lanes are striped on both sides of Jackson Avenue; however, they are temporarily disrupted south of the project site between Commodore Drive and Mabury Road. North and south of the project site, there is a raised median with limited left turn locations to or from Jackson Avenue. Along the project's frontage, there is a striped, two-way center left-turn lane.

**Ensign Way** is a local residential road with houses and sidewalks on both sides of the street. Ensign Way ends at Jackson Avenue, opposite of the project site. Currently left turns are allowed into and out of Ensign Way from Jackson Avenue. However a raised median is anticipated along Jackson Avenue that would restrict left-turn movements to and from Ensign Way.

(#) Represents Study Intersection

Source: DKS Associates, 2007

N

# Roadway Network and Study Intersections

Figure 9

### *Bicycle and Pedestrian Facilities*

The 2005 Santa Clara County Bikeways Map (Santa Clara Valley Transportation Authority, October 2005) shows the bicycle facilities in the project vicinity. Bike facilities are located along Berryessa Road (west of Capitol Avenue), Jackson Avenue (McKee to Flickinger), Flickinger Street, Mabury Road, and Capitol Avenue as major roadways that include Class II bike lanes. A Class I bicycle path also exist along the Penitencia Creek Trail, located just south of the project site.

Pedestrian facilities within the vicinity of the site include sidewalks, crosswalks, and pedestrian signals. Crosswalks and pedestrian push buttons are available at all of the signalized intersections accommodate pedestrian movements within the immediate vicinity of the project. Sidewalks are provided on both sides of Berryessa Road and Jackson Avenue with the exception of along the project site's frontage where no sidewalks are currently available.

### *Transit Service*

The Santa Clara County VTA has jurisdiction over public transit in Santa Clara County. The VTA currently operates five local bus routes within the vicinity of the proposed project. The VTA bus routes providing a direct route or connecting route are lines 36, 62, 64, 70, and 901 (Light Rail). Transit routes within the project area are presented in the traffic report in Appendix H.

### *Existing Conditions*

The results of the intersection level of service analysis under existing conditions are summarized in Table 5. According to the City of San Jose intersection level of service standards, all study intersections currently operate at acceptable levels of service under the existing conditions, with the exception of the US 101 Northbound Ramps and Old Oakland Road intersection. This intersection currently operates at LOS E+ during the AM peak hour with approximately 56.1 seconds of average delay.

The City of San Jose recently conducted a traffic control signal warrant analysis for the intersections of Berryessa Road/Junesong Way and Jackson Avenue/Commodore Drive in 2002 and 2004 respectively. The signal warrant analysis was based on the Caltrans Traffic Manual. Based on the findings of the warrant studies, the intersection of Berryessa Road/Junesong Way meets one signal warrant: Peak Hour Volume Warrant. The intersection of Jackson Avenue/Commodore Drive would meet four warrants: Progressive Movement Warrant, Accident Experience Warrant, Four Hour Volume Warrant, and Peak hour Volume Warrant.

### *Background Conditions*

The background conditions include the traffic expected to be generated by approved projects as detailed in the City's Approved Trip Inventory (ATI) database, (July 2006) prior to the completion of the proposed project. The results of the intersection level of service analysis under background conditions are shown in Table 5.

**Table 5**
**Intersection Level of Service Summary**

| Intersection | AM Peak Hour | | | | | | PM Peak Hour | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Existing | | Background | | Project | | Existing | | Background | | Project | |
| | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS |
| 1 US 101 Northbound Ramp & Old Oakland Road[a] | **61.8** | **E** | **142.5** | **F** | **149.9** | **F** | 22.9 | C+ | 46.0 | D | 45.9 | D |
| 2 US 101 Southbound Ramp & Old Oakland Road[a] | 22.4 | C | 24.1 | C | 24.4 | C | 33.6 | C- | **77.2** | **E-** | **76.8** | **E-** |
| 3 Interstate 880 Northbound Ramp & Brokaw Road[a] | 30.5 | C | 53.1 | D- | 50.5 | D | 19.3 | B- | 22.1 | C+ | 22.1 | C+ |
| 4 Interstate 880 Southbound Ramp & Brokaw Road[a] | 45.6 | D | **89.3** | **F** | **89.6** | **F** | 36.6 | D+ | **96.0** | **F** | **100.0** | **F** |
| 5 Berryessa Road & Lundy Avenue[a] | 44.1 | D | 45.1 | D | 45.3 | D | 48.2 | D | 51.2 | D- | 51.4 | D- |
| 6 Brokaw Road & Old Oakland Road[a] | 39.8 | D | 50.7 | D | 51.1 | D- | 40.7 | D | 51.1 | D- | 51.5 | D- |
| 7 Murphy Avenue & Lundy Avenue[a] | 39.4 | D | 45.4 | D | 45.6 | D | 36.7 | D+ | 39.9 | D | 40.1 | D |
| 8 US 101 Northbound Ramp & McKee Road | 19.8 | B- | 20.2 | C+ | 20.2 | C+ | 20.1 | C+ | 20.3 | C+ | 20.5 | C+ |
| 9 US 101 Southbound Ramp & Julian Street | 20.3 | C+ | 20.7 | C+ | 20.6 | C+ | 23.5 | C | 22.4 | C+ | 22.3 | C+ |
| 10 Berryessa Road & Capitol Avenue | 50.3 | D | 53.5 | D- | 54.5 | D- | 41.9 | D | 44.2 | D | 44.5 | D |
| 11 Berryessa Road & Commercial Street | 24.0 | C | 32.6 | C- | 39.0 | D | 23.4 | C | 24.1 | C | 24.4 | C |
| 12 Berryessa Road 7 Flickinger Road | 36.9 | D+ | 38.5 | D+ | 45.4 | D | 37.8 | D+ | 39.7 | D | 43.0 | D |
| 13 Commercial Street & Old Oakland Road | 38.1 | D+ | **65.5** | **E** | **72.9** | **E** | 45.1 | D | 51.7 | D- | 52.7 | D- |
| 14 Jackson Avenue & Mabury Road | 37.6 | D+ | 37.5 | D+ | 37.9 | D+ | 32.0 | C | 32.6 | C- | 32.8 | C- |
| 15 Jackson Avenue & McKee Road | 38.2 | D+ | 38.8 | D+ | 39.0 | D+ | 39.9 | D | 42.1 | D | 42.3 | D |
| 16 King Road & McKee Road | 44.1 | D | 40.6 | D | 40.6 | D | 45.9 | D | 44.1 | D | 44.2 | D |
| 17 Interstate 680 Northbound Ramp & Berryessa Road | 12.5 | B | 13.1 | B | 13.0 | B | 14.6 | B | 14.8 | B | 14.7 | B |

[a] CMP intersection
Values in **BOLD** represent LOS E or F
Source: DKS Associates, 2008

According to the City of San Jose intersection level of service standards, 15 of the 17 study intersections would operate at acceptable levels of service under the background conditions during the AM peak hour, and 16 of the 17 intersections would operate at acceptable levels during the PM peak hour. During the AM peak hour, the intersections of US 101 Northbound Ramps/Old Oakland Road/I-880 Northbound Ramps at Brokaw Road would deteriorate from LOS D to LOS F. The intersection of Commercial Street/Old Oakland Road would operate at an unacceptable LOS E. During the PM peak hour, the intersection of US 101 Southbound Ramps/Old Oakland Road would operate at LOS E+, and the intersection of I-880 Northbound Ramps at Brokaw Road would operate at an unacceptable LOS F.

## Impacts and Mitigation

### *Thresholds per CEQA checklist*

| ENVIRONMENTAL IMPACTS | | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|---|
| 15. | TRANSPORTATION/TRAFFIC. Would the project: | | | | | |
| a) | Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (for example, result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | | X | | | 1, 15 |
| b) | Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | | X | | | 15 |
| c) | Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | | X | 1, 2 |
| d) | Substantially increase hazards due to a design feature (for example, sharp curves or dangerous intersections) or incompatible uses (for example, farm equipment)? | | | | X | 1, 2 |
| e) | Result in inadequate emergency access? | | | | X | 1, 2 |
| f) | Result in inadequate parking capacity? | | | | X | 15 |
| g) | Conflict with adopted policies, plans, or programs supporting alternative transportation (for example, bus turnouts, bicycle racks? | | | | X | 1 |

## Discussion

### *Significance Criteria*

A traffic impact is considered significant in the City of San Jose if the following occurs under 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 or more seconds *and* the demand-to-capacity ratio to increase by 0.01 or more.

### *Project Traffic Generation*

Traffic volumes from the proposed project, and the locations where that traffic is expected to appear, are estimated based on 1) trip generation, 2) trip distribution, and 3) trip assignment. In determining project trip generation, traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions in which project trips would travel. In the trip assignment, project trips are assigned to specific streets and intersections.

Trip generation for the proposed project was based on the City of San Jose Trip Generation Rates. In consultation with City of San Jose staff, a capture rate reduction of 25% was applied to the retail component due to the project's mixed-use components. In addition, a 13% vehicle trip-reduction was applied to the residential land use for access to the retail center, as most of these trips were assumed to be internal trips. As shown in Table 6 below, the proposed project would generate approximately 4,445 daily trips, including 382 AM peak hour trips and 419 PM peak hour trips.

Project-generated trips were assigned to the roadway network based on access points and likely travel patterns. The proportion of these trips that would travel through the study intersections was used for the intersection LOS analysis under the project condition. The existing median island opening on Berryessa Road that allows westbound left turns onto the Nola property or U-turns to I-680 will be closed. These trips were added to the westbound left turn pocket at the intersection of Berryessa Road/Jackson Avenue to account for the additional U-turns.

### *Project Conditions*

**Intersections**. Projected peak hour traffic volumes with the project were estimated by adding the traffic generated by the project to background volumes. Project conditions were evaluated relative to background conditions in order to determine potential project impacts. The results of the intersection level of service analysis under project conditions are presented in Table 5.

As part of the traffic analysis, signal modification and roadway geometric improvements were included at the intersection of Jackson Avenue/Flickinger Road/Berryessa Road. A second left-turn lane would be added to the northbound left turn movement as part of the proposed project, and a second westbound left-turn lane would be added with the removal of the mid-block westbound left turn lane for traffic currently turning onto the Nola property. Intersection operational levels of service along with their associated critical and average delays are summarized in Table 5.

## Table 6
## Project Trip Generation

| Land Use | Size | Units | Daily | | AM Peak | | | | | | | PM Peak | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Rates | Trips | Peak Hour Rate | Percent (%) | | Rate | | Vehicle Trips | | Peak Hour Rate | Percent (%) | | Rates | | Vehicle Trips | |
| **COMMERCIAL** | | | | | | In | Out | In | Out | In | Out | | In | Out | In | Out | In | Out |
| Specialty Retail | 25 | ksf[2] | 40 | 1000 | 0.80 | 70 | 30 | 0.56 | 0.24 | 14 | 6 | 3.60 | | | 1.80 | 1.80 | 59 | 32 |
| *Capture Rate Reduction (25%)* | | | | *-250* | | | | | | *-4* | *-2* | | | | | | *-11* | *-11* |
| *Mixed-Use Reduction[1] (13%)* | | | | *-130* | | | | | | *-2* | *-1* | | | | | | *-6* | *-6* |
| Sit Down High T.O. Restaurant | 5 | ksf[2] | 206 | 1030 | 16.48 | 50 | 50 | 8.24 | 8.24 | 41 | 41 | 16.48 | 50 | 50 | 8.24 | 8.24 | 41 | 41 |
| **SUB-TOTAL (Commercial)** | | | | **1650** | | | | | | **49** | **44** | | | | | | **83** | **56** |
| **RESIDENTIAL** | | | | | | | | | | | | | | | | | | |
| Single Family Attached (Pulte) | 310 | du[3] | 7.5 | 2325 | 0.75 | 35 | 65 | 0.26 | 0.49 | 81 | 151 | 0.75 | 65 | 35 | 0.49 | 0.26 | 151 | 81 |
| Single Family Attached (Nola) | 80 | du[3] | 7.5 | 600 | 0.75 | 35 | 65 | 0.26 | 0.49 | 21 | 39 | 0.75 | 65 | 35 | 0.49 | 0.26 | 39 | 21 |
| Total Residential Trips | | | | 2925 | | | | | | 102 | 109 | | | | | | 190 | 102 |
| *Mixed-Use Reduction[1] (13%)* | | | | *-130* | | | | | | *-2* | *-1* | | | | | | *-6* | *-6* |
| **SUB-TOTAL (Residential)** | | | | **2795** | | | | | | **100** | **189** | | | | | | **184** | **96** |
| | | | | | | | | | | | | | | | | | | |
| **PROJECT TOTAL TRIPS** | | | | **4955** | | | | | | **157** | **237** | | | | | | **290** | **175** |
| *TOTAL TRIP REDUCTION* | | | | *-510* | | | | | | *-8* | *-4* | | | | | | *-23* | *-23* |
| **PROJECT GRAND TOTAL TRIPS** | | | | **4445** | | | | | | **149** | **233** | | | | | | **267** | **152** |

Source: City of San Jose, Department of Public Works, Transportation Division, Common Vehicular Trip Generation Rates for the San Jose Area, March 1994.

[1] Santa Clara Valley Transportation Authority, Transportation Impact Analysis Guidelines. February 1998.

[2] ksf: 1,000 square feet

[3] du: dwelling-unit

All study intersections would operate at acceptable levels of service (LOS D or better) under project conditions, with the following exceptions. During the AM peak hour, the project would add traffic resulting in a greater than four second increase in average delay and a 0.01 or greater increase in the critical V/C ratio at the intersections of US 101 Northbound Ramps/Old Oakland Road and Commercial Street/Old Oakland Road, resulting in potentially significant impacts. The intersection of I-880 Southbound/Brokaw Road would operate at a deficient LOS F; however, the project would not add a significant amount of traffic to the critical movements and the average delay would not increase by more than four seconds.

During the PM peak hour, the project would add traffic resulting in a greater than four second increase in average delay and a 0.01 or greater increase in the critical V/C ratio at the intersection of I-880 Southbound Ramp/Brokaw Road, resulting in a potentially significant impact. The intersection of US 101 Northbound Ramps/Old Oakland Road would operate at a deficient LOS E; however, the project would not add a significant amount of traffic to the critical movements.

**Freeway Segments.** An analysis of freeway segments in the vicinity of the project site was conducted using the VTA's Guidelines. Under existing conditions, several freeway segments along US 101, I-680, and I-880 currently operate at deficient levels. The amount of project-related traffic added to the study freeway segments would be less than one percent of the respective capacity at each location. The proposed project would not result in any significant impacts on nearby freeway segments, since project traffic would result in an increase of less than one percent of capacity for freeway segments that currently operate at LOS E or F.

A queuing analysis of the freeway on- and off-ramps was conducted for the movements that may be impacted by the addition of project related trips. Based on observations of existing operations, the freeway ramps at the interchange of I-680 and Berryessa Road operate without ramp meters or stop control. The movements to which the project would add traffic typically operate without delay or queue build up. The proposed project is not anticipated to result in any significant impacts to the ramp queuing or operations.

### *Site Access and Vehicular Circulation*

The site plan shows the primary access points on Jackson Avenue and Berryessa Road. Access to the proposed residential development would be provided via a private street extending between Jackson Avenue and Berryessa Road. Several small neighborhood streets would provide access to the proposed townhouses. Access to the commercial center will be provided from a driveway on Jackson Avenue and a driveway on Berryessa Road. The traffic analysis concluded that the overall project internal design appears acceptable.

### *Other Transportation Issues*

Based on observations of the capacity and occupancy rates of the public transit routes servicing the project area, it was concluded that transit trips to be generated by the proposed project would not significantly impact the public transit service.

The expected increase in vehicular traffic volumes would not significantly impact pedestrian movements. The intersection of Jackson Avenue/Berryessa Road would be modified as part of the proposed project, and existing pedestrian facilities would be maintained or improved. In addition, the pedestrian movements along the roadway network adjacent to the project site would be improved by the addition of proposed sidewalks (along the project frontage).

***Cumulative Conditions***

The cumulative scenario represents project traffic conditions combined with the traffic from future planned development in the area, as follows:

- City of San Jose Downtown Strategy Plan – Phase 2
- North San Jose Development Plan – Phase 2
- San Jose/Berryessa Road Flea Market Development
- Goodwill/DAL Residential Development
- Dobbin Drive Residential Development

In addition to the anticipated growth in traffic, several planned improvement measures were included in the cumulative conditions. Roadway improvements for this analysis were based on the improvement and mitigation measures presented in the respective traffic analyses conducted for the planned projects. The roadway improvements include the following:

- US 101 (NB) / Old Oakland Road – Add 2nd SB Right Turn and 2nd NB Left Turn Lane
- US 101 (SB) / Old Oakland Road – Add 2nd EB Right Turn Lane
- Berryessa Road / Capitol Avenue – Add 2nd WB Left Turn Lanes
- McKee Road / King Road – Add 2nd EB and WB Left Turn Lanes
- Old Oakland Road / Commercial Street – Add 2nd WB Left Turn Lanes

**Intersections**. Intersection levels of service under cumulative conditions are presented in Appendix H (see Table 10). According to the City of San Jose intersection level of service standards, five of the 17 study intersections would experience significant cumulative impacts and would operate at an unacceptable LOS E or F during the AM peak hour of the cumulative scenario. During the PM peak hour, two of the 17 study intersections would experience significant cumulative impacts and would operate at deficient levels.

During the AM peak hour, the intersections of Brokaw Road/I-880 Northbound Ramps and Brokaw Road/I-880 Southbound Ramps would operate at an unacceptable LOS under cumulative conditions. During the PM peak hour, the intersections of Brokaw Road/I-880 Southbound Ramp and Brokaw Road/Oakland Road would operate at an unacceptable LOS under cumulative conditions. For each of these intersections along Brokaw Road, the project would contribute less than 25 percent of the cumulative growth anticipated at these respective intersections; therefore the project's contribution is considered cumulatively insignificant. In addition, significant cumulative traffic impacts were disclosed at these intersections in the North San Jose Development Policy EIR and no feasible traffic mitigation was identified. This project's contribution to the cumulative impact is, therefore, concluded to be cumulatively insignificant.

The intersections of Berryessa Road/Commercial Street and Commercial Street/Oakland Road would also experience significant cumulative impacts during the AM peak hour. The project will participate in the US-101/Oakland/Mabury Transportation Development Policy, which will construct improvements that add capacity to both intersections. The improvements to the Berryessa Road/Oakland Road intersection include an additional westbound to northbound right turn lane. A second northbound left turn lane will also be constructed for the intersection of Old Oakland Road/Commercial Road.

The intersection of Berryessa Road/Capitol Avenue would deteriorate from LOS D to LOS E, and the average vehicle delay would increase by approximately 17.3 seconds with the addition of cumulative and project growth under cumulative conditions during the PM peak hour. Project related traffic represents approximately 6% of the anticipated cumulative growth; therefore, the project's contribution is considered cumulatively insignificant. The North San Jose EIR identified mitigation for this intersection under the North San Jose Phase 4, which would improve the operating conditions to an acceptable LOS D during the PM peak hour. The improvements consist of adding second eastbound and westbound left turn lanes. It should be noted that the timing of the Phase 4 improvements are no known at this time. The unacceptable LOS E conditions at this intersection may persist until improvements under Phase 4 are completed.

The intersection of Berryessa Road/Capitol Avenue would decrease from LOS D to LOS E, and the average vehicle delay would increase by approximately 2.1 seconds under cumulative conditions during the AM peak hour. The project-related traffic is approximately 33% of the anticipated cumulative growth; therefore, the project's contribution is considered cumulatively significant. The poor level of service at this intersection during the AM peak hour is primarily due to the high amount of southbound right-turn traffic.

**Freeway Segments**. The City of San Jose's traffic model includes the project and its current land use assumptions. To estimate the no-project cumulative conditions, project-related traffic was subtracted from the cumulative traffic volumes. In addition, on some roadway segments the forecasted cumulative traffic volumes were less than the existing traffic volumes. In these cases, the existing traffic volumes were used for the cumulative scenario.

The cumulative freeway conditions and the amount of traffic that would be added to each segment during the AM and PM peak hours are provided in Appendix H. The amount of project-related traffic added to the study freeway segments would be less than 1% of the respective freeway capacities during both the AM and PM peak hours. The proposed project would not result in cumulative impacts at the study freeway segments.

### *Conclusion*

Based on the City of San Jose traffic impact criteria, the addition of project-generated traffic would result in significant impacts at three study intersections, as follows:

- US 101 Northbound Ramp & Old Oakland Road (AM)
- Commercial Street & Old Oakland Road (AM)
- Interstate 880 Southbound Ramp & Brokaw Road (PM) - This intersection is located in the North

San Jose Development Policy Area and mitigation is covered under the NSJ Development Policy.

Traffic from the project would also contribute to significant cumulative impacts at the intersection of Berryessa Road/Capitol Avenue during the AM peak hour.

Mitigation is identified below to reduce the above significant traffic impacts of the project to a less-than-significant level.

**Mitigation Measures**

***Project Mitigation***

- **US 101 Northbound Ramp/Old Oakland Road Intersection**. The recommended improvement measures for this intersection are consistent with the planned roadway improvements identified as part of the North San Jose Development Plan and the Flea Market Development Project. These improvements consist of adding a second southbound right-turn lane and a second northbound left-turn lane. This improvement would require significant modification to the existing structure. The project developer shall implement the following:

  Participate in the City's US 101/Oakland/Mabury Transportation Development Policy. The City of San Jose has an adopted transportation policy for the US 101/Oakland/Mabury transportation corridor that will allow developments to pay a traffic impact fee based on the amount of project traffic traveling through this corridor. The policy includes improvements on the US 101/Oakland Road interchange, improvements to maximize capacity at the intersections of Old Oakland/Commercial Street and Berryessa Road/Commercial Street, and construction of a new US-101/Mabury interchange. The intent of the policy is to allow more projects to develop and temporarily allow traffic congestion in excess of the City's LOS standard for a limited time prior to construction of the required transportation improvements. The new policy includes a fee requiring all new developments to pay a fair share contribution for using a portion of the interchange capacity that would be created with the buildout of the US 101/Oakland Road interchange and construction of a new US 101/Mabury Road interchange. Based on the new available capacity that would be created, each new development would be required to contribute $30,000 for each new PM peak hour vehicle trip that it would add to the US 101/Oakland Road interchange.

- **Commercial Street/Old Oakland Road Intersection**. The addition of a second westbound left-turn lane would improve conditions to an acceptable level. This improvement measure is consistent with the planned roadway improvements identified as part of the North San Jose Development Policy and the Flea Market development project and is also identified in the US 101/Oakland/Mabury Transportation Development Policy, within which the project proposes to participate (see above).

***Cumulative Mitigation***

- **Berryessa Road/Capitol Avenue**. Converting the southbound approach to provide one through lane, one shared through/right-turn lane, and one right-turn only lane would improve the operating conditions to an acceptable LOS D. The overlapping right-turn phasing for the southbound approach may need to be removed, however the intersection would continue to operate at acceptable levels of service with the recommended change in striping. The estimated cost for this improvement is approximately $10,000 or less, and would not require modification to the existing curb line. The City may require the Pepper Lane project to contribute toward improvements to this intersection.

- **Commercial Street/Old Oakland Road Intersection**. See above for Project Mitigation.

## P. UTILITIES AND SERVICE SYSTEMS

### Setting

Utilities and services are furnished to the project site by the following providers:

- Wastewater Treatment: treatment and disposal provided by the San Jose/Santa Clara Water Pollution Control Plant (WPCP), and lines maintained by the City of San Jose
- Water Service: San Jose Water Company
- Storm Drainage: City of San Jose
- Solid Waste: Various
- Natural Gas & Electricity: PG&E

### Impacts and Mitigation

### *Thresholds per CEQA Checklist*

| ENVIRONMENTAL IMPACTS | | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|---|
| 16. | UTILITIES AND SERVICE SYSTEMS. Would the project: | | | | | |
| a) | Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | X | | 1, 2 |
| b) | Require or result in the construction of new water or wastewater treatment facilities of expansion of existing facilities, the construction or which could cause significant environmental effects? | | | X | | 1, 2 |
| c) | Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | X | | 1, 2 |
| d) | Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | X | | 1, 2 |
| e) | Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | X | | 1,2 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | X | | 1,2 |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | | | | X | 1 |

### Discussion

Public services are generally provided to the community as a whole, and financed on a community-wide basis. The proposed mixed-use development is located in an urban area that is served by municipal providers.

The project would result in an incremental increase in the demand for public services from the development of 379 residential units and approximately 30,000 square feet of retail space. The project would be subject to developer fees to accommodate the incremental demand on services, including the state-mandated school district impact fee and City-required park dedication in-lieu fee. The project would not significantly impact public services or require the construction of new or remodeled public services facilities.

With implementation of the following standard measures, the project would result in less-than-significant impacts on public services.

### Standard Measures

- The developer shall pay a school impact fee to the School District in accordance with California Government Code §65996 to offset the increased demands on school facilities.

- The project shall conform to the City's Parkland Dedication Ordinance (PDO) and Park Impact Ordinance (PIO) (Municipal Code Chapter 19.38).

## Q. MANDATORY FINDINGS OF SIGNIFICANCE

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| 17. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project: | | | | | |
| a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | | X | | 1, 7, 9 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Source(s) |
|---|---|---|---|---|---|
| b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects. | | | X | | 1, 15 |
| c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | | | X | | 1 |

## Discussion

The proposed project would not result in significant impacts associated with the CEQA mandatory findings of significance. Based on the analysis provided in this Initial Study, the proposed mixed use project would not substantially degrade or reduce wildlife species or habitat, eliminate examples of California history, result in significant cumulative impacts, or cause adverse effects on humans with mitigation and standard measures identified in this Initial Study. Refer to Section **O. Transportation** for additional discussion of cumulative traffic impacts.

# Chapter 4. References

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15. Traffic Impact Analysis, 2008

# APPENDIX A

# AIR QUALITY ANALYSIS

# *Pepper Lane, Berryessa*
# *San Jose, CA*
# *Air Quality Study*

**August 15, 2007**

• • •

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## Introduction

This report presents results of an air quality impact assessment for the proposed Pepper Lane mixed-use development site located in San Jose, California. The project proposes the construction of 394 three-story townhomes as well as 25,000 square feet of retail and 5,000 square feet of restaurant space located at the southeast corner of Berryessa Road and Jackson Avenue.

This analysis evaluates the air quality impacts of the proposed change in land uses between current uses and future allowable uses. The impact associated with the proposed development will also evaluated in terms of operational and construction impacts to air quality. This analysis was conducted following guidance provided by the Bay Area Air Quality Management District (BAAQMD)[1].

### Overall Regulatory Setting

The Federal Clean Air Act governs air quality in the United States. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act. At the Federal level, the United States Environmental Protection Agency (USEPA) administers the Federal Clean Air Act. The California Clean Air Act is administered by the California Air Resources Board (CARB) at the State level and by the Air Quality Management Districts at the regional and local levels. The Bay Area Air Quality Management District (BAAQMD) regulates air quality at the regional level, which includes the nine-county Bay Area.

United States Environmental Protection Agency

The US EPA is responsible for enforcing the Federal CAA. The US EPA is also responsible for establishing the National Ambient Air Quality Standards (NAAQS). The NAAQS are required under the 1977 Clean Air Act and subsequent amendments. The US EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. The agency has jurisdiction over emission sources outside state waters (e.g., beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission standards established by the CARB.

California Air Resources Board

In California, the CARB, which is part of the California Environmental Protection Agency, is responsible for meeting the state requirements of the Federal Clean Air Act, administering the California Clean Air Act, and establishing California Ambient Air Quality Standards (CAAQS). The California Clean Air Act requires all air districts in the State to endeavor to achieve and maintain the CAAQS. CARB regulates mobile air pollution sources, such as motor vehicles. The agency is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB has established fuel specifications for both on- and off-road vehicles. CARB oversees the functions

[1] BAAQMD CEQA Guidelines for Assessing Air Quality Impacts from Projects and Plans, 1996, revised 1999.

of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level.

Bay Area Air Quality Management District

The BAAQMD is primarily responsible for assuring that the National and State ambient air quality standards are attained and maintained in the Bay Area. The BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, as well as many other activities. The BAAQMD has jurisdiction over much of the nine-county Bay Area counties.

National and State Ambient Air Quality Standards

As required by the Federal Clean Air Act, the NAAQS have been established for six major air pollutants: carbon monoxide (CO), nitrogen oxides ($NO_x$), ozone ($O_3$), respirable particulate matter ($PM_{10}$), fine particulate matter ($PM_{2.5}$), sulfur oxides, and lead. Pursuant to the California Clean Air Act, the State of California has also established ambient air quality standards. These standards are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride and visibility reducing particles.

Both State and Federal standards are summarized in Table 1. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soil, water, visibility, materials, vegetation and other aspects of the general welfare. The CAAQS are more stringent than the NAAQS. Thus, the CAAQS are used as the comparative standard in this analysis.

**Table 1 Ambient Air Quality Standards**

| Pollutant | Averaging Time | California Standards | National Standards [a] | |
|---|---|---|---|---|
| | | | Primary [b,c] | Secondary [b,d] |
| Ozone | 8-hour | 0.07 ppm | 0.08 ppm | — |
| | 1-hour | 0.09 ppm | —[e] | Same as primary |
| Carbon monoxide | 8-hour | 9.0 ppm | 9 ppm | — |
| | 1-hour | 20 ppm | 35 ppm | — |
| Nitrogen dioxide | Annual | 0.03 ppm | 0.053 ppm | Same as primary |
| | 1-hour | 0.18 ppm | 0.030 ppm | — |
| Sulfur dioxide | Annual | — | 0.03 ppm | — |
| | 24-hour | 0.04 ppm | 0.14 ppm | — |
| | 3-hour | — | — | 0.5 ppm |
| | 1-hour | 0.25 ppm | — | — |
| $PM_{10}$ | Annual | 20 $\mu g/m^3$ | --[f] | Same as primary |
| | 24-hour | 50 $\mu g/m^3$ | 150 $\mu g/m^3$ | Same as primary |
| $PM_{2.5}$ | Annual | 12 $\mu g/m^3$ | 15 $\mu g/m^3$ | |
| | 24-hour | — | 35 $\mu g/m^3$ [f] | |
| Lead | Calendar quarter | — | 1.5 $\mu g/m^3$ | Same as primary |
| | 30-day average | 1.5 $\mu g/m^3$ | — | — |

*Notes*: (a) Standards, other than for ozone and those based on annual averages, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

(b) Concentrations are expressed first in units in which they were promulgated. Equivalent units given in parenthesis.

(c) Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health. Each state must attain the primary standards no later than 3 years after that state's implementation plan is approved by the EPA.

(d) Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

(e) The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005.

(f) The annual $PM_{10}$ standard was revoked by U.S. EPA on September 21, 2006 and a new $PM_{2.5}$ 24-hour standard was established.

**Criteria Air Pollutants & Effect**

Air quality studies generally focus on five pollutants that are most commonly measured and regulated: CO, $O_3$, $NO_2$, $SO_2$, and suspended particulate matter, i.e., $PM_{10}$ and $PM_{2.5}$. In the Santa Clara County, ozone and particulate matter are the pollutants of greatest concern since measured air pollutant levels exceed these concentrations at times.

Carbon Monoxide

CO, a colorless and odorless gas, interferes with the transfer of oxygen to the brain. It can cause dizziness and fatigue, and can impair central nervous system functions. CO is emitted almost exclusively from the incomplete combustion of fossil fuels. Automobile exhausts release approximately 70 percent of the CO in the Bay Area. A substantial amount also comes from burning wood in fireplaces and wood stoves. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. The highest CO concentrations measured in the Bay Area are typically recorded during the winter.

Ozone

$O_3$, a colorless toxic gas, is the chief component of urban smog. $O_3$ enters the blood stream and interferes with the transfer of oxygen, depriving sensitive tissues in the heart and brain of oxygen. Although $O_3$ is not directly emitted, it forms in the atmosphere through a chemical reaction between reactive organic gas (ROG) and nitrogen oxides ($NO_X$) under sunlight.[2] ROG and NOx are primarily emitted from automobiles and industrial sources. $O_3$ is present in relatively high concentrations within the Bay Area, and the damaging effects of photochemical smog are generally related to the concentration of $O_3$. Highest $O_3$ concentrations occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies.

Nitrogen Dioxide

$NO_2$, a reddish-brown gas, irritates the lungs. It can cause breathing difficulties at high concentrations. Like $O_3$, $NO_2$ is not directly emitted, but is formed through a reaction between nitric oxide (NO) and atmospheric oxygen. NO and $NO_2$ are collectively referred to as nitrogen oxides ($NO_x$) and are major contributors to $O_3$ formation. Nitrogen oxides also contribute to the formation of $PM_{10}$ through secondary particulate formation in the presence of a stable atmospheric and high relative humidity.

Sulfur Oxides

Sulfur oxides, primarily $SO_2$, are a product of high-sulfur fuel combustion. The main sources of $SO_2$ are coal and oil used in power stations, in industries, and for domestic heating. $SO_2$ is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. $SO_2$ concentrations have been reduced to levels well below the state and national standards, but further reductions in emissions are needed to attain compliance with standards for $PM_{10}$, of which $SO_2$ is a contributor.

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[2] ROG and $NO_X$ are emitted from automobiles and industrial sources.

Suspended Particulate Matter

Particulate matter pollution consists of very small particles suspended in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter also forms when industry and gaseous pollutant undergo chemical reactions in the atmosphere. Respirable particulate matter ($PM_{10}$) and fine particulate matter ($PM_{2.5}$) represent fractions of particulate matter. $PM_{10}$ refers to particulate matter less than 10 microns in diameter and $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter. Major sources of $PM_{2.5}$ results primarily from diesel fuel combustion (from motor vehicles, power generation, industrial facilities), residential fireplaces, and wood stoves. $PM_{10}$ include all $PM_{2.5}$ sources as well as emissions from dust generated by construction, landfills, and agriculture; wildfires and brush/waste burning, industrial sources, windblown dust from open lands, and atmospheric chemical and photochemical reactions. $PM_{10}$ and $PM_{2.5}$ are also formed in the atmosphere through reactions of ammonia with nitrogen oxides from motor vehicles and other combustion sources, which produce ammonium nitrate. $PM_{10}$ and $PM_{2.5}$ pose a greater health risk than larger-size particles, because these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract increasing the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Whereas, larger particles tend to collect in the upper portion of the respiratory system, $PM_{2.5}$ are so tiny that they can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility. U.S. EPA recently adopted a new more stringent standard of 35 $\mu g/m^3$ for 24-hour exposures, based on a review of the latest new scientific evidence. At the same time, U.S. EPA revoked the annual $PM_{10}$ standard due to a lack of scientific evidence correlating long-term exposures of ambient $PM_{10}$ with adverse health effects.

Toxic Air Contaminants (TAC)

TACs are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants listed above. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., benzene near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). According to the CARB, diesel exhaust is a complex mixture of gases, vapors and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the ARB, and are listed as carcinogens either under the state's Proposition 65 or under the federal Hazardous Air Pollutants programs.

CARB reports that air pollution studies have shown an association that diesel exhaust and other cancer-causing toxic air contaminants emitted from vehicles are responsible for much of the overall cancer risk from TACs in California. Particulate matter emitted from diesel-fueled engines (diesel particulate matter [DPM]) was found to make up much of that risk. In 1998, CARB formally identified DPM as a TAC. Diesel particulate matter is of particular concern since it can be distributed over large regions, thus leading to widespread public exposure. Diesel

engines emit particulate matter at a rate about 20 times greater than comparable gasoline engines. The vast majority of diesel exhaust particles (over 90 percent) consist of $PM_{2.5}$, which are the particles that can be inhaled deep into the lung. Like other particles of this size, a portion will eventually become trapped within the lung possibly leading to adverse health effects. While the gaseous portion of diesel exhaust also contains TACs, the CARB's 1998 action was specific to DPM that accounts for much of the cancer-causing potential from diesel exhaust. California has adopted a comprehensive diesel risk reduction program to reduce DPM emissions 85 percent by 2020. The U.S. EPA and CARB adopted low sulfur diesel fuel standards in 2006 that reduce diesel particulate matter substantially.

In cooler weather, smoke from residential wood combustion can be a source of TACs. Localized high TAC concentrations can result when cold stagnant air traps smoke near the ground and, with no wind; the pollution can persist for many hours. This occurs in sheltered valleys during the winter. Wood smoke also contains a significant amount of $PM_{10}$ and $PM_{2.5}$. Wood smoke is an irritant and is implicated in worsening asthma and other chronic lung problems.

**Air Quality Planning**

Bay Area Clean Air Plan

BAAQMD, along with the other regional agencies (i.e., ABAG and MTC), has prepared an Ozone Attainment Plan to address the 1-hour NAAQS for $O_3$. Although U.S. EPA revoked the 1-hour NAAQS, commitments made in that plan along with emissions budgets remain valid until the region develops an attainment demonstration/maintenance plan for the 8-hour NAAQS for $O_3$. The region will be required to submit a maintenance plan and demonstration of attainment with a request for redesignation to EPA in when the 8-hour $O_3$ NAAQS is met. A Carbon Monoxide Maintenance Plan was approved in 1998 by EPA, which demonstrated how the NAAQS for carbon monoxide standard would be maintained.

Air quality plans addressing the California Clean Air Act are developed about every three years. The plans are meant to demonstrate progress toward meeting the more stringent 1-hour $O_3$ CAAQS. The latest plan, which was adopted in January 2006, is called the *Bay Area 2005 Ozone Strategy*. This plan includes a comprehensive strategy to reduce emissions from stationary, area, and mobile sources. The plan objective is to indicate how the region would make progress toward attaining the stricter state air quality standards, as mandated by the California Clean Air Act. The plan is designed to achieve a region-wide reduction of $O_3$ precursor pollutants through the expeditious implementation of all feasible measures. The plan proposes expanded implementation of transportation control measures (TCMs) and programs such as Spare the Air. Spare the Air is a public outreach program designed to educate the public about air pollution in the Bay Area and promote individual behavior changes that improve air quality. Some of these measures or programs rely on local governments for implementation.

The clean air planning efforts for $O_3$ will also reduce $PM_{10}$ and $PM_{2.5}$, since a substantial amount of this air pollutant comes from combustion emissions such as vehicle exhaust. In addition, the BAAQMD adopts and enforces rules to reduce particulate matter emissions and develops public outreach programs to educate the public to reduce $PM_{10}$ and $PM_{2.5}$ emissions (e.g., Spare the Night Program). SB 656 requires further action by CARB and air districts to reduce public exposure to $PM_{10}$ and $PM_{2.5}$. Efforts identified by the BAAQMD in response to SB656 are

primarily targeting reductions in wood smoke emissions and adoption of new rules to further reduce NOx and particulate matter from internal combustion engines and reduce particulate matter from commercial charbroiling activities. NOx emissions contribute to ammonium nitrate formation that resides in the atmosphere as particulate matter. The Bay Area experiences the highest $PM_{10}$ and $PM_{2.5}$ in winter when wood smoke and ammonium nitrate contributions to particulate matter are highest.

San Jose General Plan

The San José General Plan includes the following policies intended to control or reduce air pollution impacts and support TCMs in the BAAQMD's Clean Air Plan:

- *Air Quality Policy 1* states that the City should take into consideration the cumulative air quality impacts from proposed developments and should establish and enforce appropriate land uses and regulations to reduce air pollution consistent with the region's Clean Air Plan and state law.

- *Air Quality Policy 2* states that expansion and improvement of public transportation services and facilities should be promoted, where appropriate, to both encourage energy conservation and reduce air pollution.

- *Air Quality Policy 5* states that in order to reduce vehicle miles traveled and traffic congestion, new development within 1,000 feet of an existing or planned transit station should be designed to encourage the usage of public transit and minimize the dependence on the automobile through the application of site design guidelines.

- *Energy Policy 1* states that 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 2* states that decisions on land use should consider the proximity of industrial and commercial uses to major residential areas in order to reduce the energy used for commuting.

- *Transportation, Pedestrian Facilities, Policy 17* states that pedestrian travel should be encouraged as a mode of movement between residential and non-residential areas throughout the City and in activity areas.

- *Transportation, Pedestrian Facilities, Policy 19* states that the City should encourage walking, bicycling, and public transportation as preferred modes of transportation.

- *Transportation, Pedestrian Facilities, Policy 23* states that each land use has different pedestrian needs. Street and sidewalk designs should relate to the function of the adjoining land use(s) and transit access points.

- *Transportation, Transportation Systems Management/Transportation Demand Management, Policy 28* states that the City should promote participation and implementation of appropriate Transportation Demand Management measures such as carpooling and vanpooling,

preferential parking and staggered work hours/flextime, as well as bicycling and walking, by all employers.

- *Transportation, Bicycling, Policy 50* states that 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, Bicycle, Policy 52* states that priority improvements to the Transportation Bicycle Network should include: bike routes linking light rail stations to nearby neighborhoods, bike paths along designated trails and pathway corridors, and bike paths linking residential areas to major employment centers.

Title 9 - Health and Safety, Chapter 9.11 of the City Municipal Code regulates wood burning devices such as fireplaces in new construction. Only natural gas-fueled fireplaces or wood burning devices that meet U.S. EPA certification are allowed in new construction units. The ordinance prohibits conversion of gas fireplaces to burn solid fuel. These types of fireplaces have negligible $PM_{10}$ emissions when compared with traditional wood burning fireplaces.

**Physical Setting**

Climate and Topography

The project is located in San Jose, in Santa Clara County County. The climate is affected by its proximity to both the Pacific Ocean and the San Francisco Bay, which has a moderating influence. The Pacific Ocean and the Bay cools the air with which it comes in contact during warm weather and warms the air during cold weather. During the afternoon and early evening, a north-northwesterly sea breeze often flows from the Bay through the valley, and a light south-southeasterly drainage flow often occurs during the late evening and early morning hours.

Typical summer maximum temperatures for the region are in the mid to upper 80's, while winter maximum temperatures are in the low 60's. Minimum temperatures usually range from the mid to high 50's in the summer to the upper 30's and low 40's in the winter. Rainfall in the area occurs mostly in the months of November through March.

Air quality standards for ozone are traditionally exceeded when relatively stagnant conditions occur for periods of several days during the warmer months of the year. Weak wind flow patterns combined with strong inversions substantially reduces normal atmospheric mixing. Key components of ground-level ozone formation are sunlight and heat; therefore, significant ozone formation only occurs during the months from late spring through early fall. Prevailing winds during the summer and fall can transport and trap ozone precursors from the more urbanized portions of the Bay Area. Meteorological factors make air pollution potential in the project area relatively high. The clear skies with relatively warm conditions that are typical in summer combine with transported and localized air pollutant emissions to elevate ozone levels. The surrounding mountains up slope and down slope flows may also recirculate pollutants already present, contributing to the buildup of air pollution. Light winds and stable conditions during the late fall and winter contribute to the buildup of particulate matter from motor vehicles, agriculture, and wood burning in fireplaces and stoves.

Air Monitoring Data

Air quality in the region is controlled by the rate of pollutant emissions and meteorological conditions. Meteorological conditions such as wind speed, atmospheric stability, and mixing height may all affect the atmosphere's ability to mix and disperse pollutants. Long-term variations in air quality typically result from changes in air pollutant emissions, while frequent, short-term variations result from changes in atmospheric conditions. The San Francisco Bay Area is considered to be one of the cleanest metropolitan areas in the country with respect to air quality. The BAAQMD monitors air quality conditions at over 30 locations throughout the Bay Area. The monitoring stations closest to the project site are in San Jose. The highest air pollutant concentrations measured in any one year at the station closest to the project are shown in Table 2.

Ozone is the air pollutant of greatest concern in summer. Prevailing summertime wind conditions tend to cause a build up of ozone in Santa Clara County. Ozone levels measured in San Jose did not exceed the national 1-hour standard that was in place until 2005. The 8-hour standard was exceeded at the San Jose stations in 2006 on one day. The State one-hour standard was exceeded from 0 to 4 days in 2002-2005 and then on 5 days during 2006 when there was extremely warm weather. Statistics regarding the new State 8-hour standard have only been kept since 2005. One exceedance occurred in 2005 and 5 exceedances occurred in 2006.

The combination vehicle exhaust and wood smoke under stagnant air quality conditions leads to a build up of particulates in late fall and winter. Particulate matter is another pollutant of concern in the San Jose area. Measured exceedances of the state $PM_{10}$ standard have occurred 2 to 4 measurement days each year in San Jose. Since particulate matter is measured every sixth day, standards are exceeded about 12 to 24 days per year. Although the $PM_{2.5}$ standard did not exceed standards at the time, the new national 24-hour standard would have been exceeded each year in San Jose. This standard was not in effect from 2001 through 2006. Annual average concentrations of $PM_{10}$ exceed the State standards. Table 3 reports the number of days that an ambient air quality standard was exceeded at the monitoring stations near the project and in the entire Bay Area.

**Table 2 Highest Measured Air Pollutant Concentrations**

| Pollutant | Average Time | Measured Air Pollutant Levels | | | | |
|---|---|---|---|---|---|---|
| | | 2002 | 2003 | 2004 | 2005 | 2006 |
| **San Jose** | | | | | | |
| Ozone ($O_3$) | 1-Hour | 0.09 ppm | **0.12 ppm** | 0.09 ppm | **0.11 ppm** | **0.12 ppm** |
| | 8-Hour | 0.07 ppm | 0.07 ppm | 0.07ppm | 0.08 ppm | **0.09 ppm** |
| **San Jose** | | | | | | |
| Carbon Monoxide (CO) | 8-Hour | 4.5 ppm | 4.0 ppm | 3.0 ppm | 3.1 ppm | 2.9 ppm |
| | 1-Hour | 5.3 ppm | 5.5 ppm | 4.4 ppm | 4.3 ppm | 4.1 ppm |
| Nitrogen Dioxide ($NO_2$) | 1-Hour | 0.08 ppm | 0.09 ppm | 0.07 ppm | 0.07 ppm | 0.07 ppm |
| Respirable Particulate Matter ($PM_{10}$) | Annual | NA | **24 μg/m$^3$** | **23 μg/m$^3$** | **22 μg/m$^3$** | **21 μg/m$^3$** |
| | 24-Hour | **70 μg/m$^3$** | **60 ug/m$^3$** | **58 ug/m$^3$** | **54 μg/m$^3$** | **73 μg/m$^3$** |
| Fine Particulate Matter ($PM_{2.5}$) | Annual | NA | 12 μg/m$^3$ | 12 μg/m$^3$ | 12 μg/m$^3$ | 11 μg/m$^3$ |
| | 24-Hour | 58 μg/m$^3$ | 56 μg/m$^3$ | 52 μg/m$^3$ | 55 μg/m$^3$ | **64 μg/m$^3$** |
| **Bay Area (Basin Summary)** | | | | | | |
| Ozone ($O_3$) | 1-Hour | **0.16 ppm** | **0.13 ppm** | **0.11 ppm** | **0.12 ppm** | **0.13 ppm** |
| | 8-Hour | **0.11 ppm** | **0.10 ppm** | 0.08 ppm | **0.09 ppm** | **0.11 ppm** |
| Carbon Monoxide (CO) | 8-Hour | 4.5 ppm | 4.0 ppm | 3.4 ppm | 3.1 ppm | 2.9 ppm |
| | 1-Hour | 6.2 ppm | 5.5 ppm | 4.8 ppm | 4.5 ppm | 5.5 ppm |
| Nitrogen Dioxide ($NO_2$) | 1-Hour | 0.08 ppm | 0.09 ppm | 0.07 ppm | 0.07 ppm | 0.11 ppm |
| Fine Particulate Matter ($PM_{10}$) | Annual | **25 μg/m$^3$** | **25 μg/m$^3$** | **26 μg/m$^3$** | **24 μg/m$^3$** | **23 μg/m$^3$** |
| | 24-Hour | **80 μg/m$^3$** | **60 μg/m$^3$** | **65 μg/m$^3$** | **81 μg/m$^3$** | **90 μg/m$^3$** |
| Respirable Particulate Matter ($PM_{2.5}$) | Annual | **14 μg/m$^3$** | 12 μg/m$^3$ | 12 μg/m$^3$ | 12 μg/m$^3$ | 11 μg/m$^3$ |
| | 24-Hour | **77 μg/m$^3$** | **56 μg/m$^3$** | **74 μg/m$^3$** | **55 μg/m$^3$** | **75 μg/m$^3$** |

Source: BAAQMD Air Quality Summaries for 2002, 2003, 2004, 2005, and 2006 and California Air Resources Board Air Quality Data website http://www.arb.ca.gov/aqd/aqdpage.htm.

Note: ppm = parts per million and ug/m$^3$ = micrograms per cubic meter
Values reported in bold exceed ambient air quality standard
NA = data not available.

**Table 3 Annual Number of Days Exceeding Ambient Air Quality Standards**

| Pollutant | Standard | Monitoring Station | Days Exceeding Standard | | | | |
|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 |
| Ozone ($O_3$.) | NAAQS 1-hr | San Jose | 0 | 0 | 0 | -- | -- |
| | | BAY AREA | 2 | 1 | 0 | -- | -- |
| | NAAQS 8-hr | San Jose | 0 | 0 | 0 | 0 | 1 |
| | | BAY AREA | 7 | 7 | 0 | 1 | 12 |
| | CAAQS 1-hr | San Jose | 0 | 4 | 0 | 1 | 5 |
| | | BAY AREA | 16 | 19 | 7 | 9 | 18 |
| | CAAQS 8-hr | San Jose | -- | -- | -- | -- | 5 |
| | | BAY AREA | -- | -- | -- | -- | 22 |
| Fine Particulate Matter ($PM_{10}$) | NAAQS 24-hr | San Jose | 0 | 0 | 0 | 0 | 0 |
| | | BAY AREA | 0 | 0 | 0 | 0 | 0 |
| | CAAQS 24-hr | San Jose | 2 | 3 | 4 | 2 | 2 |
| | | BAY AREA | 6 | 6 | 7 | 6 | 6 |
| Fine Particulate Matter ($PM_{2.5}$) | NAAQS 24-hr* | San Jose | 0 | 0 | 0 | 0 | 0 |
| | | BAY AREA | 5 | 0 | 1 | 0 | 0 |
| All Other (CO, $NO_2$, Lead, $SO_2$) | All Other | San Jose | 0 | 0 | 0 | 0 | 0 |
| | | BAY AREA | 0 | 0 | 0 | 0 | 0 |

* Based on standard of 65 $\mu g/m^3$ that was in place until September 21, 2006.
NA = data not available.

Attainment Status

Areas that do not violate ambient air quality standards are considered to have attained the standard. Violations of ambient air quality standards are based on air pollutant monitoring data and are judged for each air pollutant. The Bay Area as a whole does not meet State or federal ambient air quality standards for ground level $O_3$ and State standards for $PM_{10}$ and $PM_{2.5}$.

Under the Federal Clean Air Act, the US EPA has classified the region as marginally nonattainment for the 8-hour $O_3$ standard. The EPA requires the region to attain the standard by 2007. The Bay Area has met the CO standards for over a decade and is classified *attainment maintenance* by the US EPA. The US EPA grades the region *unclassified* for all other air pollutants, which include $PM_{10}$ and $PM_{2.5}$. Historical data indicates that the South Bay area does not meet the current national PM2.5 standards; however, EPA will not make attainment rulings until review of a three-year data set collected after the standards went into place in 2006. Attainment designations are anticipated around 2009 or 2010.

At the State level, the region is considered *serious non-attainment* for ground level $O_3$ and non-attainment for $PM_{10}$. CARB has not yet designated the area with respect to the State $PM_{2.5}$

standard. California ambient air quality standards are more stringent than the national ambient air quality standards. The region is required to adopt plans on a triennial basis that show progress towards meeting the State $O_3$ standard. The area is considered attainment or unclassified for all other pollutants.

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following people who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.

**Air Quality Impacts and Mitigations**

Thresholds of Significance

CEQA Guidelines prepared by the BAAQMD are used to establish the significance criteria to judge the impacts caused by the project. The following are the significance criteria that the BAAQMD has established to determine project impacts:

- Conflict with or obstruct implementation of the applicable air quality plan.
- A substantial contribution to an existing or project violation of an ambient air quality standard would result if traffic associated with the project would cause an exceedance of the carbon monoxide ambient air quality standard.
- 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 if the project would:
    - Emit 80 pounds per day (lb/day) or more of an ozone precursor air pollutant, which are ROG or $NO_x$.
    - Directly emit 550 lb/day or more of carbon monoxide from a stationary source.
    - Emit 80 lb/day or more of $PM_{10}$.
- Expose sensitive human receptors or the general public to substantial pollutant concentrations.
- Create or expose a substantial number of people to objectionable odors.

**Potential Impact 1: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?** *Less than significant*

Carbon monoxide emissions from traffic generated by the project would be the pollutant of greatest concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high-localized concentrations of carbon monoxide. Air pollutant

monitoring data indicate that carbon monoxide levels have been at healthy levels (i.e., below State and federal standards) in the Bay Area since the early 1990s. As a result, the region has been designated as attainment for the standard at both federal and State levels. The nearest monitoring station is in San Jose, and the highest measured concentration averaged over any 8-hour period during the last 3 years is 3.2 parts per million (ppm). The contribution of project-generated traffic to these levels was predicted using a screening procedure based on the Caline4 Line-Source Dispersion Model, and approved by the BAAQMD. The intersection of Brokaw Road and Old Oakland Road is considered the worst intersection (in terms of elevated carbon monoxide levels from traffic) that would be affected by project-generated traffic. The intersection of Berryessa Road and Jackson Avenue would be the busiest intersection that is most affected by the project. Future carbon monoxide levels were predicted near this intersection with the project in place using traffic projections provided by DKS Associates. Emission factors used in the dispersion model were calculated using the EMFAC2007 model, developed by the California Air Resources Board using default assumptions for Santa Clara County during winter that include a temperature of 45 deg. F. Carbon monoxide predictions are shown in Table 4.

**Table 4 Predicted 8-Hour CO Concentrations with Project**

| Intersection | 2006 Existing | 2010 Background | 2010 Project | Cumulative Plus Project (2020) |
|---|---|---|---|---|
| Brokaw Road & Old Oakland Road | 6.5 ppm | 6.1 ppm | 6.1 ppm | 4.4 ppm |
| Berryessa Road and Jackson Ave | 6.1 ppm | 5.3 ppm | 5.4 ppm | 4.2 ppm |
| *BAAQMD Thresholds: California ambient air quality standard that is 9.0 ppm* | | | | |

Carbon monoxide concentrations in the near term future with background conditions would be below ambient air quality standards. Vehicle emission rates are predicted by the model to decrease substantially as newer cleaner vehicles replace older vehicles that have much higher emission rates. As a result, predicted future carbon monoxide concentrations occurring when the project is in place would be much lower than existing levels. The highest 8-hour concentration with the project in place is predicted to be 6.1 ppm over an 8-hour averaging period. This represents the roadside concentration for background conditions with the project in place during the PM peak hour conditions, as reported in the DKS Associates traffic report for intersection #6. While traffic increases under cumulative conditions with the project, carbon monoxide concentrations decrease due to decreased vehicular emissions rates. Newer cars meeting stricter emission standards replace older vehicles that emit much higher rates of air pollution. The results of the screening analysis indicate that carbon monoxide levels would be below the California ambient air quality standards (used to judge the significance of the impact) or 9.0 ppm; therefore the impact is considered *less than significant.*

**Potential Impact 2: Would the project 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)?** *Less than significant*

The Bay Area is considered a non-attainment area for ground-level ozone under both the federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for respirable particulates or particulate matter with a diameter of less than 10 micrometers ($PM_{10}$), and particulate matter with a diameter of less than 2.5 micrometers ($PM_{2.5}$) under the California Clean Air Act, but not the Federal Act. The area has attained both state and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and $PM_{10}$, the BAAQMD has established thresholds of significance for air pollutants. These thresholds are for ozone precursor pollutants (reactive organic gases and nitrogen oxides) and $PM_{10}$.

The traffic impact study for the project[3] indicates that the proposed development would add about 4,500 new daily traffic trips, leading to increased emissions of air pollutants. Emissions of air pollutants associated with the project were predicted using the URBEMIS2007 model (Version 9.2), distributed by the California Air Resources Board and recommended for use by the BAAQMD. This model predicts daily emissions associated with land use developments. The model combines predicted daily traffic activity, associated with the project land use types, with emission factors from the State's mobile emission factor model (i.e., EMFAC2007). The trip generation rates predicted for the traffic study were included in the modeling. The model default trip types and lengths were applied to these trip generation rates.

Daily emissions predicted with the project are reported in Table 5 and compared against the BAAQMD thresholds. The model also predicts area source emissions associated with the proposed project. The attachment to this report includes the URBEMIS2007 model output.

**Table 5 Projected Daily Project Emissions in Pounds Per Day**

| Scenario | Modeled Daily Emissions in Pounds Per Day (lbs/day) | | |
|---|---|---|---|
| | **Reactive Organic Gases (ROG)** | **Nitrogen Oxides (NOx)** | **Respirable Particulates ($PM_{10}$)** |
| Project Area Sources | 22.7 | 3.3 | <1.0 |
| Project Operation Sources | 35.3 | 41.0 | 59.1 |
| Project Total Sources | 58.0 | 44.3 | 62.9 |
| *BAAQMD Thresholds* | *80* | *80* | *80* |

Build out of the project is not anticipated to result in the construction or modification of stationary air pollutant sources. If such sources are included in the project at a later time, they may require permits from the BAAQMD. Such sources could include combustion emissions from boilers used for heating and cooling or standby emergency generators. These sources would normally result in minor emissions, compared to those from traffic generation reported above. Sources of air pollutant emissions complying with all applicable BAAQMD regulations generally will not be considered to have a significant air quality impact. Stationary sources that are exempt from BAAQMD permit requirements because they fall below emission thresholds for permitting would not be considered to have a significant air quality impact.

[3] DKS Associates. 2006. Pulte Homes - Pepper Lane Mixed-Use Development - Draft TIA, December.

Emissions associated with the project would not exceed BAAQMD thresholds, as a result, the project would have a *less-than-significant* impact on regional air quality.

**Potential Impact 3: Would the project expose sensitive receptors to substantial pollutant concentrations?** *Less than significant with mitigation*

Operation of the project is not expected to cause any localized emissions that could expose sensitive receptors to unhealthy air pollutant levels. Construction activities would result in localized emissions of dust and diesel exhaust that could result in temporary impacts to adjacent land uses. CARB recommends a generic setback of 500 feet between new residences and freeways[4]. The project is located about 700 feet or more from Interstate 680, so future residences would not be exposed to substantial air pollutant levels from freeway traffic.

**Construction Dust**

During grading and construction activities, dust would be generated. Most of the dust could result during demolition and grading activities. The amount of dust generated would be highly variable and is dependent on the size of the area disturbed, amount of activity, type of materials disturbed, and meteorological conditions. Typical winds during late spring through summer are from the northwest. Existing residences are located near the project site. Residences along the east and south boundaries of the site would be immediately adjacent to construction sites. In addition, some proposed uses could be constructed earlier than others putting them adjacent to other future project construction activities. Existing and possibly future residences would be affected by construction activities.

$PM_{10}$ is the pollutant of greatest concern associated with dust generated from construction. If uncontrolled, $PM_{10}$ levels downwind of actively disturbed areas could possibly exceed State standards. $PM_{10}$ is both a local and regional air pollutant. In addition, dust fall on adjacent residences could create a nuisance. The BAAQMD CEQA Guidelines recommend that measures to reduce $PM_{10}$ be included with all construction projects. If uncontrolled, dust generated by grading and construction activities represents a ***significant*** impact.

Construction Equipment Exhaust

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known Toxic Air Contaminant. Diesel exhaust poses both a health and nuisance impact to nearby receptors. Diesel exhaust is also a substantial source of NOx emissions that affect regional ozone levels. These construction activities would not be near sensitive receptors and are expected to occur during a relatively short time. Therefore, the impacts are considered to be less than significant if reasonable available control measures are applied.

**Mitigation Measure:** Include measures to control dust and exhaust emissions from construction activities.

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[4] California Air Resources Board. 2005. Air Quality and Land Use handbook: A Community Health Perspective. April.

Implementation of the measures recommended by the BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a ***less- than-significant level***. Measures to reduce diesel particulate matter and $PM_{2.5}$ from construction are also recommended to ensure that short-term health impacts to nearby sensitive receptors are avoided.

1. Water all active construction areas at least twice daily and more often during windy periods. Active areas adjacent to residences should be kept damp at all times.

2. Cover all hauling trucks or maintain at least two feet of freeboard.

3. Pave, apply water at least twice daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas.

4. Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas and sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads.

5. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (i.e., previously-graded areas that are inactive for 10 days or more).

6. Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles.

7. Limit traffic speeds on any unpaved roads to 15 mph.

8. Replant vegetation in disturbed areas as quickly as possible.

9. Suspend construction activities that cause visible dust plumes to extend beyond the construction site.

10. Prohibit use of "dirty" equipment. Equipment with noticeably dirty emissions shall be prohibited from operation at the site until proper maintenance has been performed to reduce the visible emissions to acceptable levels. If necessary, opacity shall be used as an indicator of exhaust particulate emissions from off-road diesel powered equipment, where the project shall ensure that emissions from all construction diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately

11. Signs shall be clearly posted at the construction site indicating that diesel equipment standing idle for more than five minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate, or other bulk materials. Rotating drum concrete trucks could keep their engines running continuously as long as they were onsite.

12. Properly tune and maintain equipment in accordance with manufacturer specifications.

13. Stage construction equipment away from any sensitive uses.

14. The contractor shall install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g., compressors).

15. A Disturbance Coordinator will be assigned to the project when active construction is occurring within 200 feet of residences. This coordinator will ensure that all air quality construction period mitigation measures are enforced. In addition, the Disturbance Coordinator will respond to complaints from the public regarding air quality issues in a timely manner. The contact information for this Coordinator will be posted in plain view at the project site.

**Potential Impact 4: Would the project create objectionable odors affecting a substantial number of people?** *Less than significant*

The project uses are typical of those in suburban and urban areas, which do not usually result in odor complaints. During construction the various diesel powered vehicles and equipment in use on the site would create localized odors. These odors would be temporary and not likely to be noticeable for extended periods of time much beyond the project's site boundaries. The potential for diesel odor impacts is therefore ***less than significant***.

**Potential Impact 5: Would the project conflict with or obstruct implementation of the applicable air quality plan?** *Less than significant with mitigation*

The most current Clean Air Plan (CAP), the *2005 Bay Area Ozone Strategy*, was adopted by BAAQMD on January 4, 2006. This plan is based on population projections through 2020 compiled by the association of Bay Area Governments (ABAG). The 2005 Ozone Strategy uses population projections that extend beyond the City's General Plan build out year of 2020. The City estimates that the population of San Jose at General Plan build out would be approximately 1.27 million, which is higher than the 1.15 million population projected for San Jose by 2025 used for the CAP. The City's estimate, however, is consistent with the figures from ABAG of 1.34 million by 2030, which is being used in the current update to the CAP (i.e., *2007 Ozone Strategy* currently under preparation).

Consistency with Population and Travel Projections

The project would develop two parcels with a total of just over 390 new residential units along with approximately 15,000 square feet of retail uses. The project includes rezoning of the site, but no General Plan amendments. A General Plan amendment was approved for most of the site in 2006, which found that changing the land use designations would not generate substantial new traffic trips (and associated air pollution emissions) relative to the existing designation, since the project would reduce overall development density by eliminating commercial uses on the site. Therefore, the proposed project would not conflict with current clean air planning efforts.

Transportation Control Measures

The 2005 Bay Area Ozone Strategy includes 20 transportation control measures, of which seven require participation at the local level. The set of adopted TCMs, which identify local governments as implementing agencies, are listed by the BAAQMD in their CEQA Guidelines. Future development, primarily residential, associated with the project cannot individually implement the listed measures.

The project site is accessible to pedestrians, bicyclists and transit users. Berryessa Road and Jackson Avenue that are adjacent to the site have bike lanes. A bicycle path also exists along the Penitencia Creek Trail, located just south of the project site. Sidewalks are on all streets near the project, except along the frontage of the project site. Project plans would include new sidewalks at the site. Crosswalks and pedestrian push buttons are available at all signalized intersections. The site is served by about 5 different Valley Transit Authority bus routes, which include light rail within about one-half mile. Two of the bus routes are adjacent tot eh project site.

Although most TCMs would be implemented through the City's General Plan policies, mitigation measures would be needed for future development at the project site to ensure that appropriate TCM implementation. Without appropriate mitigation measures, the project could have a *significant impact*.

**Mitigation Measure 1:** To ensure incorporation of appropriate Clean Air Plan TCMs, the features listed below shall be included in the project. Implementation of the measures listed below along with the City's General Plan requirements would reduce vehicle use and vehicle miles traveled consistent with the current Clean Air Plan TCMs (a less-than-significant level):

- Bicycle amenities should be provided. This would include secure multi-family residential bicycle parking, bicycle racks for retail customers and visitors, and appropriate bike lane connections.

- Provide appropriate transit amenities in coordination with the City and VTA, such as sheltered bus stops and bus pullouts.

- Implement a landscape plan that provides shade trees along adjacent sidewalks and at bus stops.

This would be a *less-than-significant* impact with implementation of Mitigation Measure 1.

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Urbemis 2007 Version 9.2.2

Combined Summer Emissions Reports (Pounds/Day)

File Name: Z:\ARCHIVES\2007\07-110 Pepper Lane, Berryessa AQ\Pepper Lane Proposed.urb9

Project Name: Pepper Lane

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 22.74 | 3.32 | 6.32 | 0.00 | 0.02 | 0.02 | 4,149.51 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 35.27 | 41.01 | 423.68 | 0.36 | 62.92 | 12.04 | 35,549.02 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 58.01 | 44.33 | 430.00 | 0.36 | 62.94 | 12.06 | 39,698.53 |

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.25 | 3.26 | 1.51 | 0.00 | 0.01 | 0.01 | 4,141.27 |
| Hearth | | | | | | | |
| Landscape | 0.39 | 0.06 | 4.81 | 0.00 | 0.01 | 0.01 | 8.24 |
| Consumer Products | 19.28 | | | | | | |
| Architectural Coatings | 2.82 | | | | | | |
| TOTALS (lbs/day, unmitigated) | 22.74 | 3.32 | 6.32 | 0.00 | 0.02 | 0.02 | 4,149.51 |

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|---|---|---|---|---|---|---|---|
| Condo/townhouse general | 24.45 | 26.75 | 280.99 | 0.23 | 41.13 | 7.87 | 23,315.03 |
| High turnover (sit-down) rest. | 3.98 | 5.33 | 53.45 | 0.05 | 8.15 | 1.56 | 4,576.96 |
| Strip mall | 6.84 | 8.93 | 89.24 | 0.08 | 13.64 | 2.61 | 7,657.03 |
| TOTALS (lbs/day, unmitigated) | 35.27 | 41.01 | 423.68 | 0.36 | 62.92 | 12.04 | 35,549.02 |

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

**1/24/2008 4:13:48 PM**

Analysis Year: 2010 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|---|---|---|---|---|---|---|
| Condo/townhouse general | 24.62 | 7.10 | dwelling units | 394.00 | 2,797.40 | 23,916.93 |
| High turnover (sit-down) rest. | | 127.15 | 1000 sq ft | 5.00 | 635.75 | 4,741.11 |
| Strip mall | | 42.94 | 1000 sq ft | 25.00 | 1,073.50 | 7,936.39 |
| | | | | | 4,506.65 | 36,594.43 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 53.7 | 1.3 | 98.3 | 0.4 |
| Light Truck < 3750 lbs | 12.9 | 2.3 | 94.6 | 3.1 |
| Light Truck 3751-5750 lbs | 19.8 | 0.5 | 99.5 | 0.0 |
| Med Truck 5751-8500 lbs | 6.6 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 0.9 | 0.0 | 77.8 | 22.2 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.6 | 0.0 | 50.0 | 50.0 |
| Med-Heavy Truck 14,001-33,000 lbs | 1.0 | 0.0 | 20.0 | 80.0 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 0.4 | 0.0 | 0.0 | 100.0 |
| Other Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Urban Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motorcycle | 3.2 | 68.8 | 31.2 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 0.6 | 0.0 | 83.3 | 16.7 |

**1/24/2008 4:13:48 PM**

Travel Conditions

| | Residential | | | Commercial | | |
|---|---|---|---|---|---|---|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| Urban Trip Length (miles) | 10.8 | 7.3 | 7.5 | 9.5 | 7.4 | 7.4 |
| Rural Trip Length (miles) | 16.8 | 7.1 | 7.9 | 14.7 | 6.6 | 6.6 |
| Trip speeds (mph) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 |
| % of Trips - Residential | 32.9 | 18.0 | 49.1 | | | |
| | | | | | | |
| % of Trips - Commercial (by land use) | | | | | | |
| High turnover (sit-down) rest. | | | | 5.0 | 2.5 | 92.5 |
| Strip mall | | | | 2.0 | 1.0 | 97.0 |

# APPENDIX B

# BURROWING OWL SURVEYS

MONK & ASSOCIATES
**Environmental Consultants**

May 19, 2006

Pulte Homes
6210 Stoneridge Mall Road, 5th Floor
Pleasanton, California 94588

Attention: Ms. Erika Salum

**RE: Preconstruction Burrowing Owl Survey**
**Reinhard Project Site, San Jose, California**

Ms. Salum:

## 1. INTRODUCTION

Monk & Associates, Inc. (M&A) has completed preconstruction surveys for the western burrowing owl (*Athene cunicularia hypugaea*) on the 17.48-acre Reinhard Project Site in Santa Clara County, California (the project site)(Figures 1 and 2 - attached). M&A conducted dawn/dusk surveys for the burrowing owl on two separate dates: May 10, and May 12, 2006. No burrowing owls were observed during our surveys. Below, we discuss the burrowing owl's legal status, the owl's habitat requirements, our field survey methods, and results.

## 2. BURROWING OWL'S LEGAL STATUS

The burrowing owl is a Federal "species of concern" and a California "species of special concern." Its nest, eggs, and young are also protected under California Fish and Game Codes (§3503, §3503.5, and §3800). The burrowing owl is also protected from direct take under the Migratory Bird Treaty Act (50 CFR 10.13). Finally, based upon this species' rarity status, any unmitigated impacts to rare species would be considered a "significant effect on the environment" pursuant to §21068 of the California Environmental Quality Act (CEQA) Statutes and §15382 of the CEQA Guidelines. Thus, this owl species must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

## 3. BURROWING OWL HABITAT REQUIREMENTS

Burrowing owl habitat can be found in annual and perennial grasslands, characterized by low-growing vegetation. Typically, the burrowing owl utilizes rodent burrows, typically ground squirrel burrows, for nesting and cover. They may also on occasion dig their own burrows, or use man-made objects such as concrete culverts or rip-rap piles for cover. They exhibit high site fidelity, reusing burrows year after year. Occupancy of suitable burrowing owl habitat can be verified at a site by observation of a pair of burrowing owls during the spring and summer months or, alternatively, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement (white wash) at or near a burrow. Burrowing owls typically are not observed in grasslands with tall vegetation or wooded areas because the vegetation obscures their ability to detect avian and terrestrial predators. Since burrowing owls spend the majority of their time sitting at the mouths of their burrows, grazed grasslands seem to be their preferred habitat because it allows them to view the world at 360 degrees without obstructions.

1136 Saranap Ave., Suite Q ♦ Walnut Creek ♦ California ♦ 94595
(925) 947-4867 ♦ FAX (925) 947-1165

## 4. PROJECT SITE LOCATION AND DESCRIPTION

The project site is in Santa Clara County near the City of San Jose, approximately one mile west of I-680. The project site is essentially an urban infill site located at the corner of Berryessa and Jackson Street. It is currently a vacant lot. This property was previously utilized as an orchard. In between M&A's first and second project survey dates, the site was disked by the owner/farmer as a routine spring maintenance activity. The site is surrounded by residential housing to the north, south, east and west of the property boundaries.

## 5. SETTING

The project site consists of a disked ruderal field. There are no buildings of any kind on the project site. The majority of the vegetation within the project area is characterized as ruderal (weedy), non-native grasses. Ruderal vegetation within the project area includes common weed species such as wild oats (*Avena fatua),* rip-gut brome (*Bromus diandrus*), (*Brassica nigra*), foxtail barley (*Hordeum murinum leporinum*), Italian ryegrass (*Lolium multiflorum*), bristly ox-tongue (*Picris echioides*), broadleaf filaree (*Erodium botrys*), sour clover (*Melilotus indica*), milk thistle (*Silybum marianum*), fiddleneck (*Amsinckia sp.*), wild radish (*Raphanus raphanistrum*), Russian thistle (*Salsola tragus*), cheeseweed (*Malva parviflora),* bindweed (*Convolvulus arvensis*), brome (Bromus sp.), and oat sp. (Avena sp.). A few coyote brush bushes (*Baccharis pilularis*) and a small coast live oak (*Quercus agrifolia*) were growing along the eastern and southern fence lines of the property.

## 6. METHODS

A preconstruction survey for the burrowing owl was conducted on May 10 and May 12, 2006 by M&A biologist Ms. Kimberly Debriansky. During our surveys, M&A looked for direct and indirect evidence of burrowing owl occupation of the project site. Evidence of occupation would include a visual sighting of this owl species or the presence of its molt feathers, white wash, pellets, or prey remains.

Survey methods included walking systematic; parallel transect surveys over the project site. Transect widths varied between 25 and 100 feet depending on density of vegetation cover. In addition, 300-foot buffers from all proposed grading areas were examined for burrowing owls and/or their sign. High powered Swarovski binoculars were used to scan ahead while conducting transect surveys checking for owls on the ground or on project site fence posts. All California ground squirrel (*Spermophilus beechyi*) burrows encountered during the walking of transects were checked for evidence of recent burrowing owl use; evidence of recent use includes presence of white wash (*i.e.,* owl droppings), cast pellets, and/or molt feathers. Field notes included weather at the time of each survey, animal species observed during each survey, the relative abundance of burrows present on the project site and burrows were recorded in a project notebook. Positions of any suspected burrow that could be used by burrowing owl were marked on a project map.

## 7. SURVEY RESULTS

M&A did not find any evidence that burrowing owls currently use the project site. However, California ground squirrel burrows were present onsite, which are the preferred refugia/nest sites used by burrowing owls in the region of the project site. Nonetheless, M&A concludes that burrowing owls do not use the project site at the present time.

Miscellaneous bird species which were observed during the May 10 and May 12, 2006 surveys included black phoebe (*Sayornis nigricans*), house finch (*Carpodacus mexicanus*), morning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), Anna's hummingbird (*Calypte anna*), killdeer (*Charadrius vociferus*) (one found dead), and a pair of red-tailed hawks (*Buteo jamaicensis*) seen foraging over the project site. Mammal species observed include California ground squirrel.

## 8. DISCUSSION AND CONCLUSION

M&A did not observe any burrowing owls on the project site. It is our conclusion that activities related to project site development will not, at this time, affect the burrowing owl. If site grading/ project commencement does not occur before September 1st, M&A recommends that preconstruction burrowing owl surveys be repeated in the two week period prior to initiation of project site grading/construction.

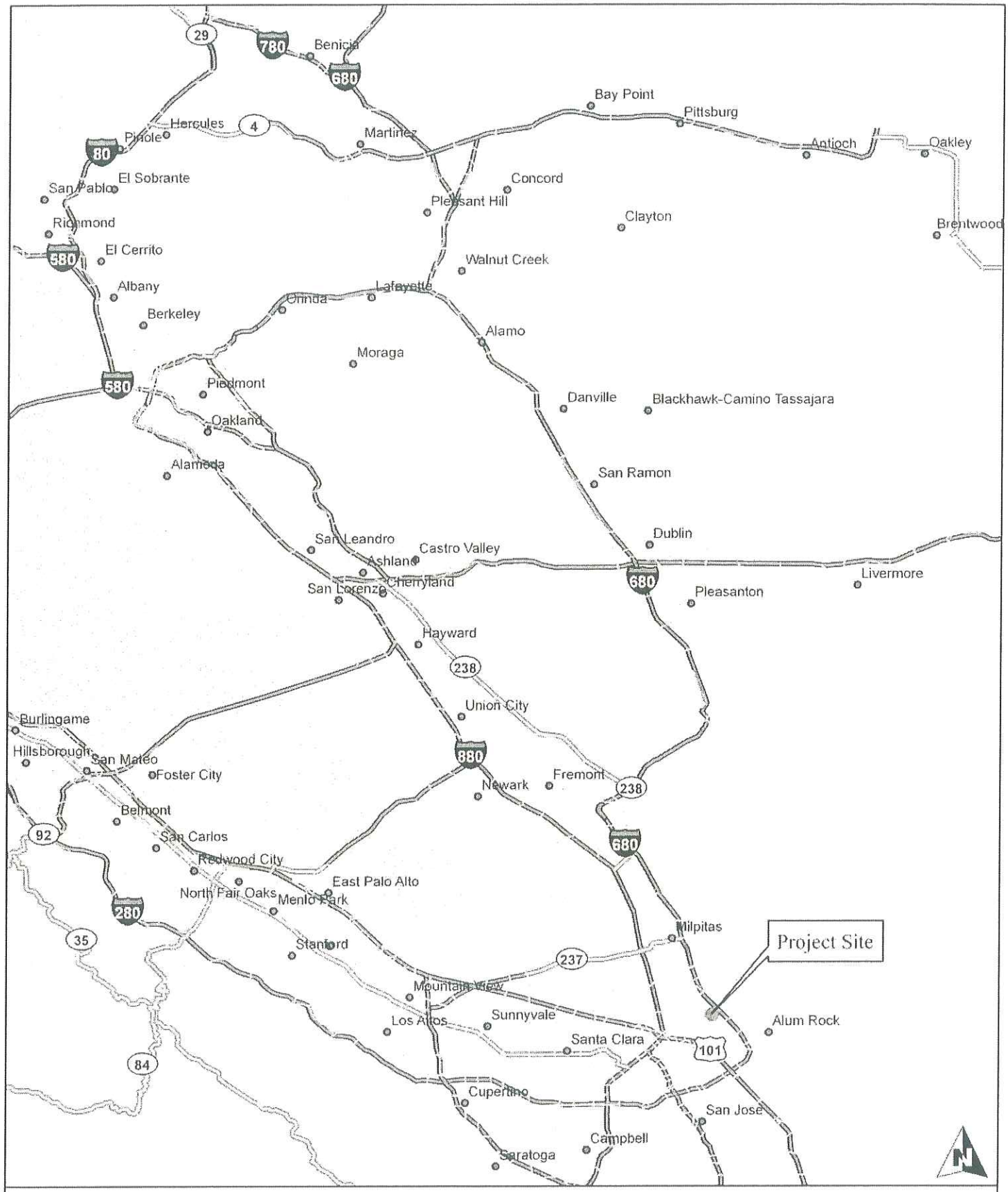
Should you have any questions, or wish to discuss any other aspect of this survey, please do not hesitate to call me at (925) 947-4867 x 223.

Sincerely,

Kimberly DeBriansky

Kimberly DeBriansky
Staff Biologist

Attachments: Figure 1
Figure 2




Monk & Associates
Environmental Consultants
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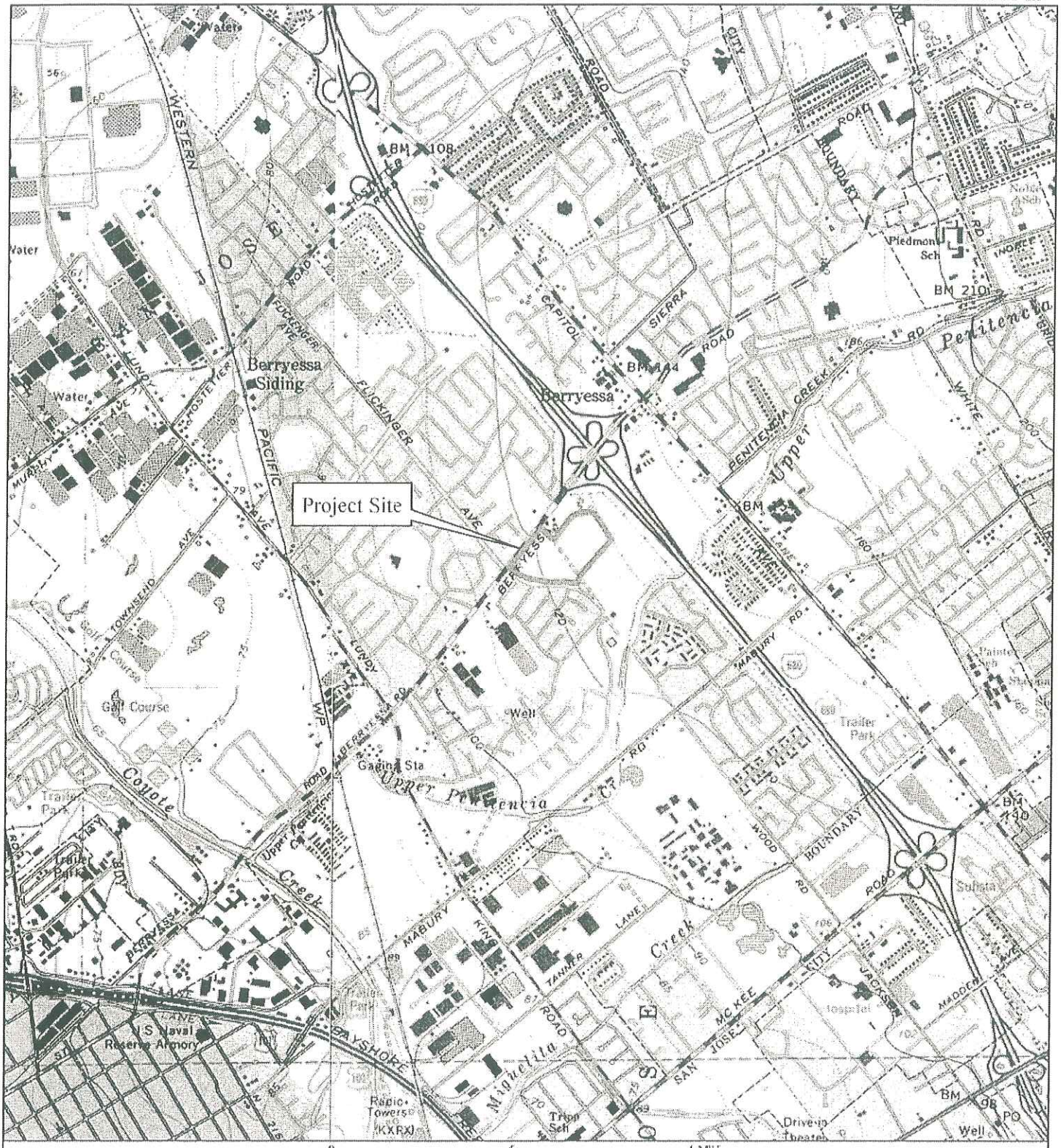
Walnut Creek, California 94595
(925) 947-4867

Figure 1. Reinhard Property Project Site Regional Map
San Jose, California

County: Santa Clara
Map Preparation Date: March 31, 2006




Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

Figure 2. Reinhard Property Project Site Locational Map
San Jose, California

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Walnut Creek, California 94595
(925) 947-4867

7.5-Minute Calaveras Reservoir quadrangle
Map Preparation Date: May 22, 2006
Source: National Geographic Holdings, Inc.
USGS Topographic Maps, 2001

MONK & ASSOCIATES
**Environmental Consultants**

July 26, 2007

Berryessa Jackson Partners
5000 Hopyard Road, Suite 170
Pleasanton, California 94588

Attention: Mr. Ravi Nandwana

**RE: Preconstruction Burrowing Owl Survey Results**
**Nola Parcels Project Site, San Jose, California**

Mr. Nandwana:

## 1. INTRODUCTION

Monk & Associates, Inc. (M&A) has completed preconstruction surveys for the western burrowing owl (*Athene cunicularia hypugaea*) on the approximately 3-acres Nola Parcels Project Site in San Jose, California (the project site)(Figures 1 and 2 - attached). M&A conducted dawn/dusk surveys for the burrowing owl on two separate dates: July 16, and July 17, 2007. No burrowing owls were observed during our surveys. Below, we discuss the burrowing owl's legal status, the owl's habitat requirements, our field survey methods, and results.

## 2. BURROWING OWL'S LEGAL STATUS

The western burrowing owl (burrowing owl) is a Federal "species of concern" and a California "species of special concern." Its nest, eggs, and young are also protected under California Fish and Game Codes (§3503, §3503.5, and §3800). The burrowing owl is also protected from direct take under the Migratory Bird Treaty Act (50 CFR 10.13). Finally, based upon this species' rarity status, any unmitigated impacts to rare species would be considered a "significant effect on the environment" pursuant to §21068 of the California Environmental Quality Act (CEQA) Statutes and §15382 of the CEQA Guidelines. Thus, this owl species must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

## 3. BURROWING OWL HABITAT REQUIREMENTS

Burrowing owl habitat can be found in annual and perennial grasslands characterized by low-growing vegetation. Typically, in northern California the burrowing owl utilizes rodent burrows, especially California ground squirrel (*Spermophilus beechyi*) burrows for nesting and cover. They may also on occasion dig their own burrows, or use man-made objects such as concrete culverts or rip-rap piles for cover. They exhibit high site fidelity, reusing burrows year after year. Occupancy of suitable burrowing owl habitat can be verified at a site by observation of a pair of burrowing owls during the spring and summer months or, alternatively, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement (white wash) at or near a burrow. Burrowing owls typically are not observed in grasslands with tall vegetation or wooded areas because the vegetation obscures their ability to detect avian and terrestrial predators. Since burrowing owls spend the majority of their time sitting at the mouths of their burrows, grazed

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*neglecta*), red-tailed hawk (*Buteo jamaicensis*), house finch (*Carpodacus mexicanus*), morning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), and Anna's hummingbird (*Calypte anna*). Mammal species observed in the adjacent tilled lot include California ground squirrel.

## 8. DISCUSSION AND CONCLUSION

M&A did not observe any burrowing owls on or adjacent to the project site. It is our conclusion that activities related to project site development will not, at this time, impact the burrowing owl. If site grading/ project commencement does not occur before September 1st, M&A recommends that preconstruction burrowing owl surveys be repeated in the two week period prior to initiation of project site grading/construction.

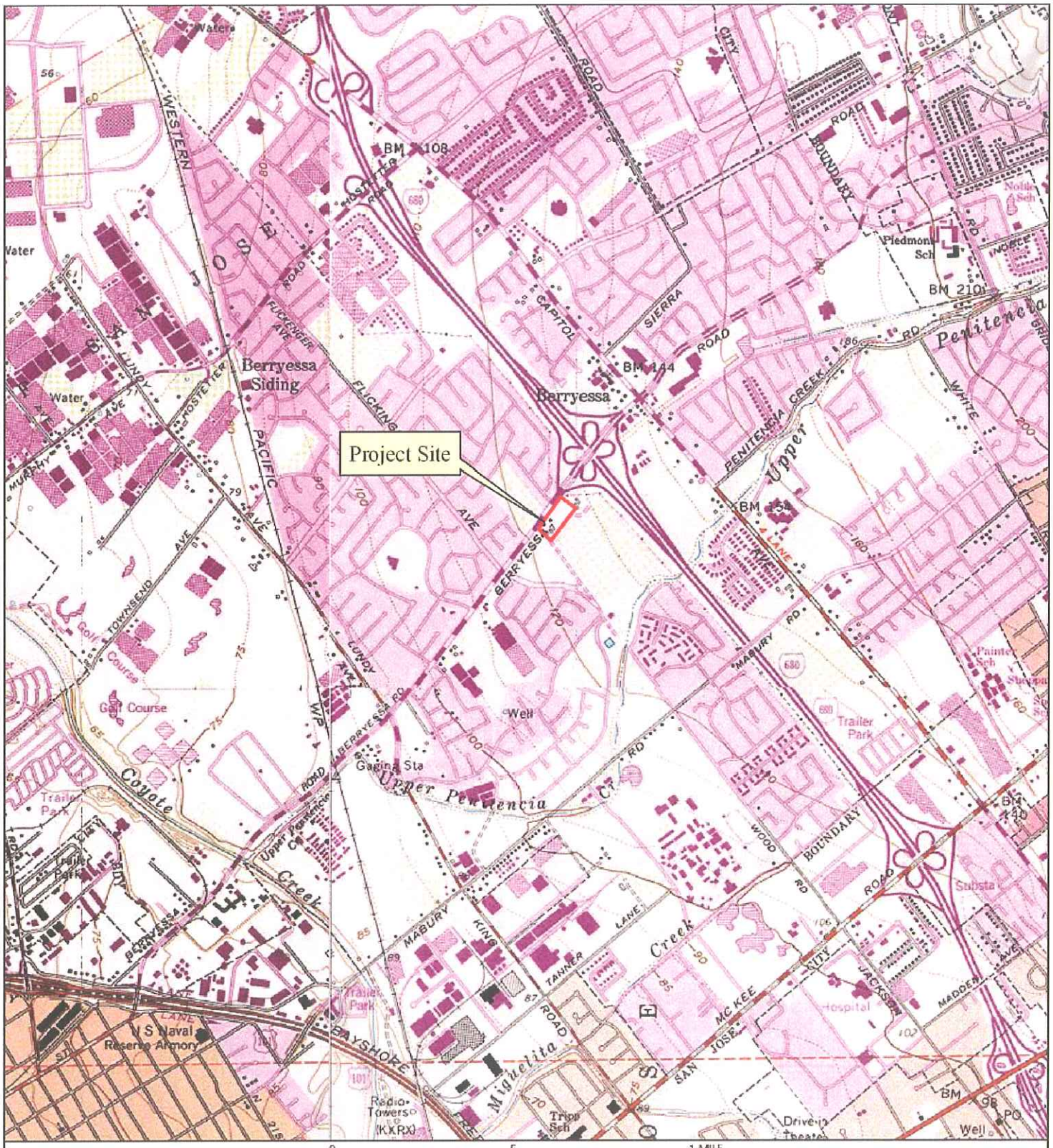
Should you have any questions, or wish to discuss any other aspect of this survey, please do not hesitate to call me at (925) 947-4867 x 223.

Sincerely,

Kimberly DeBriansky

Kimberly DeBriansky
Staff Biologist

Attachments: Figure 1
Figure 2




0 .5 1 MILE

0 1000 FEET 0 500 1000 METERS

Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

Figure 2. Nola Properties Project Site Locational Map
San Jose, California

Monk & Associates
Environmental Consultants
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7.5-Minute Calaveras Reservoir quadrangle
Map Preparation Date: July 30, 2007
Source: National Geographic Holdings, Inc.
USGS Topographic Maps, 2001

# APPENDIX C

# ARBORIST REPORT

ARBOR RESOURCES
*Professional Arboricultural Consulting & Tree Care*

# AN EVALUATION AND INVENTORY OF TREES AT BERRYESSA ROAD & N. JACKSON AVENUE (PEPPER LANE @ BERRYESSA-JACKSON) SAN JOSE, CALIFORNIA

**Submitted to:**

Berryessa-Jackson Partners, LLC
5000 Hopyard Road, Suite 170
Pleasanton, CA 94588

**Prepared by:**

David L. Babby, RCA
*ASCA Registered Consulting Arborist #399*
*ISA Certified Arborist #WE-4001A*

September 19, 2007

P.O. Box 25295, San Mateo, California 94402 • Email: arborresources@comcast.net
Phone: 650.654.3351 • Fax: 650.240.0777 • Licensed Contractor #796763

# TABLE OF CONTENTS


| SECTION | TITLE | PAGE |
|---|---|---|
| **1.0** | **INTRODUCTION** | **1** |
| | 1.1 Project Overview | 1 |
| | 1.2 Scope of Work | 1 |
| | 1.3 Purpose and Use of Report | 2 |
| **2.0** | **TREE COUNT AND COMPOSITION** | **2** |
| | 2.1 Inventoried Trees | 2 |
| | 2.2 Tallied Trees | 3 |
| | 2.3 Ordinance-Size Trees | 3 |
| **3.0** | **SUITABILITY FOR PRESERVATION** | **3** |
| **4.0** | **TREE PROTECTION GUIDELINES** | **4** |
| | 4.1 Design Guidelines | 4 |
| | 4.2 Protection Measures before and during Development | 6 |
| **5.0** | **ASSUMPTIONS AND LIMITING CONDITIONS** | **9** |


# EXHIBITS


| EXHIBIT | TITLE |
|---|---|
| A | TREE INVENTORY TABLE |
| B | SITE MAP |
| C | PHOTOGRAPHS (includes photo index) |

# 1.0 INTRODUCTION

## 1.1 Project Overview

Pulte Homes is planning to develop the section of property at the east corner of Berryessa Road and N. Jackson Avenue in San Jose, California. The existing site is comprised of large vacant parcels previously used for agriculture crops; three separate properties containing single-family residences (13060, 13100, and 13120 Berryessa Road); and cherry tree orchards amongst the homes.

## 1.2 Scope of Work

On behalf of Pulte Homes, I have been retained by Berryessa-Jackson Partners, LLC to [1] inventory and evaluate trees (non-orchard) that have trunk diameters near or greater than 12 inches, and [2] tally all orchard trees (fruit- or nut-bearing), as well as trees substantially smaller than 12 inches in trunk diameter. Tasks performed for the inventory and evaluation of non-orchard trees approximately and greater than 12 inches in trunk diameter are as follows:

- Identify the tree's species and verify its location.
- Measure or estimate their trunk diameters at approximately two feet above grade.
- Estimate tree heights and canopy spreads.
- Ascertain the trees' health and structural integrity.
- Determine the trees' suitability for preservation (e.g. high, moderate or low).
- Identify which of these trees is of Ordinance-size; Section 13.32.020(I) of the City of San Jose Municipal Code defines Ordinance-size trees as having trunks larger than 18 inches in diameter at two feet above grade.
- Obtain photographs of the trees (these can be viewed in Exhibit C).
- Assign numbers to each inventoried tree and plot these numbers on the map presented in Exhibit B, which is a copy of the ALTA/ACSM Land Title Survey by Civil Engineering Associates, dated 10/17/06.
- Prepare a written report containing the aforementioned information, as well as provide general guidelines to help avoid or mitigate anticipated impacts to trees that will be retained.

### 1.3 Purpose and Use of Report

The purpose of this report is to [1] inform Berryessa-Jackson Partners, Pulte Homes, the City of San Jose, and other decision-makers of the type, size and condition of trees in proximity to the proposed development, and [2] present recommendations for minimizing damage to trees being retained.

To my understanding, this report will be used in the planning process of project development, including for and incorporation into the architecture and civil drawings, as well as integration into applicable environmental assessment documents.

## 2.0 TREE COUNT AND COMPOSITION

### 2.1 Inventoried Trees

**Fifteen trees** of eight various species were inventoried and evaluated for this report, and the table presented below identifies their name, number and percentage. Specific information obtained for each tree is presented within the Tree Inventory Table in Exhibit A. The trees' locations can be viewed on the map in Exhibit B.

| NAME | TREE NUMBER(S) | COUNT | PERCENT OF TOTAL |
|---|---|---|---|
| Coast Live Oak | 15 | 1 | 7% |
| Corkscrew Willow | 13 | 1 | 7% |
| English Yew | 3, 4 | 2 | 13% |
| Hollywood Juniper | 1 | 1 | 7% |
| Italian Cypress | 5 thru 11 | 7 | 47% |
| Siberian Elm | 2 | 1 | 7% |
| Silk Tree | 14 | 1 | 7% |
| Southern Magnolia | 12 | 1 | 7% |
| | **Total** | **15** | **100%** |

### 2.2 Tallied Trees

A total of **202 orchard** trees and **8 non-orchard** trees were tallied during my site assessment. Of the **orchard** trees, 177 are cherry trees, and the other 25 are comprised of 10 various species; note that the vast majority of orchard trees are dead or dying. Of **non-orchard** trees, they are comprised of one coast live oak, two privets, one melaleuca, one pepper tree, four Siberian elms, and one ash.

### 2.3 Ordinance-Size Trees

**Four** of the inventoried trees, #1 thru 4, are of Ordinance-size and consist of one Hollywood juniper (#1), one Siberian elm (#2), and two English yews (#3 and 4).

One tree, **#11**, is not shown on the survey plan. It is the south-westernmost cypress in the row of cypress near the road. Note that its location as shown on the map in Exhibit B is approximate and should not be construed as being surveyed.

## 3.0 SUITABILITY FOR TREE PRESERVATION

Each tree has been assigned a "high," "moderate" or "low" suitability for preservation rating as a method for cumulatively measuring and considering their physiological health, structural integrity, location, size and species. A description of these ratings with the assigned tree numbers are presented below.

**High**: Applies to **trees #12 and 15**. These trees have a high potential of providing long-term contribution to the site, appear in good health, and contain seemingly stable structures.

**Moderate**: Applies to **trees #1 and 3 thru 11**. These trees contribute to the site but not at seemingly significant levels. Typically, their longevity and contribution is less than those of high suitability and more frequent care is needed during their remaining life span.

**Low**: Applies to **trees #2, 13 and 14**. These trees are predisposed to irreparable structural defects that are expected to worsen regardless of measures employed. Consequently, the failure of the trees' trunks and/or large limbs is likely to occur in the near future.

## 4.0 TREE PROTECTION GUIDELINES

Recommendations presented within this section are intended to serve as guidelines for achieving viable mitigation and the protection of trees planned for retention. They should be carefully followed and incorporated into the project plans, and are subject to revision upon reviewing the project plans.

### 4.1 Design Guidelines

1. The Tree Protection Zone (TPZ) should be regarded as the entire area beneath a tree's canopy. This is where all grading (soil cuts, fill and finish-grading), trenching,[1] soil scraping, staging and routes of access should be avoided. In areas where this is not feasible, the impacts should be reviewed by the project arborist[2] for determining whether an alternative TPZ can potentially support a tree's longevity and stability.

2. All buildings should be designed to be at least five feet beyond the canopies of retained trees (this allows for scaffolding to be established while remaining clear of the tree canopies). When there is an existing home beneath the canopy of a tree being retained, any future structure should be established at least two to three feet farther from the trunk than the existing building.

[1] This includes, but is not limited to, irrigation, lighting, drainage, and underground utilities and services.
[2] The "project arborist" refers to me or another individual that is certified by the International Society of Arboriculture (ISA) and/or is a member of the American Society of Consulting Arborists (ASCA).

3. Where near a TPZ, any overcut/overbuild for a building foundation, basement or parking area shall not exceed 24 inches; in doing so, vertical shoring (such as soil nailing and shotcrete construction) may need to be employed.

4. A copy of this report should be incorporated into the final set of project plans; titled Sheets T-1, T-2, etc. (Tree Protection Instructions); and referenced on all site-related plans (e.g. site, grading and drainage, and landscaping).

5. The permanent and temporary drainage design, including downspouts, shall not require water being discharged beneath the trees' canopies. Additionally, the drainage design shall not require trenching or fill within a TPZ.

6. All existing, unused lines or pipes beneath the canopies of retained trees shall be abandoned and cut off at existing soil grade (rather than being dug up and causing subsequent root damage).

7. All utilities and services should be routed outside from a TPZ. In the event this is not feasible, directional boring and/or the use of a pneumatic air device (such as an Air-Spade®) must be considered. For boring, the ground above the tunnel(s) must remain undisturbed and the access pits established as far from the trunks as possible. Additionally, the pit locations (if within the TPZ or designated-fenced areas) shall be reviewed with the project arborist prior to being dug.

8. Upon availability, the following plans must be reviewed for tree-related impacts: site, elevations, grading and drainage, underground utilities, and landscaping (layout, planting and irrigation).

9. The proposed landscape design should conform to the following additional guidelines:
    a. Turf should be avoided beneath the trees. As an alternative, I suggest a four-inch layer of coarse wood chips is used.

b. Any plant material installed within a TPZ must be highly drought-tolerant, limited in amount, and planted at least five from the trees' trunks.
c. Irrigation can, overtime, adversely impact the oak trees and should be avoided. Irrigation for any new plant material beneath the oak's canopy should be low-volume, applied irregularly (such as only once or twice per week) and temporary (such as no more than three years).
d. In the event trenches for irrigation and/or lighting are required beneath a canopy, they shall be installed in a radial direction to the trees' trunks. If irrigation trenches cannot be routed as such, the work may need to be performed using a pneumatic air device (such as an Air-Spade®) to avoid unnecessary root damage.
e. Stones and new fencing should not be placed against the trees' trunks (I suggest a minimum two-foot setback). Additionally, mulch should not be placed against the trunks.
f. Tilling beneath canopies should be avoided, including for weed control.
g. Bender board or other edging material proposed beneath the canopies should be established on top of existing soil grade (such as by using vertical stakes).

### 4.2 Protection Measures before and during Development

10. Prior to site demolition and clearing, an on-site, pre-construction meeting shall be held between the project arborist and contractor. The intent is to review trees being removed, procedures for digging beneath or near TPZs, protection fencing locations, limits of grading, staging areas, routes of access, cleanout pits, mulching, supplemental watering, and any other required protection measures.

11. Tree protective fencing shall be installed prior to any demolition, grading or surface scraping; the intent of fencing is to restrict access into a TPZ. It shall be comprised of six-foot high chain link mounted on eight-foot tall, two-inch diameter steel posts that are driven 24 inches into the ground and spaced no more than 10 feet apart. The fencing must be maintained throughout development and at no time shall it be opened or relocated without direct authorization from the arborist. Note that fencing

beneath canopies shall be established within one-foot from existing buildings. Also note that in certain areas, fencing may need to be established in two phases (e.g. demolition & construction).

12. Unless otherwise approved, all construction activities must be conducted outside the designated-fenced areas (even after fencing is removed), and beyond the unpaved areas beneath tree canopies, to include, but not limited to, the following: demolition, grading, stripping of topsoil, trenching, equipment cleaning, stockpiling/dumping of materials, and equipment/vehicle operation and parking.

13. Prior to construction, a five-inch layer of coarse wood chips (¼- to ¾-inch in size) must be spread on unpaved soil beneath the trees' entire canopies (but not piled against the trunks); this is not necessary within 24 inches from the footings of new buildings. The depth shall be maintained throughout development and the wood chips can be obtained from tree service companies and/or by contacting *www.reuserinc.com*.

14. The project arborist shall monitor development activities authorized within a TPZ. Any digging or trenching within a TPZ shall be manually performed (i.e. through hand-digging) without using heavy equipment or tractors. For trenching, roots exposed with diameters of two inches and greater should remain intact and not be damaged (if necessary, tunneled beneath).

15. The locations of any posts or piers (e.g. wood fences and/or porches) within a TPZ shall be first reviewed by the project arborist prior to digging. A post-hole digger should be used for digging the first 2.5 to 3 feet below grade; a manually-operated, mechanical auger (or one attached to heavy equipment if approved by the arborist) can be used to drill the remaining depth. In the event a root of two inches and greater in diameter is encountered during the process, the hole may need to be resituated.

16. Recommendations that are presented within Section 4.1 of this report and pertain to site development should also be followed.

17. Throughout construction during the months of May thru October (or as deemed necessary), supplemental water shall be supplied to the retained trees. The methodology, frequency and amounts shall be prescribed by the project arborist.

18. The pruning of trees shall be performed in accordance with ANSI A300-2001 standards, and by a California state-licensed tree service company that has an ISA (International Society of Arboriculture) Certified Arborist in a supervisory role. All pruning work shall be performed under direction of the project arborist.

19. Great care must be taken by equipment operators to position their equipment to avoid the trunks and branches of trees. Where a conflict exists, the project arborist should be advised to provide a feasible solution.

20. The disposal of harmful products (such as chemicals, oil and gasoline) is prohibited beneath canopies or anywhere on site that allows drainage beneath or near canopies. Herbicides should not be used beneath the trees' canopies; where used on site, they should be labeled for safe use near trees.

## 5.0 ASSUMPTIONS AND LIMITING CONDITIONS

- All information presented herein covers only those items that were examined and reflects the condition of those items at the time of my observations on September 18, 2007.
- My observations were performed visually without probing, coring, dissecting or excavating. I cannot, in any way, assume responsibility for any defects that could only have been discovered by performing the mentioned services in the specific area(s) where a defect was located.
- The assignment pertains solely to trees listed in Exhibit A. I hold no opinion towards other trees on or surrounding the project area.
- I cannot provide a guarantee or warranty, expressed or implied, that deficiencies or problems of any trees or property in question may not arise in the future.
- No assurance can be offered that if all my recommendations and precautionary measures (verbal or in writing) are accepted and followed, that the desired results may be achieved.
- All information presented on the plans reviewed is assumed to be correct. I cannot guarantee or be responsible for the accuracy of information provided by others.
- I assume no responsibility for the means and methods used by any person or company implementing the recommendations provided in this report.
- The information provided herein represents my opinion. Accordingly, my fee is in no way contingent upon the reporting of a specified finding, conclusion, or value.
- This report is proprietary to me and may not be copied or reproduced in whole or part without prior written consent. It has been prepared for the sole and exclusive use of the parties to who submitted for the purpose of contracting services provided by David L. Babby.
- The map presented in this report (Exhibit B) is solely intended to show approximate tree locations and numbers and shall not be interpreted as an engineered or architectural drawing.
- If any part of this report or copy thereof be lost or altered, the entire evaluation shall be invalid.

Prepared By: _____
David Babby, RCA

Date: September 19, 2007

# EXHIBIT A:

# TREE INVENTORY TABLE

# TREE INVENTORY TABLE

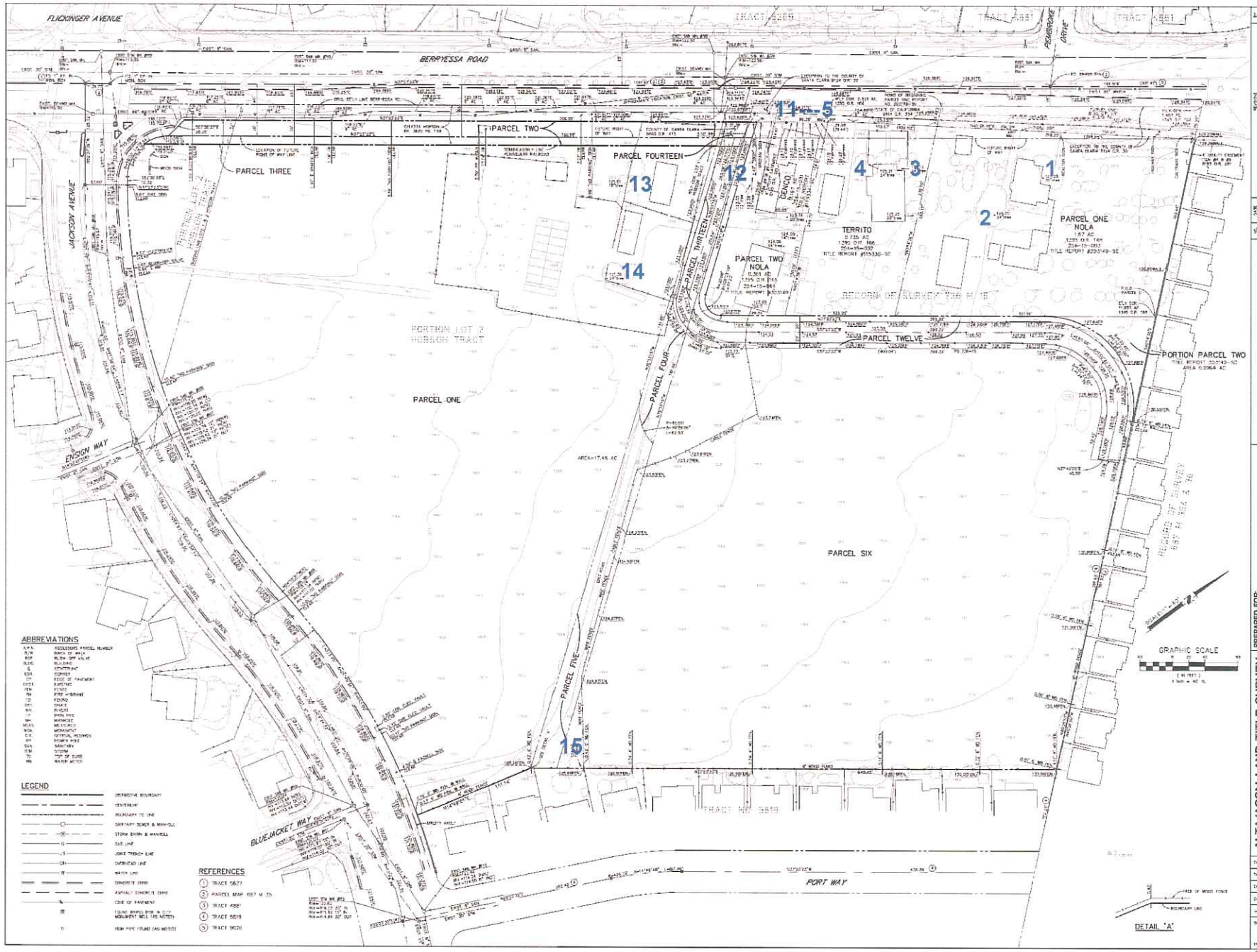
| TREE NO. | TREE NAME | Trunk Diameter (in.) at two feet above grade | Height (ft.) | Canopy Spread (ft.) | Health Condition (100%=Best, 0%=Worst) | Structural Integrity (100%=Best, 0%=Worst) | Overall Condition (Good/Fair/Poor/Dead) | Suitability for Preservation (High/Moderate/Low) | Ordinance-Size |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Hollywood Juniper (*Juniperus c* . 'Torulosa') | 26 | 25 | 35 | 75% | 50% | Fair | Moderate | X |
| | Comments: Tree leans away from existing home and has a highly asymmetrical canopy. The base of its trunk is 16 inches from adjacent foundation. | | | | | | | | |
| 2 | Siberian Elm (*Ulmus pumila* ) | 28 | 35 | 45 | 75% | 25% | Poor | Low | X |
| | Comments: These types of trees have inherently weak structures and are highly prone to large limb failure. | | | | | | | | |
| 3 | English Yew (*Taxus baccata* ) | 30 | 30 | 25 | 100% | 25% | Fair | Moderate | X |
| | Comments: Has multiple stems. Its trunk is within one-foot from existing foundation. The canopy grows against adjacent roof. | | | | | | | | |
| 4 | English Yew (*Taxus baccata* ) | 22 | 30 | 25 | 100% | 25% | Fair | Moderate | X |
| | Comments: Has multiple stems. Its trunk is against existing porch and its canopy grows against adjacent roof. | | | | | | | | |
| 5 | Italian Cypress (*Cupressus sempervirens* ) | 12 | 30 | 9 | 100% | 75% | Good | Moderate | |
| | Comments: Form a row with trees #6 thru 11. Located beneath household electrical drop. | | | | | | | | |
| 6 | Italian Cypress (*Cupressus sempervirens* ) | 12 | 25 | 9 | 100% | 75% | Good | Moderate | |
| | Comments: Located beneath household electrical drop. | | | | | | | | |
| 7 | Italian Cypress (*Cupressus sempervirens* ) | 12 | 25 | 6 | 100% | 75% | Good | Moderate | |
| | Comments: Located beneath household electrical drop. | | | | | | | | |
| 8 | Italian Cypress (*Cupressus sempervirens* ) | 10 | 20 | 7 | 100% | 75% | Good | Moderate | |
| | Comments: Located beneath household electrical drop. | | | | | | | | |
| 9 | Italian Cypress (*Cupressus sempervirens* ) | 10 | 20 | 8 | 100% | 75% | Good | Moderate | |
| | Comments: | | | | | | | | |
| 10 | Italian Cypress (*Cupressus sempervirens* ) | 11 | 25 | 8 | 100% | 75% | Good | Moderate | |
| | Comments: | | | | | | | | |
| 11 | Italian Cypress (*Cupressus sempervirens* ) | 12 | 30 | 10 | 100% | 75% | Good | Moderate | |
| | Comments: Tree is not shown on survey and has been added to map in Exhibit B. | | | | | | | | |

# TREE INVENTORY TABLE

| TREE NO. | TREE NAME | Trunk Diameter (in.) at two feet above grade | Height (ft.) | Canopy Spread (ft.) | Health Condition (100%=Best, 0%=Worst) | Structural Integrity (100%=Best, 0%=Worst) | Overall Condition (Good/Fair/Poor/Dead) | Suitability for Preservation (High/Moderate/Low) | Ordinance-Size |
|---|---|---|---|---|---|---|---|---|---|
| **12** | Southern Magnolia (*Magnolia grandiflora* ) | 14 | 25 | 30 | 100% | 75% | Good | High | |
| | Comments: | | | | | | | | |
| **13** | Corkscrew Willow (*Salix matsudana* 'Tortuosa') | 13, 8, 6 | 30 | 35 | 75% | 25% | Poor | Low | X |
| | Comments: Tree is comprised of three trunks originating at grade. Due to the manner in which they grow, one or more are predisposed to failure. | | | | | | | | |
| **14** | Silk Tree (*Mimosa julibrissin* ) | 14, 9.5 | 15 | 40 | 75% | 25% | Poor | Low | X |
| | Comments: Decay observed at base of trunk, a condition that leads to trunk failure. | | | | | | | | |
| **15** | Coast Live Oak (*Quercus agrifolia* ) | 14 | 20 | 25 | 100% | 100% | Good | High | |
| | Comments: Trunk is about two feet from existing property fence. A four-inch diameter coast live oak grows about 2.5 feet from trunk. | | | | | | | | |

# EXHIBIT B:

# SITE MAP


FLICKINGER AVENUE
BERRYESSA ROAD
PENBROKE DRIVE
JACKSON AVENUE
ENSIGN WAY
BLUEJACKET WAY
PORT WAY
PARCEL TWO
PARCEL THREE
PARCEL FOURTEEN
PARCEL ONE
PARCEL SIX
PARCEL FIVE
PARCEL FOUR
PARCEL THIRTEEN
PARCEL TWELVE
PARCEL ONE NOLA
PARCEL TWO NOLA
TERRITO
DENCO
PORTION PARCEL TWO
PORTION LOT 2 HOBSON TRACT
RECORD OF SURVEY 338 M 18
TRACT 4881
TRACT 5819
1
2
3
4
5
11
12
13
14
15
GRAPHIC SCALE
DETAIL 'A'
ABBREVIATIONS
LEGEND
REFERENCES
1 TRACT 5677
2 PARCEL MAP 697 M 35
3 TRACT 4881
4 TRACT 5819
5 TRACT 8028
Civil Engineering Associates
Civil Engineers • Planners • Surveyors
PREPARED FOR:
ALTA/ACSM LAND TITLE SURVEY
BERRYESSA ROAD
@ JACKSON AVENUE
SAN JOSE
CALIFORNIA
Date OCT. 17, 06
Scale 1"=40'
Drawn CSI
Checked RM
Job 06-114
Sheet 3
OF 3 Sheets

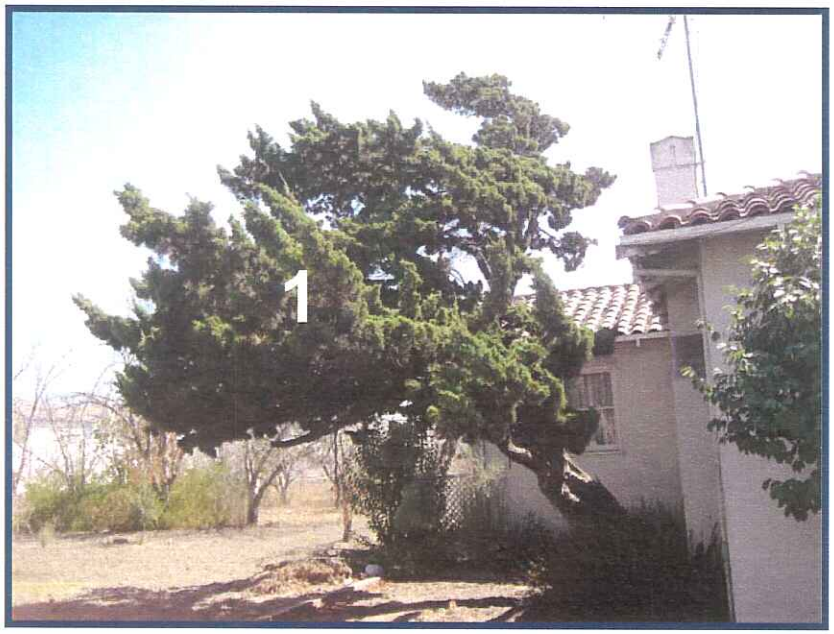
# EXHIBIT C:

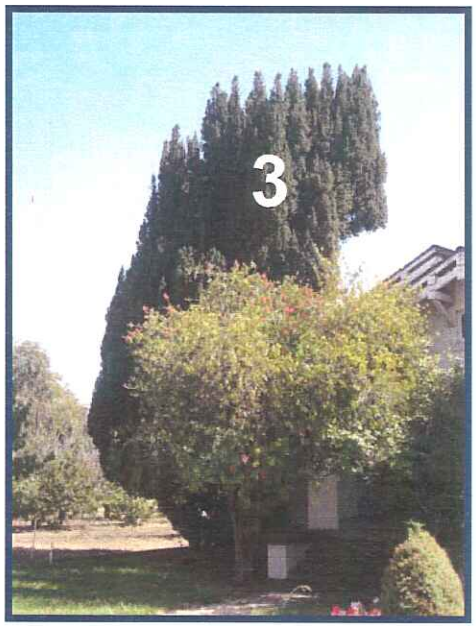
# PHOTOGRAPHS

## Photo Index

**Page C-1:** Trees #1 thru 4

**Page C-2:** Trees #5 thru 15


1


3

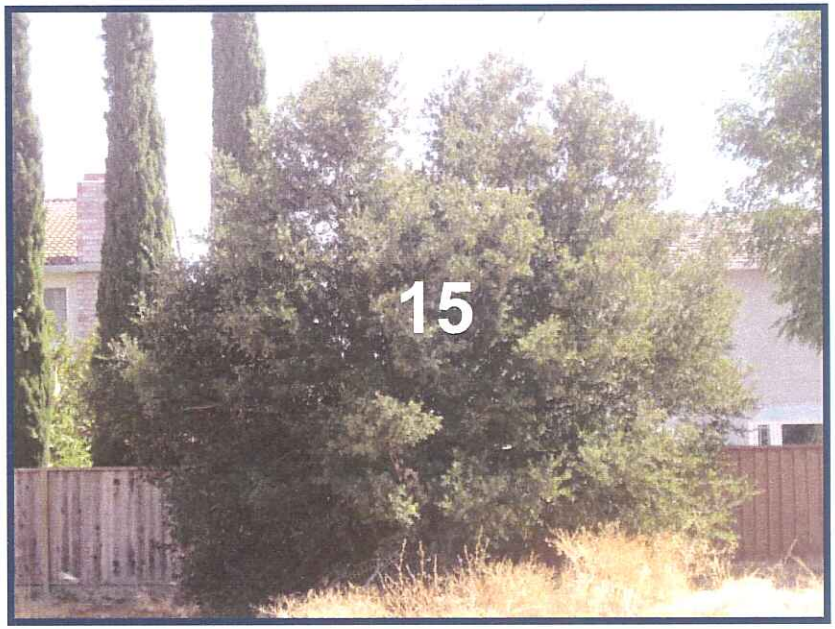
2

4

11 ------- 3

12

14
13


15

# APPENDIX D

# HISTORICAL EVALUATION

# HISTORICAL AND ARCHITECTURAL EVALUATION REPORT
# FOR THE
# NOLA FRUIT RANCH AND ADJACENT BUILDINGS
# 13060,13100 & 13120 BERRYESSA ROAD
# SANTA CLARA COUNTY, CALIFORNIA

Prepared for: Dan Carol
Pulte Homes, Inc.
5000 Hopyard, Suite 170
Pleasanton CA

Prepared by: Bonnie Bamburg
Urban Programmers
10710 Ridgeview Avenue
San Jose, CA 95127
Phone: 408-254-7171
Email: bbamburg@usa.net

DATE OF COMPLETION 1/19/08:Revised: 2/09/08

## SECTION B TABLE OF CONTENTS


| | | Page |
|---|---|---|
| Section A. | Title Page | 1 |
| Section B. | Table of Contents | 2 |
| Section C. | Introduction | 5 |
| Section D. | Historic Background | 7 |
| | Nola Fruit Ranch | 15 |
| Section E. | Description of the Historic Resource | 21 |
| Section F. | Evaluation of Significance | 32 |
| Section G. | Impacts of the Proposed Project | 46 |
| Section H. | Recommendations and Mitigations | 46 |
| Section I. | APPENDIX | 48 |
| | Sources Consulted | |

Attached are the :

Historic Resources Inventory Forms
Historic Resource Evaluation Sheets

FIGURES, MAPS, AND PHOTOGRAPHS (inserted within the report)

Figure 1 – Vicinity Map
Figure 2 – Assessor's Parcel Map
Figure 3 – Survey - Site Plan

Photographs - Existing Buildings

**Figure 1 Vicinity Map – Berryessa Road at I – 680**

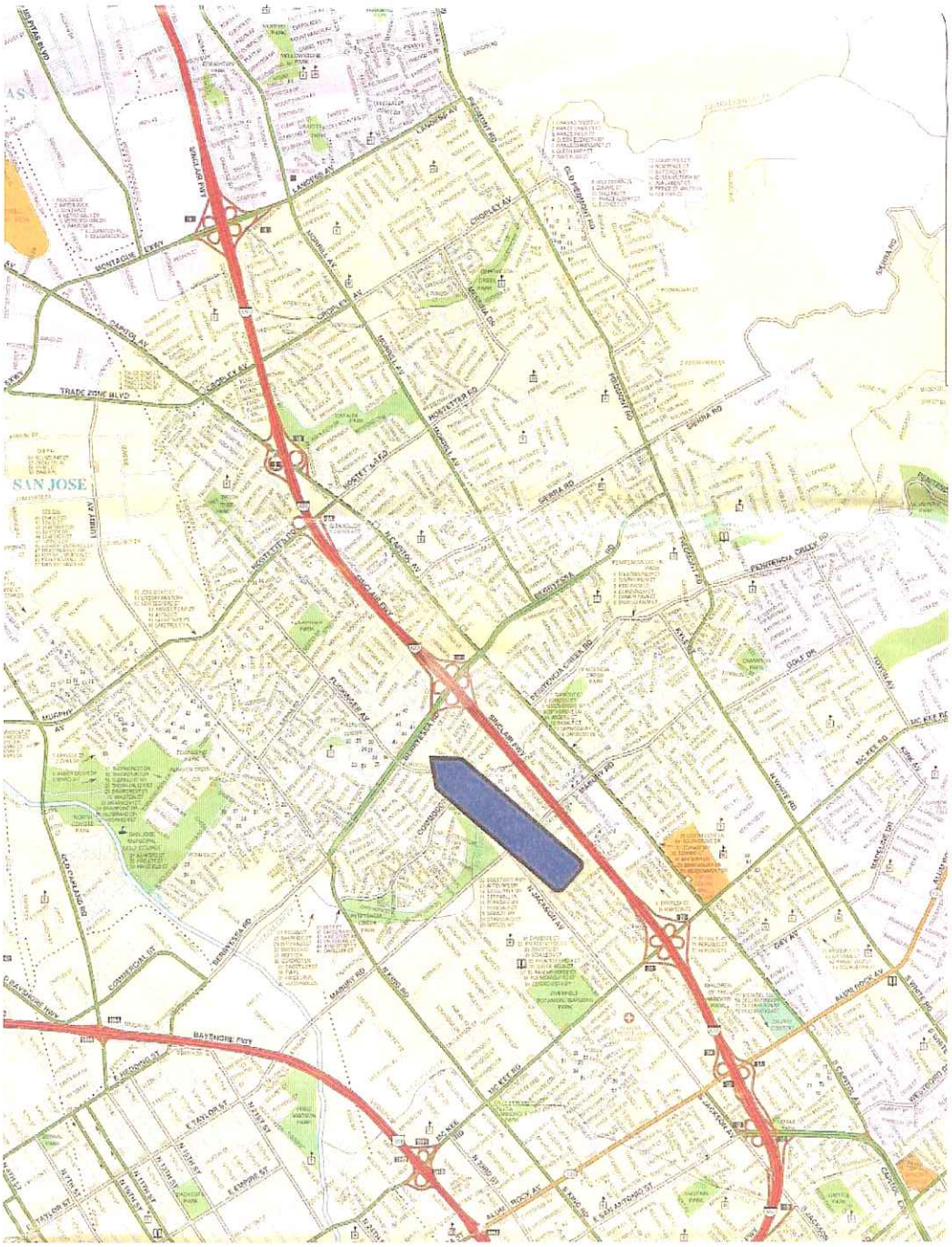
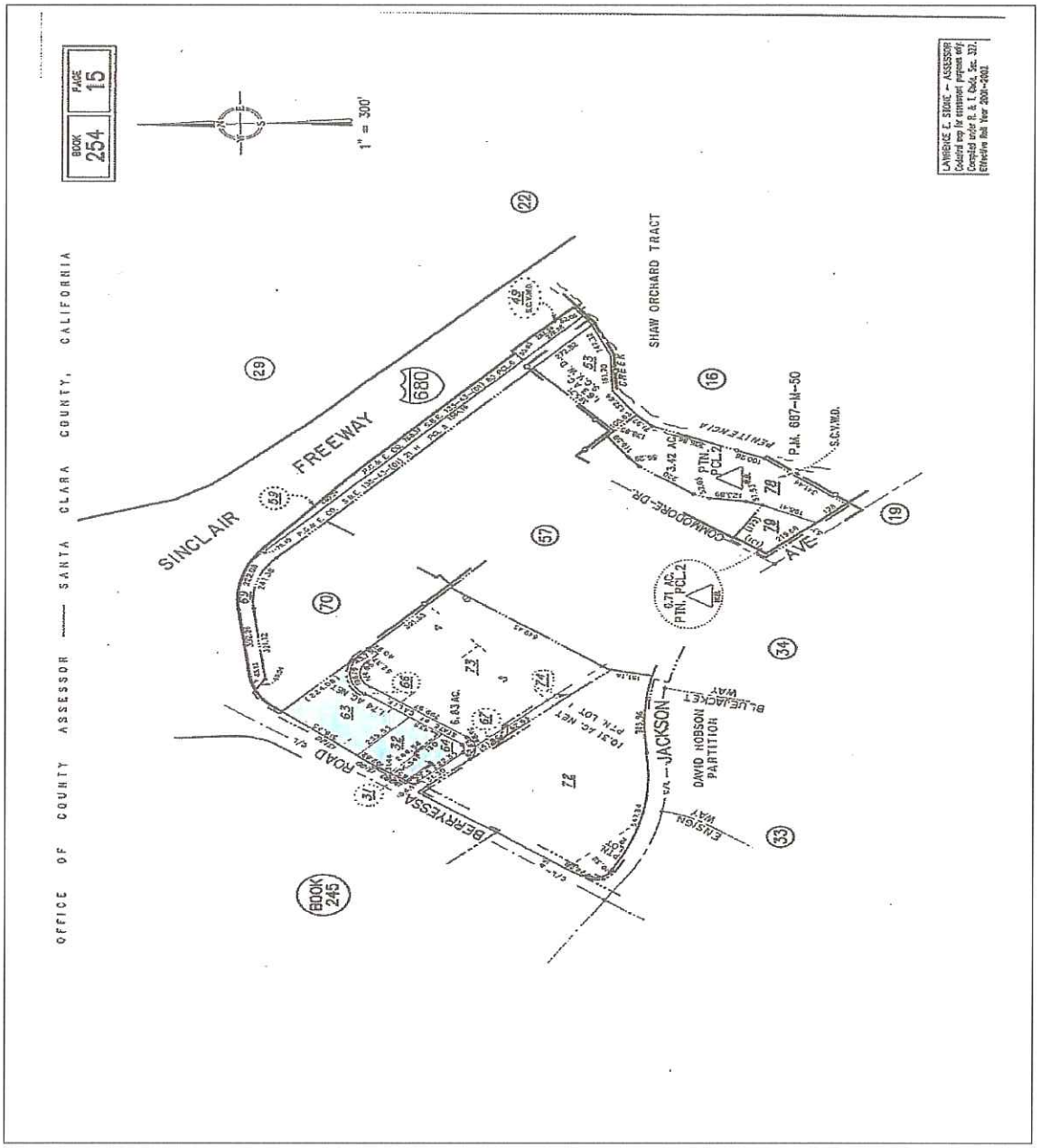


**Figure 2 Santa Clara County Assessor's Map**
**Parcels 254-15-063, 032, 031, 064**



## SECTION C. INTRODUCTION

### 1. Name of the Proposed Project

Pepper Lane

### 2. Name of the Developer

Pulte Homes, Inc

### 3. Description of the Proposed Project

The project has not been defined. It is anticipated that the project will include new residential development on the site known as the Nola Ranch..

### 4. Address, nearest Cross Street, Acreage, and APN for the Property

The properties, APN# 254-15-032, 13100 Berryessa Road
254-15-064, Vehicle Storage (no address)
254-15-063, 13120 Berryessa Road
254-15-031, 13060 Berryessa Road
are located to the west of I-680 and to the east of Jackson Avenue, San Jose. The total acreage is 3.78 acres

### 5. Current Use of the Property

The site is residential, formerly associated with agricultural uses.

### 6. Report

The report was prepared by Urban Programmers and compiled by Bonnie Bamburg, who has over 27 years experience in preparing historic surveys for cities, counties and the federal government, National Register Nominations for individual sites and historic districts and local assessment reports. She is a former instructor in Historic Preservation at SJSU, a lecturer in historic preservation and former San Jose Historic Landmark Commissioner (1974-1980) She is a Director of History San Jose, the Western Region of the Association for

Preservation Technology and a member of the Advisory Committee of Preservation Action San Jose. Linda Larson Boston, BA, has 19 years experience as a researcher and published author in local history, she conducts historic research for architects, attorneys and landowners. She is a former Historical Landmarks Commissioner (1993-1997), member Institute for Historical Study, and the Board of Directors Preservation Action Council of San Jose. William Zavlaris, MUP, has extensive experience in providing historical architectural assessment, and over 25 years experience in evaluating architecture for local historical surveys and National Register Nominations.

## 6. Description of the Research Procedures used to prepare the Report

Standard research methodology included, compiling existing data, researching maps, and deeds, published and unpublished materials and contacting individuals with knowledge of the property and related historical subjects. Site inspections and photographs were also part of the research. Unless otherwise noted, historical information presented in this report was drawn from Sanborn Insurance maps, city directories, tax assessment rolls and block books.

The report incorporates the historic context and reviews the historical background of the subject property and describes the historical significance of the buildings, structures and objects located on the property, as they may have the potential to be individual or contributing elements eligible for local designation or listing in the National Register of Historic Places or the California Register of Historic Resources. Evaluation was the final step prior to preparing the written report.

## 7. Current Listing of the Property in the San Jose Historical Resource Inventory

The property is not listed in the San Jose Historic Resources Inventory.

## SECTION D. HISTORICAL CONTEXT STATEMENT AND BACKGROUND OF THE PROPERTY

### Historical Development

#### Prehistoric Period

The first known inhabitants of the Santa Clara Valley were the Tamien tribe, a group of four distinct triblets that occupied different parts of the valley and were part of the Coastal Ohlone language group. Their settlements were established in areas where game, fish, acorns and vegetation (food) and fresh water were available, often along the Guadalupe River and Coyote Creek (Laffey 1992:1).

The Ohlone were decimated in the late 1700's as Spain, attempting to thwart the expansion of Russia and England in California, colonized the area enforcing subjugation and introducing European disease as Spain continued exploring and settling the coast for commercial expansion.

#### The Spanish Period (1777-1822)

Exploration of Alta California brought the Spanish to the San Francisco Bay Area. The initial discovery of the Santa Clara Valley was by Sergeant Jose Ortega of the Portola Expedition in 1769, who chronicled the abundance of timber, rich soil and a native population that could become a work force. It took less than eight years for Mission Santa Clara to be established and a few months longer for the first civil settlement in California, El Pueblo de San Jose de Guadalupe, to be established along the east bank of the Guadalupe River. The river became the boundary between the Roman Catholic Mission and the civil settlement. Although both were expected to provide food and goods to the Presidios of Monterey and San Francisco, their methods were very different. The Mission required the native population as a work force, while the Pueblo was settled by volunteers who were provided limited provisions and operated under a form of civil/military regulations.

In November 1777, Lt. Jose Joaquin Moraga, representing the King of Spain, and 14 families, a total of 66 people, left the Presidio San Francisco to create the first civil settlement in California in the fertile valley of the Guadalupe River. Moraga had the map drawn providing each family with a lot for a house and allocating "suertes" farming plots which could be used but not sold, and surrounding the Pueblo, common lands for grazing.

The settlement was originally located on the Guadalupe River in north San Jose (Taylor Street), but the annual flooding caused the settlers to petition for relocation to the south

where they would be on higher ground. The request was granted, allowing the town to relocate about 1791. The new location was at the cross roads from Monterey and Mission Santa Clara with the port of Alviso about one mile north. The town was laid out with the center a plaza and market place where the Road from Monterey entered (Market Street). Creating the town required a system of ditches (acequia) be constructed that would circulate fresh water throughout the town and farm lands. Eventually these were fed throughout the years by constructing a dam on the river. Residential lots and settlement patterns followed the alignment of the acequia.

The route of travel between San Francisco (Yerba Buena) and Monterey essentially follows the El Camino Real (Monterey Road through the south of the county) to Santa Clara Street; The Alameda to Santa Clara. Along this section, willow trees were planted by the Padres to shade travelers. Other modern roads also follow the early trails; Trimble Road connected the Mission Santa Clara with its corn fields (milpas) and to Mission San Jose (established in 1789); Highway 880 (#17) connected the Missions of Santa Clara and Santa Cruz, an old trail that was improved with the labor of Mission Indians.

During the Spanish period, farming produced beans, corn, wheat, hemp, flax, seasonal vegetables and fruit. The basic industry of the area revolved around the crops, milling and hemp/flax thread, candles and soap- the necessities. A poor quality wine and brandy were made from small vineyards and orchard fruit. As the cattle herds grew, hides (leather) and tallow (fat and rendering) became important in the local economy. Surplus food and goods made by the Pueblo were sent to the Presidios or traded with the sailing ships through the ports of Alviso, Monterey, Yerba Buena, and Santa Cruz.

**Mexican Period (1822-1846)**

Change was brought about by the 1810, civil war in Mexico which relaxed the regulations and destroyed the economy within the Pueblo. With reduced oversight from the Spanish military and reduced Spanish trade, the opportunity for trade with foreign ships through previously guarded ports provided different provisions - tea and coffee as well as manufactured goods. Exposure to different trade and governance systems came from the sailors who decided to jump ship and stay in California.

In 1822 Mexican governmental control replaced Spain's. The two most important and long term changes were the secularizing of Mission lands and, in 1824, the granting of large land holdings (ranchos) to any person who settled an unoccupied track of land. Within Santa Clara Valley there were 38 land grants issued between 1833 and 1845, 15 of which were within the lands formerly held by the Pueblo (Laffey 1992:2). The ranchos were operated much as small towns, self sufficient in growing food and providing labor for the rancho's fields and industries, which were increasingly related to cattle (hides and tallow). While religion was part of the Rancho life, education was lacking.

Another change was allowing foreigners to settle in California. The first such settler was Antonio Sunol, born in Spain, who arrived on a French ship. An educated man, he opened the first general store and saloon in the Pueblo. He also planted a vineyard and it appears he was the first European to make wine in Santa Clara Valley selling it as early as 1823 (Arbuckle 1984:175). Soon his education qualified him for postmaster, banker and attorney, and in 1841, he became the Alcade (Mayor). Others followed and in 1841, the first Americans arrived by overland routes. In 1835, approximately 700 residents lived in the Pueblo; 40 were foreign, mostly English or Americans. By 1845, the population had grown to 900; almost 200 were Americans. The Americans were interested in business and transforming the Pueblo with American style commerce. By 1846, when the Americans occupied the State, their numbers were sufficient to take control.

**The Early American Period (1846-1869)**

This turbulent period was marked by change; the influx of American settlers to the Mexican community; the dramatic change from the established governing systems of Spain, then Mexico to the English/American legal system; and an agrarian economy to the beginning of industry in the local economy. Land ownership was particularly difficult since the Mexican Government had granted large holdings with little documentation of boundaries; the two cultures often disagreed on how to adjudicate differences.

To settle at least some of the issues relating to land ownership, a survey was conducted in 1847 of the Pueblo from Market Street to Eighth Street and Julian south to Reed Street. Those who claimed ownership were given legal title; unclaimed land sold for $50 a city block (Laffey 1992:5). Other surveys followed, some more accurate than others. In 1850, Surveyor Thomas White extended the city limits to Coyote Creek in the east and beyond the Guadalupe River on the west. Surveys were only part of the problem. Americans believed the open lands gained by the Treaty of Hidalgo were public and available. To determine legal title under the American system required the US government to establish the California Lands Commission in 1851; but that process proved lengthy and expensive, with the consequence that land was often forfeited. Within the Pueblo, the area between Market Plaza and the Guadalupe was contested for many years delaying development in this area while ownership was determined.

The gold rush of 1848-49 brought a sudden influx of primarily Americans to California. People needed food and services that were not immediately available. The businessmen of San Jose quickly developed hotels, saloons, theaters, and stores ready to sell whatever the miners needed. So prominent was the City that it was selected the first State Capitol in 1850 and although it lasted only two years, this provided incentive for even more urban development.

Outside the city proper, farms, orchards vineyards started to fill The Valley. However, the stock of vines and trees did not significantly improve until 1851-53 when Antoine Delmas and then Louis Pellier imported European vines and scions that could be grafted to the hardy mission grape stock. They were followed by Etienne Thee and Charles Le Franc, who by 1857, had formed the Almaden Vineyards.

The College of Notre Dame was founded in 1851 growing from a small wood building to occupy a large campus of classic brick buildings on W. Santa Clara St. between San Pedro and Santa Teresa. The school educated young girls, elementary school through college. A few years later Minns Evening Normal School was established in San Francisco in 1857, after which it moved to San Jose, becoming San Jose Normal School now San Jose State University.

Infrastructure continued to develop to support the population growth. Natural gas was piped to buildings and street lights in San Jose and Santa Clara in 1861. Five years later, San Jose Water Company incorporated to provide piped water to residents followed closely by the City installing the first sewers. Transportation, using horse drawn carriages, was established between Santa Clara, San Jose and Saratoga-Los Gatos, to be replaced by Samuel Bishop's Street Car line in 1868. This line extended from Santa Clara eventually ending at the Alum Rock Reserve (park) in the east hills.

The educated population attracted printers and newspapers to the area. Politically motivated, the *State Journal* in December 1850, and the *Daily Argus* in 1851, were short lived; however, San Jose would never again be without locally printed newspapers (Arbuckle 1984:397).

A subtle change was occurring in agriculture with a switch from grazing lands to planted grain fields, primarily wheat, filling the valley floor. The economy was changing from cattle-based to wheat and seasonal fresh fruit. Fruit orchards planted by the Mission supplied apples and pears to the miners showing the profit potential that could be made by raising fruit. By the end of 1850, San Jose was home to several professional orchardists and nurserymen including Louis Pellier, who opened City Nursery on the northeast corner of San Pedro and Chaboya Alley in 1850. Just 10 years later, 106,000 fruit trees thrived in the county and 156,000 grape vines; orchards were planted in all directions extending from the City (Arbuckle 1984:155).

This early period ends with the coming of the railroad. The first line was between San Francisco and San Jose opened in 1864, and in 1869, the Central Pacific line started from San Jose to Niles. The transcontinental railroad that connected Santa Clara Valley to the eastern states allowed access for the local agriculture and goods to be sold into the world's markets.

**Horticultural Expansion 1870-1918**

Grape growing found an instant market in the late 1870s, and into the 1880s because wine was in high demand and fruit that could not be dried, remained a seasonal commodity. "By the end of the 1880's Santa Clara County had 15,000 acres of vine and 478 viticulturists. producing 2,500,000 gallons of wine a year" (Arbuckle 1984:176). Orchards of many varieties of fruit spread in all directions spawning small towns with services and conveniences for the rural families. Berryessa in the east, The Willows in the west, Saratoga and Los Gatos, were all connected by fruit orchards. The most popular fruit was the small French prune imported by Louis and Pierre Pellier, known as the "la Petite Prune d'Agen" a fruit that would lead the agricultural industry in Santa Clara Valley. A fruit in high demand all over the world the fruit grew to be a $43,000,000 a-year- industry in California (Arbuckle, 1984:163). Throughout the Horticultural Era and into 1970, when the industry was ending, the prune was grown in ratios of approximately three to one of the next species, apricots (Arbuckle,1984:163). Drying fruit was a relatively natural and low cost process, but it was subject to weather conditions and not suitable for all types of fruit. The abundance of the orchards demanded a new process to preserve the fruit for sale.

Food processing started in France in the 1850's. However, locally it was Dr. James Dawson who invented the process in his home laboratory in 1871. Companies formed to manufacture all types of equipment to support the joint industries; orchard sprayers, food processing machinery, and tractors all were made in San Jose. With superb growing conditions and land for vast orchards, the canning industry grew quickly in San Jose, as did support industries of box, basket, and can factories. Mergers of the smaller or specialized companies led to some of the largest corporations, such as FMC, that started as Bean Pump and Spray Company merging with Anderson –Barngrover, Hull and Cunningham. During the same period, vineyards were also bountiful and Paul Masson, Pierre Mirassou and William Wehner were all producing wines from grapes grown on the hillsides around the Valley. Food processors, canners and dryers separated to form their own support organizations.

As the economy grew so did urban development, expanding from First Street to Second and, two years after the Chinatown fire of 1887, a new City Hall was constructed in the Plaza, and in 1893, a new Post Office on Market Street. During the 1880's three and four-story bank buildings were constructed on all four corners of Santa Clara and First streets. During this time, business moved south from Santa Clara Street, spurred on by T.S. Montgomery who developed several large city blocks.

As the City expanded so did the infrastructure. By 1881, electricity, was provided by several private companies operating from different locations around the City. In the same year J.J. Owen, owner of the San Jose Mercury was instrumental in having a light tower constructed at the corner of Market and Santa Clara streets. Electric arc lamps that

had replaced the gas lamps were replaced in 1912, with incandescent lights on the downtown streets.

Automobiles were first seen in the Valley in 1890's, with the State's first auto manufacturing, garage and gas station established in San Jose by the turn of the century. The first "garage" was opened by Clarence Letcher in 1900 followed by his first gas station in 1902. The first motor bus line in the state began service from San Jose to Mt. Hamilton in 1910. It was them possible to take the bus to the San Jose Country Club established in 1899, on Alum Rock Avenue.

The first regularly scheduled radio station was started in San Jose in 1909, when Dr. Charles Harold broadcast from his offices at the corner of First and San Fernando streets. In addition to the first commercial broadcast, Harold is credited with opening a college to train radio engineers where he qualified over 1200 students by 1922. He is also credited with more than 50 inventions during his career.

Development continued throughout the City. Most of the vacant lots were filled with houses or small commercial buildings during the 1880's. The Hensley property was divided in 1886, as was College Park off the Alameda followed by the subdivision of General Naglee's estate in 1902 and Hanchett Park in 1907. During this period, the City annexed the Gardiner District and the City of East San Jose in 1911, and a year later an unusual annexation was the 100 foot wide strip of land along N. First Street leading to Alviso. Streets that began in the center of the city, extended to connect the rural corners of the Valley. Although they changed names outside the core, the convenience of a connected valley was perfect for the automobile and truck traffic that took hold during his era.

**Inter-War Period 1918-1945**

Three projects that started in the 1920's and completed by 1939, were particularly important in the development of San Jose. The first was the connection of Bayshore Highway from N. First Street to San Francisco; the second was the formation of the Santa Clara Valley Water Conservation District to alleviate the falling level of ground water, and the selection and development of Moffett Field as a military base, for which San Jose campaigned heavily.

After several years of attempting to block the effects of the Volstead act in Santa Clara Valley, the winemakers were faced on February 20, 1920 with following the provision of the Eighteenth Amendment to the U.S. Constitution "prohibiting the sale and manufacture of intoxicating liquors until the conclusion of the present war and thereafter until the termination of demobilization, the date of which shall be determined and proclaimed by the President of the United States. The words "beer, wine, or other intoxicating malt or vinous liquors" in the War Prohibition Act shall be hereafter

construed to mean any such beverages which contain one-half of 1 per centum or more of alcohol by volume" (Volstead Act; Title one, 1919). Winemaking was an important part of the local economy in the Santa Clara Valley where 8,000 acres were cultivated with wine grapes. Northern California more known as the wine area was more heavily invested (Sullivan1982:128). Not until 1933 were the effects of the Volstead Act - 1920-1933 - and local laws repealed. Several local wineries had stocked wine and were quick to tool up their old equipment and begin shipping wine made and stored during the dry years. Cabari, Almaden, Paul Mason and others shipped less than 145,000 gallons. The first new winery operation after repeal was constructed in 1937, by Peter Mirassou who held 100 acres in Evergreen. The winery with 130,000 gallon capacity shipped bulk dry wine and Champaign, that was considered of better quality than most (Sullivan 1982:144). Peter and his sons Edmund and Norbert continued to improve the quality of local wine and promote the industry. At the conclusion of WWII, California and the Santa Clara Valley was experiencing a wine shortage and more acreage was planted to meet the need. Along with this came a campaign to teach the wine buying public about the quality of Santa Clara Valley and other premium wines. The industry was moving away from sweet wine, cheap white wine, and to the better wines produced locally.

At the same time the vintners were facing a loss of business, the orchards were expanding to supply the growing need for fruit to satisfy the demand for processed, canned and dried fruit. Associations of growers, canners and dryers finally gained stability developing into huge organizations that would distribute the produce of the Santa Clara Valley world wide. World War I was ending when the California Fruit Packers Association (Calpak) was formed, uniting several successful independent companies under one name. In San Jose construction began in 1918 to construct plants along the railroads, often taking over buildings left empty by prohibition. F.W. Wool, Baron-Gray, Richmond-Chase, Calpak – Del Monte, Tri-Valley Growers and Packers, Sunsweet, and Hunt Bros. constructed plants throughout the Valley, in San Jose there were concentrations in the Taylor-Jackson area, The Alameda, along S. 3rd-9th Sts, and in Willow Glen. The food processors were followed by American Can, Continental Can and other secondary manufacturers of containers and machinery. In 1925, there were 6,959 farms, between 1927 and 1930 prune acreage increased to 65,077 acres; apricots to 17,891; pear to 7,308 cherry to 1,906 and plum to 1,560 acres (Arbuckle 1985:163). La petite prune d'Agen, propagated by Louis Pelllier was the fruit that lead the county in percentage of the world consumption and was reported to have been a $43,000,000 a year industry. The food processing industry became the economic engine that encouraged growth in population, housing, social organizations, wealth, and all aspects of the City. However international events leading to WWII had a dramatic effect in the Valley when the Third Reich, at Hitler's direction ceased purchasing dried fruit from California. The resulting glut of fruit in 1933-34 forced several ranches into bankruptcy and others to replant prunes with alternative species.

Population continued to increase and the residential development to expand into the orchard areas or infill such as the Vendome Hotel site on N. First Street. Annexation continued to extend the City boundaries; Palm Haven in 1922, and the Stockton and White districts in 1924. Willow Glen incorporated in 1927 and annexed to San Jose in 1936. Further outside the City, the east hills were subdivided for homes and the first airport was constructed at 1919 Alum Rock Road. The first municipal airport was established as the Garden City Airport in 1934 and moved to Tully Road in1939 by Cecil and Robert Reid who renamed it Reid Hillview Airport (Laffey 1992:9).

Part of the population and job growth was from those who had served in the military and came to attend college in the Valley using the G.I. Bill to help pay expenses. At Stanford University, Dr. Frederick Terman, a gifted professor had an exceptional class and was already seeing some of his students venture into what would become the next economic wave; electronics, and high technology. Students David Packard and Bill Hewlett invented test equipment in 1939, and obtained government contracts to continue their work during the war years. In 1945, they were well positioned to lead those who formed or worked for companies that were the foundation of Silicon Valley - Varian Sylvania, Philco-Ford, GE and Lockheed.

**Industrialization and Urbanization 1945-1991**

During WWII social changes occurred. Women who became part of the war-effort work force were then less content to stay at home. Able to work outside the home or to volunteer these women made it very desirable to have two cars in each family. This was not lost on the home builders who included a two car garage with most homes after 1945. With more automobiles available, commercial centers were no longer tied to the bus or street car line; thus they spread out along all the major roads. At the same time, changes in building safety codes required additional exiting and other modifications to second floor spaces primarily in the downtown. Without the guarantee of higher rents, many owners did not correct the deficiencies so the upper story spaces became vacant.

After WWII, the population of San Jose rose dramatically. City leaders launched campaigns to attract non-agricultural industries and house building led construction in the Valley. The post-war community of 95,000 in 1950 became the urban hub of 500,000 by 1975, while the area of the City grew from 17 square miles to 120 square miles as land annexed for housing tracts, commercial centers and industrial complexes replaced orchards.

All roads seemed to lead out of the historic downtown. Valley Fair at Stevens Creek and Winchester boulevards, offered a new shopping experience - a mall with free parking and a variety of stores, (I Magnin, Joseph Magnin, Macys, and the Emporium, stores previously only in San Francisco). In 1957, the new City Hall was constructed with modern manufactured materials, signaling the progressive City, was located at N. First

and Mission Streets, far north of the downtown. Hotels in the downtown, once the heart of the social set, became subsidized housing for older, often destitute people. Even the San Jose Mercury and San Jose Evening News, San Jose's only daily newspapers moved from W. Santa Clara Street to a new facility on Ridder Park Drive out of the downtown. Soon the downtown became isolated as shops either went out of business or moved to outlying centers and there was little to attract people to come into the City's core. During the 1950's and early 1960's federal funds were available for urban renewal to demolish obsolete or blighted buildings and San Jose's leaders, believing that a cleared parcel of land was more attractive to new development, received many awards for this work. Asphalt soon covered the vacant lots where three and four story buildings had once stood, almost 30% of the downtown was paved.

The train ran between San Jose and San Francisco exactly has it had since 1909, and the Southern Pacific sponsored bus line dropped the SP and became the Greyhound Line, moving to a larger bus terminal on Notre Dame Avenue. Light industrial development appeared just outside the core where the opportunity for less expensive land allowed service, repair, warehouse and distribution of services related to the remaining businesses.

Outside of the City, General Electric Company opened a new facility at Curtner and Monterey Road in 1948, IBM on Cottle Road in 1953, and Ac'cent on Monterey Road in 1946. Lockheed was also renting space and looking for a place to construct a facility (eventually in Mt. View). Major reconstruction of the schools in San Jose began in the late 1950's when, with the intent to protect children, the State made bond funds available to local school districts if their schools were evaluated by structural engineers and found to be seismically inadequate. Many schools were determined to be structurally unsafe and were demolished, replaced with new buildings or new facilities which were deemed to be more economical to maintain and located in areas where the population was growing. A few years later, hospitals found the same state mandates and were either rebuilt or extensively remodeled.

By the end of the 1970's Park Center Plaza, a new library and the Center for the Performing Arts were constructed on the west side of the downtown. In the center, next to St. James Park the Scottish Rite Temple on N. 3rd became the San Jose Athletic Club and the old Post Office (formerly library) became the San Jose Museum of Art. Other than reusing some historic buildings, there was little new development in the core area.

Surrounding the growing city, agricultural use remained predominate, with most of the land outside the City boarders in Santa Clara County. The villages that developed on transit corridors, generally about five miles from the downtown providing the sense of a district or community a town center, with a school and often a post office. Replacing the orchards with residential tracts accelerated in the decades of the 1950's and 1960's as large acreages were annexed to San Jose. The new housing was constructed in suburban

style tracts, all with a forward facing double or triple garages to showcase the family cars. As San Jose continued annexations those agricultural areas that remained outside the City were strengthened in their identity and "village" feeling well into the next decades.
As the City embraced the new, ever expanding high technology, the price of industrial waste and capacity was beginning to be understood. Still, the general tenure through the 1980's was one of optimism and progress.

**Nola Ranch**

During the later years of the Horticultural Expansion Era 1870-1919, Nola Orchards (fruit ranch) was established on land that had previously been used for grazing and may have been planted with orchard trees. Throughout the Santa Clara Valley, orchards produced the fruit that became the resource to an expanding fruit processing industry, an industry that would see the Santa Clara Valley producing 25% of the world's prunes by the 1930's (Laffy, G.A.: 1992). Through the Inter-War Period 1918-1945, agriculture remained the most important industry of the Valley; however, the stage was set for a new era of technology after WWII, as residential and industrial development expanded into the agricultural lands leading to the Era of Industrialization and Urbanization 1945-1991. Throughout the years when it was in full operation, 1912-1976, the Nola Fruit Ranch was one of the family ranches contributing to the fruit economy of the Santa Clara Valley. After 1976, the ranch was significantly reduced in size when the family sold land for development. Thus the origins are within the context of the Horticultural Era, a time when immigrants from Italy arrived in the Valley finding that agriculture was their new life. Of the many families who followed this pattern, most of the ranches lasted into the 1950's before the agricultural economy began to decline and the land reused. As a relatively small family ranch, the Vincent Nola Ranch is recognized as a example of immigration and hard work. The ranch provided opportunities leading to second and third generations of family success and the opportunity to maintain the tradition of the agricultural existence with a road side fruit stand supported by importing fruit from other parts of California. The ranch and Nola family are noted for their hard work, rather than for an individually significant contribution to the Horticultural Era or to the history of San Jose.

The property that became the Nola Ranch in 1912, was included within the Pueblo Lands as Tract #1, established with el Pueblo de San Jose de Guadalupe in 1777-78. As the lands passed through the period of Mexican rule into statehood, the owners used the land for agricultural purposes, primarily grazing. By the mid 1870's the land was owned by Isaiah Shaw who emigrated from New York, settling in Berryessa in 1853. He is listed in the 1876 Thompson and West Historical Atlas of Santa Clara County as a farmer and stock raiser with 852 acres. The official map titled the Map of the Subdivision of a Part of the Isaiah Shaw Orchard, recorded on August 24, 1889, divided portions of his land creating parcels along Berryessa Road. In 1895 Italian immigrants Vincent Nola and his brothers came to the United States through New Orleans where they worked for the

railroad. Finding the south both hot and humid, they took the train to California to visit relatives in Pleasanton. Vincent returned to Italy and in 1902 brought his wife Isabella and daughter Mary to San Jose where they resided on N. 13th Street at Jackson Avenue (V. Nola 8/20/05). By 1912 they had acquired land that included the subject parcels planting, tending and harvesting the orchards. They constructed barns, in which the families of two brothers lived, and sheds, but did not immediately construct a house on the ranch. In 1920 the Nola's engaged Charles McKenzie to design the house at 13100 Berryessa Road (McKenzie documents:1920). It appears that Peter Nola also constructed a house on his adjoining property (Charles Territo 10/12/07). At that time the Vincent Nola family included daughter Mary born in Italy and children born in San Jose: Frank, Manuel, Carmela, Josephine and Adeline.

The Nola brothers, Vincent, Peter and Gaetano, entered the orchard business just a few years apart. The adjacent ranch on Berryessa Road was owned by Peter Nola, Vincent's younger brother while Gaetano chose the Willow Glen district for his ranch. The brothers were all fruit ranchers who raised a variety of fruit trees: prunes, cherries, pears and apricots. Up until the early 1930's, Vincent Nola raised predominantly prunes, but also some cherries and apricots (V. Nola 8/20/05). The petite prune d'Agen and apricots were dried on the ranch and packed for shipping as Suni-Best, the Nola Packing Company label (SMN 6/24/01) . Entering the 1930's, the German market purchased almost 50% of the dried prunes and a large quantity of other dried fruit from Santa Clara County, and ranchers planted more prune trees to accommodate the growing demand. Then in 1933, when the German Reich (Nazi Germany) came to power under Chancellor Adolph Hitler, he forbid German markets to purchase California dried fruit. This resulted in a glut of California prunes, fruit that had to be sold at very low prices and/or stored. Ranchers, who had other crops to carry them through the three years necessary for new trees to mature, immediately replaced their prune trees with new trees to supply the fresh fruit market (Couchman, R. 1967:89). The Nola brothers were in this group replacing the prune trees with trees that bore fresh fruit for the commercial market, particularly cherry trees. This was the beginning of the decline in agricultural production for the ranch. After replanting the orchard in the mid 1930's, fruit raised on the ranch was sold fresh to local brokers and at the roadside stand, or dried on site and sent to distributors. The drying and packing were done in two large barns and packing sheds that originated before 1915, and were demolished in the late 1950-60's, when the market for local packaged fruit had significantly declined. Some of the wood from these buildings was used to construct a vehicle shed and a much smaller packing house constructed in 1962 (J. Territo 9/17/07).

Frank S. Nola, Vincent and Isabella's oldest son, married Grace Rosalie Pilotti in 1928. A year later they had a house constructed on the property adjacent to his parents (13120 Berryessa Road). The generations worked together tending the fruit ranch and in the packing business that was operated from a large barn on the property (Joseph Territo 9/17/07). The children of Frank and Grace, Vincent born in 1931, Richard born in 1934

and Gerald (Jerry) born in 1940, grew up working on the ranch as did their cousins. After the deaths of Vincent and Isabella Nola, the title to the ranch was divided among their children. Other than Frank, the children did not build their houses on the ranch, but returned to help with ranch chores and at harvest time. Daughter Mary A. married Vincent V. Genco moving to town where they owned the house at 392 N. 13th Street and worked for McKinley & Glans Furniture Company. Later they moved to N. 11th Street. Carmela Nola Territo worked as a bookkeeper residing on the ranch until she married. The fruit ranch operations extended to the next generation and Vincent Genco, Jr., the son of Mary Nola Genco and grandson of Vincent and Isabella, constructed his home on the family property in 1950 (13060 Berryessa Road).

As the residential and commercial development extended to the Berryessa district, the children and grandchildren of Vincent and Isabella Nola continued to operate the ranch even as surrounding land was sold for development. In the late 1970's, Peter Nola's ranch, one of the first to practice organic methods of ranching, was sold for residential development as was 20 acres of Frank and Grace Nola's ranch. A road was constructed across the Vincent Nola ranch property to access property to the east isolating the existing approximately 3 acres fronting on Berryessa Road. After Frank S. Nola died on June 10, 1976, Grace Nola, her children and grandchildren continued limited fresh fruit ranch operations selling from a fruit stand that was constructed each year to sell fresh cherries and pears grown on the remaining trees and augmented with fruit from the Central Valley. Frank and Grace Nola's children did not remain on the ranch. Vincent F. Nola became a physician and psychiatrist eventually locating his office in Indian Wells, California; Richard Nola became the owner of Vacaville Fruit Company in Yolo County, and Jerry Nola a rancher/farmer in the Stockton area. Each year, the children and grandchildren returned to San Jose to help Grace Nola care for the ranch and sell the fruit at the roadside Nola Ranch fruit stand. In the mid 1990's, the family decided that the pieces of the "temporary" fruit stand were dilapidated and the dirt floor was difficult for Grace Nola. In 1992, the family constructed a permanent stand, with a concrete floor and sides that could be closed when not in use (V. Nola 8/20/05). In 2003, when Grace Nola died at age 98, the ranch consisted of 200 trees on two acres. The *San Jose Mercury News* carried a front page article on January 17, 2004, titled "A Way of Life Passes in the Valley"; the article commemorated the life of Grace Nola. The article describes the changes that occurred to the agricultural way of life during in the past century and the anticipated end of the Nola Orchard and roadside fruit stand. In 2004 the fruit stand was operated by family members selling cherries from the Berryessa trees, but primarily fruit from Jerry Nola's ranch in the Central Valley (V. Nola 8/20/05). As residential development surrounded the Nola property and the family was dispersed, the continued use of the Nola Ranch as agricultural land did not appear feasible. Selling the property for residential development appeared immanent and much of the equipment used to care for

the ranch was sold or transferred to other locations. Fruit drying and packing equipment had been sold, transferred or destroyed years earlier.

In 2007, there are very few fruit trees on the property producing marketable fruit. Most of the orchards trees have been removed; others are dead or dying. The houses on the property continue to be occupied by family members, or are vacant. The sheds and buildings became household and hobby storage for family and friends. In the summer of 2007, family members operated the Nola Orchards fruit stand for a few weeks, again primarily offering fruit grown in the orchards of the central valley.

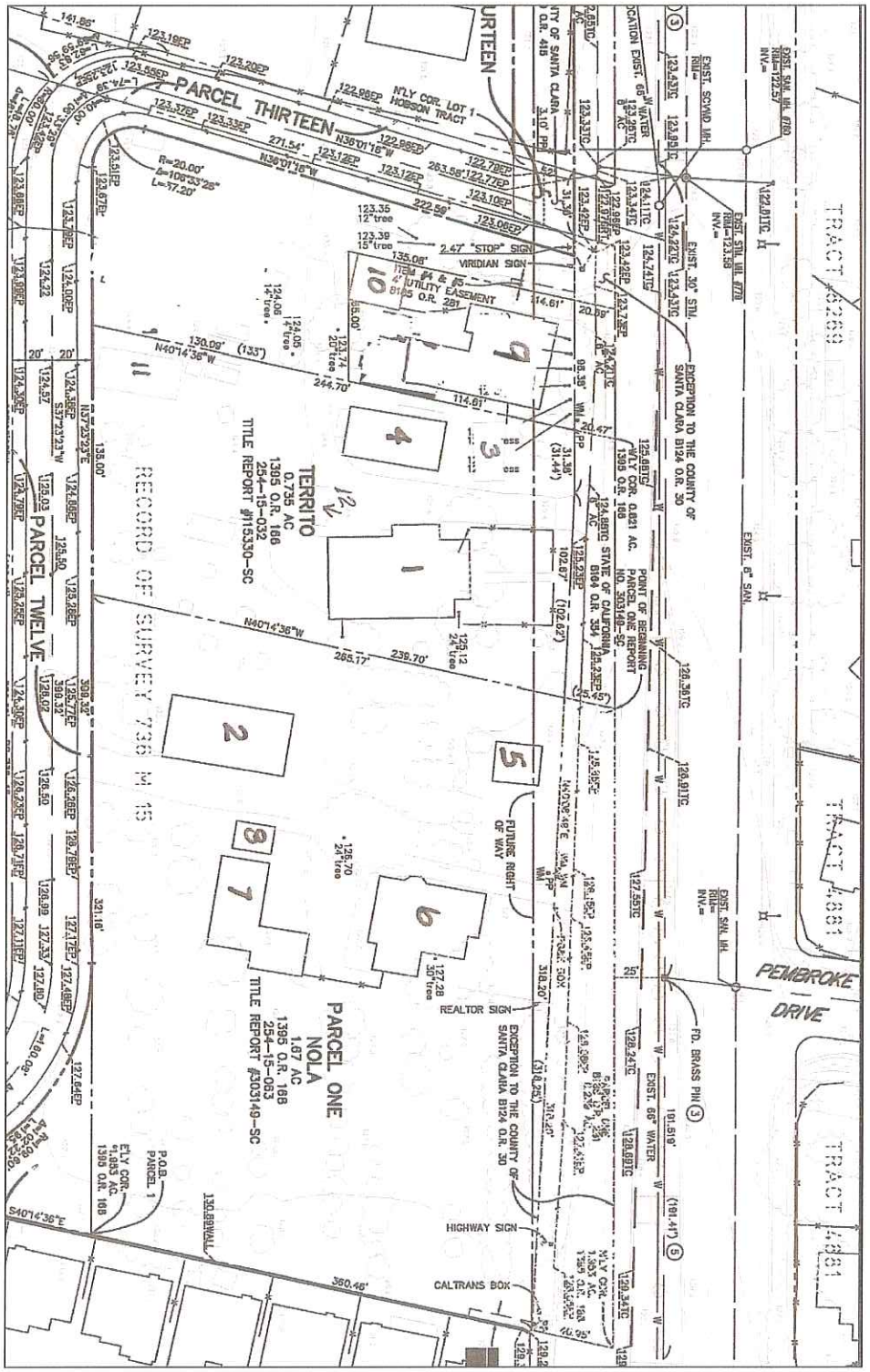
The story of the Nola family and Nola Fruit Ranch is typical of so many stories of the immigrants who came to the Santa Clara Valley to establish fruit orchards and who contributed to the horticultural expansion that was the primary economy of the area for the fist 30 years of the twentieth century. Located outside the City of San Jose, the family identified with the Berryessa Agricultural District of the County. Within this district, there were many family ranches whose names are now assigned to the suburban streets in the area of their former ranches. It does not appear the Vincent Nola family was significant in the government, social or cultural development of the area.

The property known as the Nola, Territo and Genco parcels was annexed into the City of San Jose in 1997. The history of the property relates to the Santa Clara County and the Berryessa District.

**Charles McKenzie Architect**

Noted as one of San Jose's most prolific architects Charles McKenzie was the son of a draftsman and carpenter who moved to California with his family in 1876. The self taught draftsman began his career in San Jose in 1892, as a draftsman for architect Joseph McKee. Two years later the firm was taken over by Frank Wolfe who also appears to have been self trained in architecture but with a solid foundation in carpentry. The partners were responsible for a number of turn of the century homes in Naglee Park and authored the Book of Designs, a selection of 100 plans for houses that was published in 1907,after the devastating earthquake of 1906. The partnership lasted until 1911, after which McKenzie continued to practice architecture as a alone until 1942, when he stopped producing architectural drawing for clients but worked as a draftsman for the military (Espanola, G., 2004:11). During his career as a sole practitioner, Charles McKenzie designed numerous homes in the Craftsman Bungalow style as well as commercial and civic buildings (Espanola, G., 2004:1-4:11). He died in 1957.

**Figure 3 Survey showing the location of buildings on the Nola Ranch**
**Source: Pulte Homes**




Key to Buildings

1 house c.1920

2 Fruit packing shed c.1962

3 Water tank

4 Garage c.1968

5 Fruit stand c.1992

6 House c.1929

7 Storage/office c 1965

8 Garage

9 House c. 1950

10 Garage c. 1950

11 Utility Shed c.1956

12 Garage c.1930

## SECTION E. DESCRIPTION OF THE HISTORICAL RESOURCE

Surrounded by primarily single family residential development, the 3.03 acre site is west of and less than ¼ mile from Interstate 680 with the buildings (houses) fronting on Berryessa Road, a major urban thoroughfare connecting San Jose's east hills to the downtown. The rear boundary of the property is a former California Department of Transportation easement now owned by another entity. The land is relatively flat with small areas of landscaping.

View across the front yard of 13120 Berryessa Rd. toward the area where the last fruit orchard trees were grown.

Photo: 9/11/07
Camera facing SE

Within the four parcels are three houses and several ancillary buildings that are all wood frame construction. There are almost no healthy fruit trees that remain on the property. Fruit trees were located towards the east at the rear of the property and to the west is a storage area for vehicles and miscellaneous items.

APN 254-15-031, 13060 Berryessa Road (# 9) The main house is a single story c. 1950, mid-century California Ranch style, with a hipped tile roof over exposed eaves exhibiting straight cut rafter tails. The front façade, a typical low concrete porch with a shed roof, is supported on square wood posts and shades the entry and a large pane tripartite picture window. The remaining wall of the front façade has a second tripartite window. The porch is almost hidden by large

Italian cypress trees. A decorative low brick element extends from the front façade around to the sides where it stops in approximately four feet. Above the decorative brick, the walls are smooth stucco. The west façade is punctuated with three windows spaced the length of the façade. The rear- south façade projects to the rear and, as the east façade is flat stucco walls with casement or single-hung windows. A double car garage in the same style is behind the house. Landscaping is minimal, flowers along the side of the house; however Italian cypress trees hide the front façade. The majority of the area around the house is hardscape or paving.

Building # 9
Genco House
c.1950
13060 Berryessa Rd.

Photo: 9/11/07
Camera facing S/E

APN 254-15-064 (Nola Parcel #2) - Behind the house and garage is an area for maintaining vehicles and equipment. Two long open sheds constructed in the mid 1950's used recycled wood from other demolished structures. They are of wood frame with metal roofs on the primary structures. One is open on all sides and the other open on one side with horizontal board siding on the other. A vertical board sided equipment garage is located to the south of the open sheds. Sheds appear to be constructed as general storage and randomly attached to each other. The buildings are surrounded with pieces of equipment, conveyor belts, tractor parts, some are elements of the fruit ranch equipment, most seem to be

personal vehicles part of a collection. The area is protected with a chain link fence.

Shed #11
Vehicle repair area & sheds c. 1953

Photo 8/05
Camera Facing NE

APN 254-15-032 (13100 Berryessa Road Vincent Nola House and property). The main house is a large single-story California Bungalow c.1920, constructed on a wood frame and sheathed with stucco. The plan of the house is irregular created by intersecting gables. Typical of the bungalow style, the shingle covered roof extends over the wall with the truss style brackets on all sides of the house. The front façade is composed of projecting gable that creates a recessed porch in front. The porch is raised five steps sided with low, stucco covered walls, topped with bricks, that end level with the fourth step. The porch has half walls, also stucco covered with a molded cap that extends around to the west façade creating a veranda. The front entry door is a single width and not adorned. To the west is a tripartite window with a large pane in the center and small square divided panes in a panel at the top of each section, a pattern that is replicated on other facades. The corner posts are slightly truncated, stout and covered with stucco. They have two projecting bands, one a foot above the porch wall and the other at the point where it joins the sculpted flat arch opening. Beneath the gable point is an eight-pane window centered between two of the decorative truss-brackets that surround the roof under the eave. A decorative trim board is a fastened a few inches below the actual eave. The south façade is almost as

prominent as the front façade (west). A projecting gable extends from the center of the façade where the veranda wraps around to create a second porch with a stair at the end. This gable is very similar to the one on the front, with stout columns, a flat arch opening, and an identical tripartite window next to the door. The porch has been rebuilt with stepped wall details that are not shown on the architects plans. Just past the stair starts the new construction and addition to the rear of the building where metal frame windows have replaced the original wood system. Other features are a chimney and wood frame windows high in the wall with twelve small square panes and a basement window close to the rear corner. The main roof exhibits exposed rafter tails. The rear façade is an alteration to the original design where the corner wood porch was removed and a wall, covered with smooth stucco extended the building. The new wall includes contemporary metal frame paired windows. A back door is at the top of a stair with wrought iron railings on each side. The flat façade has a cellar door next to the stairs and a wood double hung window on the east quarter of the façade. The east façade is relatively simple with double hung window systems randomly located in the wall. The house is typical of architect Charles McKenzie's bungalow designs, particularly those from 1911-1925 (G. Espinola 9/29/07)

To the rear is a concrete patio with small patches for flowers or other gardens. A small front yard consists of lawn, a walkway to the front, a small patch of flowers, and a tree in front of the porch. Between the house and the two-story garage is a paved driveway. In front of the garage is the remains of a wood frame tower for a water-tank. The tank top of the structure has been demolished, leaving the frame. The sheathing has been removed leaving the structure and exposed on one side and contemporary materials siding on the other.

Building #1

Vincent & Isabela
Nola House c. 1920

13100 Berryessa Rd.

Photo: 9/11/07
Camera Facing: S

Building # 1
Vincent and Isabella
Nola House c. 1920

13100 Berryessa Rd

Photo 9/11/06

Camera Facing NE

View: addition to the rear of the house.

To the west of the house is a two story garage c. 1968, building with two double lift-up doors on each side, and small metal windows close to the roof line. The pitched roof building is sheathed in smooth stucco without decoration. A

Pegasus sign, the symbol of Mobile Oil Company, is mounted above the doors on the east façade.

Structure #3
Water tank base
c. 1920
(extensive alterations)
c.2006

Photo: 9/11/07
Camera Facing: south

Building # 4
Garage1968

Photo: 9/11/07
Camera Facing West

APN 254-15-063 (13120 Berryessa Road - Frank Nola House): a single-story house in an eclectic California Bungalow style, c. 1930, constructed with a wood frame and sheathed in stucco. The hipped roof is covered in red tile above open eaves with exposed rafter tails. A full basement is evident by the occurrence of hopper windows at grade. The front façade is divided with a projecting porch extending across two-thirds of the width, the remainder in line with the main building's wall. Truncated columns at the two front corners of the porch meet the flat arch opening that is sculpted with an arrow point in the center. A half wall with a flat cap extends around the raised porch on all three sides. Six red concrete steps led to the entry door and a square single-pane window. A second window of the same type is on the other side of the façade. The west façade has a projecting bay with simple double-hung windows on each side. The remaining smaller windows are in the same style. The rear façade (east) has a back-door atop a raised porch with a metal railing. Windows punctuate the upper part of the façade and a slanted wood double door enters the basement. An addition to the east and rear facades that follows the original style was made c. 1940. The east façade is flat with the same style simple frame wood windows that are found throughout the house. The house was designed and constructed by a local contractor, believed to have been Aug R. Calvelli. When the house was expanded to the rear the same contractor did the remodeling.

Behind the house, a single car garage, in the same style as the house, is protected from the main drive by a wood lattice wall. Separated by a walkway on the other side is a three bay garage made of horizontal board siding with composition roofing. At a right angle to the garages is a c.1960's building that was used for entertainment and storage. It has metal frame windows, decorative brick on the lower part of the wall and red tile on the roof that faces into the courtyard. The surface surrounding the buildings and in the courtyard is paved. The front yard is also hardscape. Landscaping is very minimal consisting of a bush or small tree against the buildings. The buildings are in good condition, but a lack of recent maintenance is evident in the deteriorating porch columns and the need for repair and painting.

To the west behind the garages is a large horizontal board sided shed that has a pitched roof covered with metal sheets, and a concrete slab foundation/floor inscribed with the date 1962. The north façade has a large lift up door in the

center of the façade, and two windows, one on each side. The east façade has a single pedestrian door and is also punctuated with windows; however, the larger of these are contemporary metal systems. Constructed in c. 1962, much of the materials used in the construction were recycled from buildings that were demolished on site. The south façade is like the north with a large opening and two windows. The shed was used for packing and sorting fruit into the 1970's and is currently used for domestic storage.

Building # 6
Frank and Grace Nola House c.1930

13120 Berryessa Rd

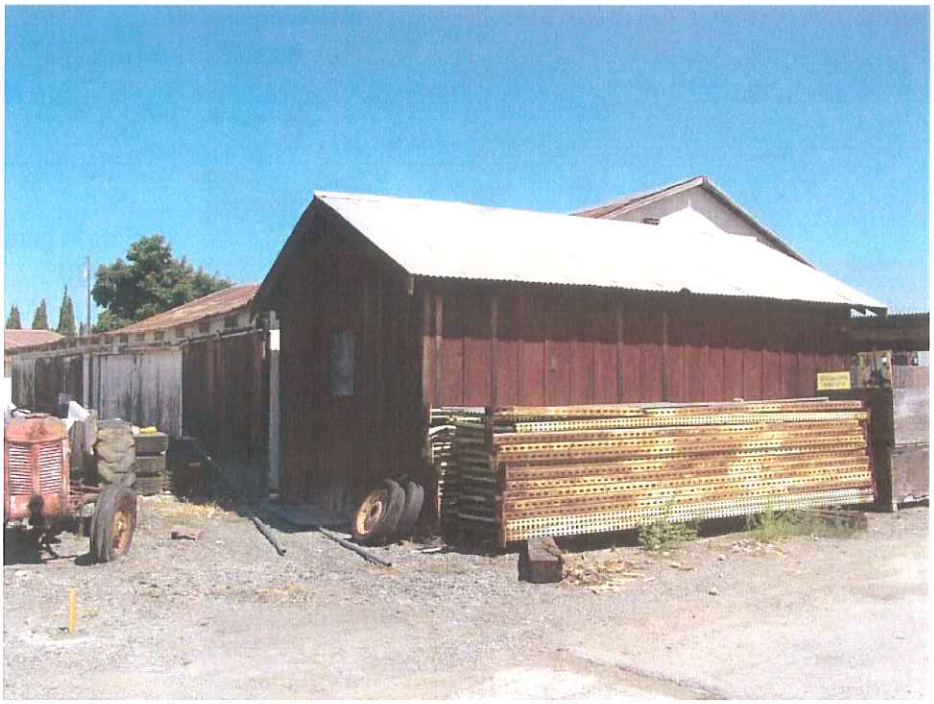
Photo: 9/11/07
Camera Facing S/E

Building # 7 & 8
Garage c. 1955
and
office/storage c. 1970
Single garage c.1970

Photo: 8/05
Camera Facing: East

Building # 2
Fruit Packing Shed warehouse c.1962

Photo: 8/05
Camera Facing: Souted –



Sheds # 11
Sheds behind
13060 Berryessa
Rd
c.1952-53
Photo: 8/05
Camera Facing
West

Shed # 5
Fruit Stand
c.1992-94

Photo: 9/11/07
Camera facing:
SE

In summary the buildings are representative of houses and sheds that were typical styles for the time they were constructed. As residences they were occupied by members of the extended Nola family while some, particularly the second generation worked in the family orchards. As the orchard land was sold, the ranch was reduced to residential sized parcels, which contained houses, sheds, a few fruit trees, and miscellaneous storage-mostly for domestic items and collected vehicles. The houses and sheds are not high quality design, unusual construction methods and the materials are in common use. The Vincent Nola house designed by architect Charles McKenzie is a good example of a Craftsman Bungalow, but is not among his best works. The condition of building and sheds ranges in proportion to the amount of maintenance given each building, from good to severely deteriorated.

## SECTION F. EVALUATION OF SIGNIFICANCE

The properties were evaluated using the criteria of the City of San Jose Historic Preservation Ordinance; the California Register of Historic Resources, and the National Register of Historic Places. The properties were evaluated within the historical context of the later years of the Horticultural Expansion Era 1870-1918 when the ranch was established by Vincent Nola. This is the period of significance of the original Vincent Nola Prune Ranch that extends between 1912-1935, and the time the 1920 house was constructed. This is the period when the Petite Prune d' Agen is the most important fruit grown in the Santa Clara Valley. Secondarily, is the period interest is 1936-1976 during which the second generation, Frank Nola operated the property as a fresh fruit ranch. Although sales of fresh fruit imported from the Central Valley have continued from the 1992 fruit stand, the secondary period of interest ended when orchard land was sold for residential development and the property reduced to approximately three acres with primarily residential buildings.

Summary: Evaluated as a unit, the Nola Ranch lacks integrity of the primary period of significance 1912-1935 when it was a prune orchard. The location and association are the only two of the seven aspects that remain. The only buildings that remain are residential, the 1920, home of Vincent and Isabella Nola and 1929, Frank Nola house. The spatial design of an operating ranch and buildings associated with the prune ranch were removed over 30 years ago. The drying tray open spaces, barns, work sheds, and orchards that defined the prune ranch, and were part of the dried fruit industry have been eliminated. These included; two barns on a very large wood barns, a small dehydrator and ancillary buildings. Without the orchards, the setting of the ranch has been drastically altered. The materials of the ranch, orchard trees, wood barns, and equipment are no longer on site, the two houses from this period are the only remaining buildings and the area around them so altered with later additions that the relationship to the prune ranch is lost. The aspect of workmanship that would be shown in constructing the barns, and drying equipment is no longer extant. The workmanship exhibited in construction of the two houses remains, although these are altered with later additions. The summary aspect is the feeling, which with the loss of so much integrity does not communicate the feeling of a 1912-1935 Santa Clara Valley prune ranch. The identifying orchards, large barns, work and drying areas and equipment are no longer a part of the site, thus the elements relevant to the processing and operations of the prune ranch have been reduced to the 1920 house of Vincent Nola, and the 1930 house of Frank Nola,

and a very altered water tank base. The site does not retain integrity from the primary period of significance, when it was an 80 acre prune ranch.

Considering the secondary period, 1936-1976 during the time when Frank Nola operated a fresh fruit ranch, there is still a loss of integrity without the orchards to support understanding of the otherwise residential and utilitarian buildings. Of the three residential buildings, Vincent Nola House (1920), the 1930 Frank Nola House and the 1950 Genco House, the relationship to the activity of a fruit ranch is diminished by the additions and ancillary buildings that have no relationship to the ranch use. A rectangular building constructed in 1962 was reported to have been where fruit was packed for shipping, however none of the equipment or other identifying elements from this use remain. Thus it appears as a contemporary and utilitarian storage building. Other sheds an garages on the property were constructed to house family collections of vehicles or items not otherwise related to the ranch. The ranch equipment sheds, open sided linear sheds, are no longer extant. The building that gives feeling to the property and best communicates the previous fruit ranch use is a small roadside stand constructed in 1992, with a painted sign proclaiming Nola Farms.

In summary the site appears as a collection of buildings located in an area where development of single family tract houses has removed the previous fruit orchards. The collection of eclectic buildings and sheds does not constitute a definable fruit ranch.

The evaluation of individual buildings determined that the Vincent Nola house at 13100 Berryessa Road (APN 254-15-063), appears eligible for the California Register of Historic Resources under Criteria 3. The house was designed by noted local architect Charles McKenzie and although altered retains sufficient of the original to convey his design. It is also the oldest remaining ranch house of the Vincent Nola Fruit Ranch and Suni Packaged Fruit (the Nola Brand), and is associated with growing and processing prunes, an important industry that dominated the economy of San Jose and the Santa Clara Valley during the 1920's. The association with architect Charles MeKenzie and the association with the Nola Ranch, are the factors that determined the Nola House to be a Structure of Merit under the San Jose Historic Preservation Evaluation Tally, rating a total of 59.42 points.

Compared to the criteria of the National Register of Historic Places, the buildings that remain on the subdivided parcels were only loosely associated with events that made significant contributions to the broad patterns of our history. The loss

of the setting and feeling of a fruit ranch diminishes the collected integrity of the houses and storage buildings. Most of the building have been altered or are not over 50 years old and thus are not eligible for listing in the National Register of Historic Places or the California Register of Historic Resources.

The setting and feeling are severely diminished by the lack of orchard acreage and the close proximity of neighboring contemporary residential development. The buildings that are over 50 years old are houses that have a secondary association to the Nola Fruit Ranch and other than the Vincent Nola House, were constructed to be residences for children or grandchildren of the owners. The houses were not designed by notable architects and are not outstanding examples of vernacular architectural design and are not significant to the history of San Jose.

**San Jose Historic Landmark**

The San Jose Historic Preservation Ordinance #17927, as amended, contains the criteria that were used to evaluate the property and building. The criteria are as follows.

Historical, Architectural, Cultural, Aesthetic or Engineering Interest or Value of an Historical Nature is defined as, "historical, architectural, cultural, aesthetic, or engineering interest or value of an historical nature" shall mean a quality that derives from, is based upon, or related to any of the following factors:

*1. 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;*
*2. 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.*

San Jose Historic Landmarks Commission's Evaluation for Significance establishes the following levels of significance:

67-134 Candidate City Landmark
33-66 Structure of Merit
33-66 Contributing structure to a historic district
32-0 Non-significant

The site as a whole received adjusted total of 41.8 which is categorized as a structure of merit
The individual buildings received adjusted totals of:
APN- 254-15-032: 13100 Berryessa Road (Vincent Nola House) - 59.42 points
254-15-064: Equipment Sheds -no address - 19.1 points
254-15-063: 13120 Berryessa Rd. (Frank Nola House & ancillary garages and sheds) - 28.08 points
254-15-063: Former Fruit packing - ancillary storage building - 23.2 points
254-15-031, 13060 Berryessa Road (Residence) - 24.26 points

Of the separate properties, the c.1920 ranch house at 13100 Berryessa Road was rated as a Structure of Merit, primarily due to its design by Charles McKenzie and the association with the fruit ranch developed by Vincent Nola. The other properties and buildings rated non-significant.

**The Nola Ranch properties (all parcels):**
*Criteria #1. 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;*

The Nola Ranch is associated with the Vincent Nola family and the Horticultural Expansion era, however the association is typical of many family ranches in the Berryessa Area during the first quarter of the past century. The family does not appear to have contributed to San Jose's history, heritage or culture in a distinctive, significant or important way.

*Criteria #2. 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.*

Criteria # 2 (d). The Nola Ranch was typical of many fruit ranches in the Berryessa area. Currently it is composed of several parcels containing three residential buildings, storage buildings and sheds. Viewed together and without the orchard, the buildings have lost the integrity of the operating fruit ranch and do not comprise a distinctive, significant or important work (vernacular ranch design or cultural landscape).

Criteria #2 (e) The site has been reconfigured with buildings that were not part of the fruit ranch and, those that were present during the period of significance 1912-1935 have been removed. Therefore it is unlikely that the site (s) could yield information of value about history, architecture, engineering, cultural or aesthetic, or that it provides for existing and future generations an example of the physical surroundings in which past generations lived or worked.

The site is rated at 41.8 points and is considered a Structure of Merit.

**Individual evaluations:**

254-15-032: 13100 Berryessa Road (Vincent Nola House) an adjusted point total of 59.42 (Structure of Merit) ( Nola Trust)

254-15-064: Equipment Sheds c. 1952-3 (no address -Nola Trust) received an adjusted point total of 19.1 (non-significant)

*Criteria #1. 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;*

*Criteria # 1:* The property is not associated with persons or events that have contributed to local, regional, state or national history, heritage or culture in a distinctive, significant or important way;

Italian immigrants, Vincent Nola and his wife Isabelle lived in the downtown area before establishing a fruit orchard and constructing their house in 1920. They are closely associated with the pattern of development at the end of the Horticultural Era 1870-1919, and with fruit ranching and processing on their property, but typical of many families and are not individually associated with specific events that are distinctive or significant to local, regional, state or national history heritage or culture.

*Criteria #2. 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.*

*Criteria #2 (b)*: The Nola house was designed by a prolific local architect Charles McKenzie who designed many Craftsman Bungalows that are similar in style. The house is typical of the architect's work and not, a distinctive, significant or important work or vestige in the architect's body of work. The house construction is considered good quality but not excellent craftsmanship.

*Criteria #2 (d).* In addition to the Vincent Nola house, other buildings on the parcel are the remains of a water tank-house that has lost integrity and a c.1968 garage that does not appear associated with the fruit ranch operations. These buildings do not support or add to the value of the Vincent Nola House.

The other criteria do not apply to this property.

<u>254-15-063: 13120 Berryessa Road (APN 254-15-063 ( Frank Nola Residence & ancillary buildings) received an adjusted point total of 28.08 (non-significant)</u>

<u>254-15-063: Ancillary Building – Packing & Storage Shed c. 1962 - an adjusted point total of 23.2 (non-significant)</u>

*Criteria # 1. 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;*

*Criteria # 1:* The property is not associated with persons or events that have contributed to local, regional, state or national history, heritage or culture in a distinctive, significant or important way;

Frank S. Nola, son of Vincent and Isabelle had the house constructed in 1930 on land owned by his father. Frank and his wife Grace worked on the ranch while raising their three sons. After most of the orchard was sold, Grace continued to tend a few fruit trees around the house and to sell fruit at a roadside stand until the year she died in 2003 at the age of 98.

The Frank S. Nola family is associated with fruit growing and packaging, an important economic industry during the period 1919-1945 and into the 1970's. They are not

associated with individual events that were distinctive, significant, or important to local, regional, state or national history heritage or culture.

*Criteria #2. 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.*

*Criteria #2*: The buildings on the property are not identified as, or associated with, a distinctive, significant or important work or vestige. The eclectic California bungalow style architecture does not represent high artistic work or the work of a master architect, or builder, nor does it exhibit unusually excellent craftsmanship. The garages and game room are utilitarian wood frame structures that were not significant examples of design or workmanship. The ancillary buildings, including the 1968 packing shed are also utilitarian architecture without identifying elements. The ancillary buildings are not 50 years old.

The Frank Nola house rated 33.76 categorized a structure of Merit. The 1968 packing shed rated 23.2 points categorized not significant.

<u>254-15-031, 13060 Berryessa Road ( Genco Residence) received an adjusted point total of 24.26</u>

*Criteria # 1. 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;*

*Criteria # 1:* The property is not associated with persons or events that have contributed to local, regional, state or national history, heritage or culture in a distinctive, significant or important way;

The house was constructed for and occupied by Vincent Genco, grandson of Vincent Isabelle Nola, Members of the Genco family worked on the ranch until the commercial viability was reduced by selling acreage. Research did not uncover any individually significant people or events associated with the house.

*Criteria #2. 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.*

*Criteria #2*: The House and garage on the property are not identified as, or associated with, a distinctive, significant or important work or vestige. The eclectic Modern Ranch style architecture does not represent high artistic work or the work of a master architect or builder, nor does it exhibit unusually excellent craftsmanship.

The Genco house and garage rated 24.26 points categorized as not significant.

The San Jose Planning Department's Historic Evaluation Sheet and Evaluation Tally Form are located in the appendix to this report.

**California Register- Eligibility Statement**

The criteria for listing historical resources in the California Register are consistent with those developed by the National Park Service for listing resources in the National Register of Historic Places, but have been modified for state use in order to include a range of historical resources which better reflect the history of California. An historical resource must be significant at the local, state or national level under one or more of the following four criteria;

1. *It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.*
2. *It is associated with the lives of persons important to local, California, or national history;*
3. *It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or*
4. *It has yielded, or is likely to yield, information important to the prehistory or history of the local area, California, or the nations.*

In addition, the resource must retain enough of its historic character or appearance to be recognizable as a historic property, and to convey the reason for its significance.

Architectural and historic integrity are determined by the presence of seven attributes, location, design, setting, materials, workmanship, feeling and association which together form the ability of a property to convey its significance (National Register Bulletin – How to Apply the National Register Criteria for Evaluation; page 44-47). The buildings retain the aspects of location, design, materials, and workmanship however, the attributes of setting and feeling that were present when there was substantial orchard acreage associated with the buildings, the original barn and equipment sheds that are no longer present are further diminished by the surrounding contemporary residential development and the loss of orchard acreage. Because the buildings individually meet the basic standard of integrity, the buildings were evaluated under the criteria the California Register for Historic Resources.

The Nola Ranch has lost the integrity of an operating fruit ranch because the orchard no longer exists and the pattern of operations has been destroyed by the loss of buildings that were important in defining the operations of a prune or fresh fruit ranch. Many of the existing contemporary buildings and sheds were constructed in the spaces previously used for ranch operations. These ancillary buildings and sheds, some over 50 years old, were constructed as storage primarily for domestic use and are not directly associated with the fruit ranch operations. Sheds on the western edge of the site were constructed with recycled lumber taken from demolished barns and constructed over several years. The buildings that are more than 50 years old and in their original locations are residential buildings oriented to the street without identifying elements that communicate the past fruit ranch operations. The former rural setting of the ranch site is diminished by the development of single family residential tracts and the proposed new tracts to the south. Buildings less than 50 years old are not eligible for the California Register of Historic Resources unless they exhibit unusual significance. The buildings on the Nola Ranch associated with later fresh fruit operations such as the 1962, packing shed and the 1992, fruit stand are not over 50 years old and do not exhibit unusual and identifiable significance such that the site, lacking the primary elements of integrity, would be eligible for the California Register. The site as a whole does not meet the criteria of integrity, however the Vincent Nola house, when evaluated individually appears to retain sufficient architectural integrity and appears eligible under criteria #3 for the architectural design and association to Charles S. McKensie, a noted local architect.

Vincent Nola Ranch House 13100 Berryessa Road c. 1920 house (APN 254-15-032). Water tower structure c.1920 and 1968 garage. The water tank structure has lost integrity with the removal of the water tank, partial remodeling for other uses including the addition of contemporary siding and roof. The 1968 garage is not over fifty years old and was constructed for domestic storage. Buildings less than fifty years old of those that have lost integrity are not considered eligible for listing in the California Register of Historic Places. The Vincent Nola house is the only building on the parcel that is over fifty years

old that retains integrity. The Vincent Nola Ranch House site includes only the house and front yard to the Berryessa Road right-of-way that is approximately 30 feet from the existing road reducing the size of the existing front yard, and approximately 12 feet on the other three sides of the house to include the shade trees.

Evaluation:

1. *It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.*

   The house is associated with the Nola Fruit Ranch and the Suni Brand of dried fruit that was part of, although not a significant contributor to, the important agricultural economy of the Santa Clara Valley. The house was constructed in 1920, at the end of the Horticultural Expansion Era that lasted from 1870 until 1918. The Vincent Nola family operated a relatively small fruit ranch that was typical of many immigrants who came to the Santa Clara Valley after the turn of the century and were associated with raising fruit for the fruit processing industry. Like many others they dried fruit on the ranch and sold it to brokers and at local outlets. The house was present during the early operation of the fruit ranch however it does not appear to have been more than the residence of the family and does not have definitive characteristics that would convey an additional association to that industry.

2. *It is associated with the lives of persons important to local, California, or national history;*

   The original owners, Vincent and Isabelle Nola appear to have spent their energy in developing a small fruit ranch and in raising their family. There is no evidence that they or their family members who lived in the house were involved in significant historical developments in San Jose, California or the nation. Later buildings on the parcel are associated only with the family and not with persons important to local, California or national history.

3. *It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values;*

   The house is a modest Craftsman Bungalow designed by noted local architect Charles McKenzie. It is typical of those designed by the architect during the period 1911-1915, and is unusual for its later construction c.1920. This house is not considered an outstanding example of the architect's work, of which many elaborate Craftsman homes were constructed in San Jose, but is representative of his more modest designs. The design embodies distinctive characteristics of the Craftsman Bungalow and is the work of an important local architect. The construction, including the redesigned and constructed front porch is good

quality, but not unusual or exemplary craftsmanship. The design and association with Charles McKenzie appears to qualify the Vincent Nola House for the California Register of Historic Resources.

4. *It has yielded, or is likely to yield, information important to the prehistory or history of the local area, California, or the nations.*

   The site has a low probability to yield information important to the prehistory of history due to extensive agricultural use and construction.

Properties that are associated with events that have made a significant contribution to the board patterns of local cultural heritage include those associated with the original family that planted the orchards and packaged the fruit during the Horticultural Expansion Era and into the succeeding years. The property that represents this value is the Vincent Nola Ranch House. To a lesser degree the much later c. 1962 fruit packing shed that is less than 50 years old and not eligible for listing in the California Register of Historic Resources.

<u>13120 Berryessa Road, Frank Nola House , garages, recreation room and storage shed and roadside fruit stand. A detached parcel contains a vehicle and general storage shed c. 1952-53</u>

The parcel contains one house (c. 1929-1930 ), garages and a recreation room c.. 1970 and a former fruit packing and storage shed c. 1962, and a roadside fruit stand c. 1992-94, and a few cherry trees. The detached vehicle shed (c.1952-1995), is an amalgam of attached sheds and storage lockers and has lost integrity. Buildings less than fifty years old of those that have lost integrity are not considered eligible for listing in the California Register of Historic Places. The Frank Nola house is the only building over fifty years old that retains integrity. The cherry trees have past productive maturity and are in decline.

*1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.*

The Frank Nola house, c. 1929-30 is associated with the Nola Fruit Ranch and the Suni Brand of dried fruit that was part of, although not a significant contributor to, the important agricultural economy of the Santa Clara Valley. The Nola family operated a relatively small fruit ranch and is typical of many where the second generation constructed a house on the orchard property and to work on the ranch. The building was present during the operation of the fruit ranch however it does not appear to have been more than the residence of the family and does not have definitive characteristics that would convey an additional association to that industry. Located on the site of the Nola Fruit Ranch, it is one

of a dwindling number of family houses that remain on their original locations and that hearken from the active fruit ranch period. The house is also associated with Grace Nola who, with family members, sold fruit from the family fruit ranches until her death in 2003. While interesting to the history of San Jose, the association of the house to the fruit ranch industry does not appear to qualify the building for listing in the California Register of Historical Resources under Criteria 1. –for association with events that have made a significant contribution to the broad patterns of local or regional history.

2. *It is associated with the lives of persons important to local, California, or national history;*

The Frank Nola house, is not associated with persons important in the history of San Jose. Later buildings on the parcel are associated only with the family and not with persons important to local, California or national history.

3. *It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values;*

The house, 1929-1930 is a California Bungalow style, and does not appear to have been designed by an architect. This house, including the rear addition is good quality construction, but not unusual or exemplary.

4. *It has yielded, or is likely to yield, information important to the prehistory or history of the local area, California, or the nations.*

The site has a low probability to yield information important to the prehistory of history due to extensive agricultural use and construction.

The Frank Nola house and adjacent buildings do not appear to be eligible for listing gin the California Register of Historic Resources.

<u>13060 Berryessa Road, House and garage</u>

The Vincent Genco House c. 1950, and garage are the only buildings on the parcel.

*1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.*

The Vincent Genco house and garage, c.1950 was constructed as a residence for Vincent Genco, grandson of Vincent Nola, and his family. It does not appear to have played a significant role in the operations of the ranch and was not constructed during the primary period of significance 1912-1935. The Nola family operated a relatively small fruit ranch that was typical of many where the second and third

generations constructed a house on the orchard property. The building was present during the last years of the operation of the fruit ranch however it does not have definitive characteristics that would convey an association to the fruit industry. This tertiary association is not significant and the building does not qualify for listing in the California Register of Historical Resources under Criteria 1.

2. *It is associated with the lives of persons important to local, California, or national history;*

   The Vincent Genco house, is not associated with persons important in the history of San Jose. The parcel is associated only with the Genco family who are not persons individually important to local, California or national history.

3. *It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values;*

   The house, c. 1950 is a mid-century ranch style, that was not designed by an architect. This house exhibits good quality construction, but it is not unusual or exemplary. The house does not possess high artistic values.

4. *It has yielded, or is likely to yield, information important to the prehistory or history of the local area, California, or the nations.*

   The site has a low probability to yield information important to the prehistory of history due to extensive agricultural use and construction.

Properties that are not significant under the criteria of the San Jose Planning Department for Evaluating Historic Resources are not considered significant under the criteria of the California Register. Applying the City of San Jose's Historic Evaluation and Tally to the property, none of the buildings on the parcel rated above non-significant

National Register of Historic Places – Standards (Criteria)
The National Register of Historic Places has established standards for evaluating the significance of resources that are important in the heritage of the nation. Historic resources may be considered important at the local level, state level or national level. To apply the standards the resource must be considered within significant historical contexts. The standards, age and integrity statements follow;

1. *A property must be fifty years old*
2. *The resource must retain architectural and historical integrity.*
3. *The resources must meet at least one of the following criteria*
   a. *are associated with events that have made a significant contribution to the broad patterns of our history; or*

b. *are associated with the lives of persons significant in our past; or*
c. *embody the distinctive characteristics of a type, period, or method that possess high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; or*
d. *have yielded, or may be likely to yield, information important in prehistory or history.*

The three properties contain houses that meet the criteria of 50 years or older. Of these, the integrity is diminished in feeling and in setting due to the surrounding contemporary residential development and loss of the orchard that defined the Nola fruit ranch. Individually the buildings do not exhibit historical or architectural significance.

a) the buildings are not associated with events that have made a significant contribution to the broad patterns of our history,
b) are not associated with the lives of persons significant in our past,
c) The buildings do not embody the distinctive characteristics of a type, period, or method that possess high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction;
d) Due to the development and redevelopment of the site it is unlikely the site would yield important information about prehistory or history.

The properties do not posses significance, as defined under the four criteria of the National Register of Historic Places, and are thus not eligible for listing in the National Register of Historic Places.

## SECTION G. IMPACTS OF THE PROPOSED PROJECT

The proposed project includes 379 single-family attached residences and 30,000 square feet for retail commercial uses on a 20.18 gross acres site. The proposed project does not retain any of the existing buildings, structures of objects in their present locations. It is proposed to relocate one house, 13100 Berryessa Road and to remove the other buildings.

The California Environmental Quality Act (CEQA) defines historic resources as those that are eligible for listing in the California Register or the National Register of Historic Places. The City of San Jose considers a resource listed as a Candidate City Landmark to be considered eligible for the California Register.

The building that appears to qualify for the California Register of Historic Resources is the Vincent and Isabelle Nola House at 13100 Berryessa Road. The other buildings do not to qualify for the California Register of Historic Resources. None of the buildings that are over fifty years old and retain integrity qualify for listing in the National Register of Historic Places.

Buildings that are eligible for listing in the California Register of Historic Resources require consideration under the California Environmental Quality Act and mitigation if they are approved for alteration or demolition. The CEQA Guidelines provide that to reduce the impact of the loss of a historic resource building to less than significant, the building may be relocated to a compatible site and rehabilitated in conformance with the Secretary of the Interior's Standards for Rehabilitation. The project will relocate the Vincent and Isabella Nola house at 13100 Berryessa Road in conformance with the Secretary of the Interior's Standards, which would reduce the impact to less than significant.

The alteration or removal of buildings that are not eligible for listing in the California Register of Historic Resources does not create a "substantial adverse change" therefore the removal is not considered an impact under the CEQA Guidelines. No mitigation is required for such buildings, objects or structures.

## SECTION H. RECOMMENDATIONS

Because the Vincent Nola House is rated as a Structure of Merit, and appears eligible for listing in the California Register of Historic Resources the Planning Department may consider any application under the CEQA Guidelines for Historic Properties and place conditions upon granting the approval to remove the building. The following recommendations are presented as recommendations for the removal of a Structure of Merit, that appears eligible for listing in the California Register of Historic Places.

1. There has been discussion within the Territo family that they are interested in relocating the Vincent Nola house to a residential setting on property owned by the family on McKee Road. This would be a compatible site and would allow the building to be retained and continue in family use. The City could encourage the retention of the Vincent Nola house by relocation to a site that is compatible with the architecture and roadside setting.
2. Relocating a Structure of Merit and one that appears eligible for listing in the California Register of Historic Resources should be accomplished using the Secretary of the Interior's Standards for Rehabilitating Historic Buildings, including guidance for relocation.
3. Prior to disposing of artifacts associated with the Nola Fruit Ranch that are not desired to be kept by the Nola, Genco and Territo families, History San Jose should be contacted to survey the items for possible addition to the City's collection of historical items and records.
4. The site should be recorded in medium approved by the City Planning Department and History San Jose. The recording should include photographs, video and interviews.

5. Should the proposed plan include commercial uses, the opportunity to include a "roadside" fruit stand should be considered to preserve the recent history of Grace Nola and the Nola Fruit Ranch.

The Nola Ranch, including buildings that are not over 50 years old and those that have lost integrity, was evaluated under the City of San Jose Historic Evaluation Tally and rated as a "Structure of Merit" property,

The following recommendations will provide for future generations to learn from this property.

1. Prior to any actions to relocate or remove buildings or sheds, a photographic survey should be completed using photographs, and recording media (video). Survey plans should be marked to indicate the buildings and keyed to the photographs. The professional staff at History San Jose should specify the work.
2. To the extent the Nola, Territo and Genco family are willing, provide video recorded interviews to capture remembrances of the ranch, operations, and their relatives.
3. Provide a copy of the materials to the San Jose Planning Department and History San Jose.
4. Encourage future developers of the property to incorporate the recorded information into a format that can be placed on the History San Jose website

# SECTION I. APPENDIX

## LIST OF SOURCES CONSULTED

### Unpublished:

City of San Jose; Glory Ann Laffy, *Historic Resources Inventory Survey Phase II*; Archives and Architecture, November 17, 1992 as amended and updated

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Polk Publishing Company, San Jose City Directory Including Santa Clara County, California; *1870 - 1978, San Francisco*

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San Jose Water Company, San Jose Water Company,125 Years of Service 1866-1991, San Jose, CA 1991

Santa Clara County Historical Heritage Commission, Santa Clara County Heritage Resource Inventory, San Jose, CA, 1979 (not listed)

Sawyer, Eugene T., History of Santa Clara County, Historic Records Company, Los Angles CA 1922

Thomson & West, 1876 Historical Atlas of Santa Clara Co. California, (reprint) Smith McKay, San Jose, 1973

**Periodicals**:

Hubka, Thomas C.,"The Americanization of the Barn",_National Building Museum; Spring 1994

San Jose Mercury News; Mike Cassidy, "End To Cherry Season Evokes Sweet Memories Of S.J." June 24, 2001, page 1A

San Jose Mercury News; Death Notice; Josephine Nola, December 31, 2002

San Jose Mercury News; Death Notice; Grace Rosalie Nola, December 28, 2003

San Jose Mercury News; Obituary; "A Way of Life Passes in Valley, At Age 98, She was last Great Boss of the Orchards San Jose's Grace Nola Lived And Died In A Place Unknown To Us, And That Is A Reason To Mourn", January 17, 2004 page 1A

## Published Works - Architecture

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McAlester, V & L. A Field Guide to American Houses, A. Knopf, New York,1985

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Thollander, Earl, Barns of California, A Collection by Earl Thollander, California Historical Society, San Francisco, 1974

Whiffin, Marcus, American Architecture Since 1780, A Guide to Styles, *M.I.T.Press, Cambridge Mass. 1981*

## Repositories Consulted

Martin Luther King Jr. Memorial Library, San Jose Main Library, California Room.

Santa Clara County Recorder's Office, Official Records and Deeds

US Census and Citizenship records- Internet repository

Pacific Aerial Survey; Aerial photographs of the site, 1954-1990

## Interviews:

Charles Territo, Phone interview, regarding the construction of the buildings 10/12/07

Joseph Territo, on site, regarding the buildings and family history, September 17, 2007; Phone conversation September 18, 2007

George Espinola, email September 29, 2007 regarding the work of Charles McKenzie

Dr. Vincent F. Nola; regarding the family history and fruit ranching; August 20 and August 28, 2005, 10/11/,07 regarding the early barns and how the families lived prior to constructing houses..

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
# PRIMARY RECORD

Primary #
HRI #
Trinomial
**NRHP Status Code** NA

Other Listings _____
Review Code _____ Reviewer _____ Date

 ***Resource Name or #:** (Assigned by recorder) 13100 Berryessa Rd. San Jose

**P1. Other Identifier:**

***P2. Location: Not for Publication** X **Unrestricted**

***a. County** Santa Clara **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** San Jose East **Date** 1980 **T** __; **R** __; __ **3 of** __ **3 of Sec** __; _____ **B.M.**

c. Address 13100 Berryessa Rd. City San Jose Zip 95133

d. UTM: (Give more than one for large and/or linear resources) Zone 10, 600568 mE/ 41 37613 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN 254-15-032

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The property is located immediately west of I-680 fronting on Berryessa Road a busy east- west collector street. The parcel is .735 acre of 3.03 acres that are the remains of a former 80 acre fruit ranch. The area surrounding the site is residential development from the 1970's, or planned for residential use. The property is not eligible for the National Register but appears eligible for the CRHR and as a Structure of Merit for its design and association with Charles McKenzie.

The main house is a large single-story California Bungalow c.1920, constructed on a wood frame and sheathed with stucco. The plan of the house is irregular created by intersecting gables. Typical of the bungalow style, the shingle covered roof extends over the wall with the truss style brackets on all sides of the house. The front façade is composed of projecting gable that creates a recessed porch in front. ( Continued on page 3)

***P3b. Resource Attributes:** (List attributes and codes) HP 2 Single family detached house

**P4. Resources Present:** X Building Structure Object Site District Element of District Other (Isolates, etc.)

**P5b. Description of Photo:** (view, date, accession #) View S Front Façade, 10/09/, 2007

***P6. Date Constructed/Age and Source:** X Historic Prehistoric Both
Constructed: 1920 Architect's Plans

***P7. Owner and Address:**
Territo Trust
1045 Noble Ave. San Jose CA 95132

***P8. Recorded by:** (Name, affiliation, and address)
Bonnie Bamburg
Urban Programmers
10710 Ridgeview Avenue
San Jose CA 95127

***P9. Date Recorded:** 1/17/08

***P10. Survey Type:** (Describe) Reconnaissance

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") None

***Attachments:** NONE Location Map Continuation Sheet X Building, Structure, and Object Record
Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
Artifact Record Photograph Record Other (List):

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HRI#

# BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code NA

 *Resource Name or # (Assigned by recorder), 13100 Berryessa Rd San Jose

B1. Historic Name: Vincent Nola House

B2. Common Name: Territo House

B3. Original Use: Residential-single family B4. Present Use: Vacant

*B5. Architectural Style: Craftsman Bungalow

*B6. Construction History: (Construction date, alterations, and date of alterations)

Constructed 1920 remodeled porch and rear c. 1980

*B7. Moved? X No Yes Unknown Date: _____ Original Location:

*B8. Related Features:

ancillary buildings- not significant, not 50 years old

B9a. Architect: Charles McKenzie b. Builder:

*B10. Significance: Theme Agriculture Fruit Ranch Area San Jose

Period of Significance 1910-1930 Property Type Ranch house Applicable Criteria NA (Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

During the Horticultural Era, 1870-1919 just outside San Jose the Santa Clara Valley, exploded with orchards growing many varieties of fruit. The rural areas spread in all directions spawning small towns with services and conveniences for the rural families. Berryessa was the center for the north-east side of the valley. The most popular fruit was the small French prune imported by Louis and Pierre Pellier, known as the "la Petite Prune d'Agen" a fruit that dominated the world markets and grow to be a $43,000,000 a-year- industry in California (Arbuckle, 1984:163). Drying the fruit was a relatively natural and low cost process, but it was subject to weather conditions and not suitable for all types of fruit. The Inter-War Era, 1920-1945 extended the period of abundance from the orchards The Volstead Act extending from 1920-1933, to eliminate alcoholic beverages, created the change from vineyards to orchards increasing the production of fruit varieties, particularly prunes. Abundance of fruit spawned the canning industry to preserve the fruit during the harvest season making it available all year. The combination of bountiful orchards and processing plants thrust the Santa Clara Valley's produce to leadership in world markets, creating an era of economic growth that attracted immigrants from Europe, Asia and other states. Santa Clara Valley produced 25% of the world's prunes by the 1930's (Laffy, G.A.: 1992).As world markets closed to California fruit at the outset of WWII, the federal government began setting prices that stabilized the industry until the end of WWII, when agriculture began to decline in the Santa Clara Valley. (Continued page 4)

B11. Additional Resource Attributes: (List attributes and codes) HP 4 Ancillary Buildings, HP 33 Ranch Buildings

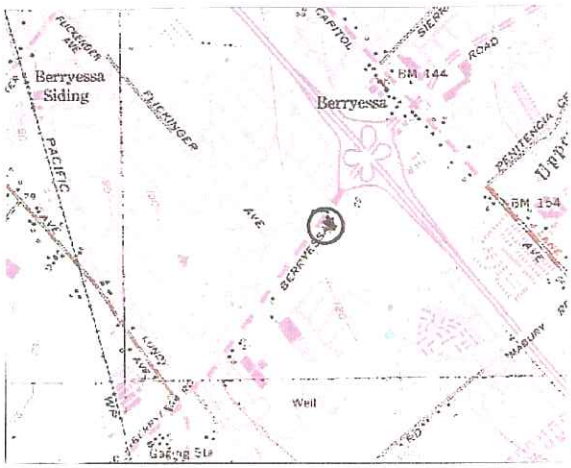
*B12. References: Arbuckle,C.,Clyde Arbuckle's History of San Jose, 1984, C.McKenzie architectural drawings, aerial photographs - continued

B13. Remarks:

*B14. Evaluator: Bonnie Bamburg

*Date of Evaluation: 1/17/08

(This space reserved for official comments.)






*Required information

**P3.Description cont**

The porch is raised five steps sided with low, stucco covered walls, topped with bricks, that end level with the fourth step. The porch has half walls, also stucco covered with a molded cap that extends around to the west façade creating a veranda. The front entry door is a single width and not adorned. To the west is a tripartite window with a large pane in the center and small square divided panes in a panel at the top of each section, a pattern that is replicated on other facades. The corner posts are slightly truncated, stout and covered with stucco. They have two projecting bands, one a foot above the porch wall and the other at the point where it joins the sculpted flat arch opening. Beneath the gable point is an eight-pane window centered between two of the decorative truss-brackets that surround the roof under the eave. A decorative trim board is a fastened a few inches below the actual eave. The south façade is almost as prominent as the front façade (west). A projecting gable extends from the center of the façade where the veranda wraps around to create a second porch with a stair at the end. This gable is very similar to the one on the front, with stout columns, a flat arch opening, and an identical tripartite window next to the door. Other features are a chimney and wood frame windows high in the wall with twelve small square panes and a basement window close to the rear corner. The main roof exhibits exposed rafter tails. The rear façade is an alteration to the original design where the corner porch was filled with a wall, covered with smooth stucco that surrounds contemporary metal frame paired windows. A back door is at the top of a stair with wrought iron railings on each side. The flat façade has a cellar door next to the stairs and a wood double hung window on the east quarter of the façade. The east façade is relatively simple with double hung window systems randomly located in the wall. The house is typical of architect Charles McKenzie's bungalow designs, particularly those from 1911-1915 (G. Espinola 9/29/07)

To the rear is a concrete patio with small patches for flowers or other gardens. A small front yard consists of lawn, a walkway to the front, a small patch of flowers, and a tree in front of the porch. Between the house and the two-story garage is a paved driveway that extends to the house.

To the west of the house is a two story garage/storage building, c. 1968, building with two double lift-up doors on each side, and small metal windows close to the roof line. The pitched roof building is sheathed in smooth stucco without architectural decoration. A Pegasus sign, the symbol of Mobile Oil Company c.1960, is mounted above the doors on the east façade.

In front of the garage is the remains of a wood frame tower for a water-tank and small pump house. The tank that sat on top of the structure has been demolished, leaving the frame. Original siding has been removed leaving the structure exposed on one side and contemporary materials used as siding on the others.

Set behind the house is what appears to be the foundation of a shed or two car garage and a garden type structure.

**B 10 Significance Continued:**

The site was formerly part of a fruit ranch with orchards to the south, large barns, dehydrators, packing houses and a variety of sheds, all of which have been removed. The site currently exhibits a residential parcel with contemporary storage buildings. The house is in good condition although it is in need of paint and maintenance to prevent water intrusion.

Background: The property that became the Nola Ranch in 1912, was included within the Pueblo Lands as Tract #1, established with el Pueblo de San Jose de Guadalupe in 1777-78. As the lands passed through the period of Mexican rule into statehood, the owners used the land for agricultural purposes, primarily grazing. By the mid 1870's the land was owned by Isaiah Shaw who emigrated from New York, settling in Berryessa in 1853. He is listed in the 1876 Thompson and West Historical Atlas of Santa Clara County as a farmer and stock raiser with 852 acres. The official map titled the Map of the Subdivision of a Part of the Isaiah Shaw Orchard, recorded on August 24, 1889, divided portions of his land creating parcels along Berryessa Road. In 1895 Italian immigrants Vincent Nola and his brothers came to the United States through New Orleans where they worked for the railroad. Finding the south both hot and humid, they took the train to California to visit relatives in Pleasanton. Vincent returned to Italy and in 1902 brought his wife Isabella and daughter Mary to San Jose where they resided on N. 13th Street at Jackson Avenue (V. Nola 8/20/05). By 1912 they had acquired land that included the subject parcels in the Berryessa District of Santa Clara County. Here they planted, tended and harvested the orchards. They constructed barns, in which the families of two brothers lived, and sheds, but did not immediately construct a new house on the ranch. Peter moved into a house on property adjoining that of Vincent and in 1920 the Nola's engaged Charles McKenzie to design the house at 13100 Berryessa Road (McKenzie documents:1920). The Vincent Nola family included daughter Mary, born in Italy, and children born in San Jose: Frank, Manuel, Carmela, Josephine and Adeline.

The Nola brothers, Vincent, Peter and Gaetano, entered the orchard business just a few years apart. Vincent and Peter chose the Berryessa District adjacent to each other, while Gaetano chose the Willow Glen district for his ranch. Like the other outlying agricultural districts of Santa Clara County with a cross-roads center, the corner of Capitol Ave. and Berryessa Rd., became a community center the district with a school and other services to augment those of San Jose. Up until the early 1930's, Vincent Nola raised predominantly prunes, but also planted a few cherries and apricots (V. Nola 8/20/05). The prunes and apricots were dried on the ranch and packed for shipping in bulk or as Suni-Best, the Nola Packing Company label (SMN 6/24/01 . Entering the 1930's, the German market purchased almost 50% of the dried prunes and a large quantity of other dried fruit from Santa Clara County, encouraging ranchers to plant more prune trees to accommodate the growing demand. Then in 1933, when the German Reich (Nazi Germany) came to power under Chancellor Adolph Hitler, he forbid German markets to purchase California dried fruit. This resulted in a glut of California prunes that had to be sold at very low prices and/or stored. Ranchers, who had other crops to carry them through the three years necessary for new trees to mature, immediately replaced their prune trees with new trees to supply the fresh fruit market (Couchman, R. 1967:89). The Nola brothers were in this group replacing the prune trees with trees that bore fresh fruit for the commercial market, particularly cherry trees. After replanting the orchard in the mid 1930's, fruit raised on the ranch was sold fresh to local brokers and at the roadside stand, or dried on site and sent to distributors. During this time, there were two large barns and numerous sheds for drying packing and storing fruit. These were demolished in the 1950's, when the market for dried fruit

**B 10 Significance Continued:**

had significantly decreased. Some of the wood from these buildings was used to construct a vehicle shed and the much smaller packing/storage building constructed in 1962 (J. Territo 9/17/07). After the deaths of Isabella Nola, November 24, 1960 and Vincent Nola in 1965, the property was divided between their children. Mary Nola Territo inherited the Nola House, where her children and grandchildren have sometimes resided. The property remained an unincorporated area surrounded by the City of San Jose until annexed in 1997.

Charles McKenzie Architect

Noted as one of San Jose's most prolific architects Charles McKenzie was the son of a draftsman and carpenter who moved to California with his family in 1876. The self taught draftsman began his career in San Jose in 1892, as a draftsman for architect Joseph McKee. Two years later the firm was taken over by Frank Wolfe who also appears to have been self trained in architecture but with a solid foundation in carpentry. The partners were responsible for a number of turn of the century homes in Naglee Park and authored the Book of Designs, a selection of 100 plans for houses that was published after the devastating earthquake of 1906, in 1907. The partnership lasted until 1911, after which McKenzie continued to practice architecture as a sole practitioner until 1942, when he stopped producing architectural drawing for clients but worked as a draftsman for the military (Espanola, G., 2004:11). He died in 1957. During his career as a sole practitioner, Charles McKenzie designed numerous homes in the Craftsman Bungalow style as well as commercial and civic buildings (Espanola, G., 2004:1-4:11).

The Nola House and ancillary buildings is evaluated under the historic period of the Horticultural Era, 1870-1919 and into the Inter-War Era 1920-1945 with the period of significance 1912-1930 with the theme of agriculture and architecture. The house, the only building over 50 years old is associated with the fruit industry and development of the Nola Fruit Ranch which was typical of the many immigrant families that came to the Santa Clara Valley to build a new life as part of the agricultural expansion in the first decades of the twentieth century. The house was also evaluated for its architecture because it designed by a local and prolific architect, Charles McKenzie.

**Evaluation:**

San Jose Historic Landmark

The San Jose Historic Preservation Ordinance #17927, as amended, contains the criteria that were used to evaluate the property and building. The criteria are as follows.

1. *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;*
2. *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 of vestige whose component parts may lack the same attributes;*

**B 10 Significance Continued:**

*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. 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.*

San Jose Historic Landmarks Commission's Evaluation for Significance establishes the following levels of significance:

| | |
|---|---|
| 67-134 | Candidate City Landmark |
| 33-66 | Structure of Merit |
| 33-66 | Contributing structure to a historic district |
| 32-0 | Non-significant |

The buildings received adjusted totals of:
APN- 254-15-032: 13100 Berryessa Road (Vincent Nola House) and ancillary buildings– 59.42

Criteria # 1: The property is not associated with persons or events that have contributed to local, regional, state or national history, heritage or culture in a distinctive, significant or important way;

Italian immigrants, Vincent Nola and his wife Isabelle lived in the downtown area before establishing a fruit orchard and constructing their house in 1920. They are closely associated with the pattern of development at the end of the Horticultural Era 1870-1919, and with fruit ranching and processing on their property. The family was typical of many immigrant families that came to Santa Clara Valley at the beginning of the 1900's as part of those seeking opportunities within the era of horticultural expansion and are not individually associated with specific events that are distinctive or significant to local, regional, state or national history heritage or culture.

Criteria #2: ( criteria d, e, & f do not apply)

*a..* The Nola house is a good example of the Craftsman Bungalow style. It appears unusual in the rural setting and for the time it was constructed, past the height of Craftsman Bungalow designs by McKenzie. The house exhibits good but not excellent artisanship or craftsmanship in construction.
b. The house was designed by local master architect Charles McKenzie who designed many Craftsman Bungalows in San Jose.
c. The house is typical of the architect's prolific work and not, a distinctive, significant or important work or vestige in the architect's body of work.
The other buildings on site are a water tank-house that has lost integrity due to the extensive loss of historic materials and the addition of contemporary materials, and a garage that is not 50 years old, an although the San Jose criteria does not specify an age threshold, the building was constructed for domestic vehicles and storage and is not associated with the fruit ranch operations nor is it architecturally distinctive.

**B 10 Significance Continued:**

The Vincent Nola family vehicle/storage Sheds on parcel 254-15-064 are barely 50 years old, but are not distinctive vernacular architecture and have been enlarged and altered for storage. Much of the shed is wood from former barns or sheds and does create fine construction or maintain the association within the period of significance for the prune ranch operations. Extensive deterioration and structural failures are also observable indicating poor quality construction.

## California Register- Eligibility Statement

The criteria for listing historical resources in the California Register are consistent with those developed by the National Park Service for listing resources in the National Register of Historic Places, but have been modified for state use in order to include a range of historical resources which better reflect the history of California. An historical resource must be significant at the local, state or national level under one or more of the following four criteria;

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4. It has yielded, or is likely to yield, information important to the prehistory or history of the local area, California, or the nations.

In addition, the resource must retain enough of its historic character or appearance to be recognizable as a historic property, and to convey the reason for its significance.

Architectural and historic integrity are determined by the presence of seven attributes, location, design, setting, materials, workmanship, feeling and association which together form the ability of a property to convey its significance (National Register Bulletin – How to Apply the National Register Criteria for Evaluation; page 44-47). The buildings retain integrity of location, design, materials, and workmanship however, the attributes of setting and feeling that were present when there was substantial orchard acreage associated with the buildings, are diminished by the surrounding contemporary residential development and the loss of orchard acreage. Because they meet the basic standard of integrity, the buildings were evaluated under the remaining criteria the California Register for Historic Resources.

Vincent Nola Ranch House 13100 Berryessa Road (APN 254-15-032, 064) c. 1920 house, water tower structure c.1920 and 1968 garage. The Water tower structure has lost integrity and the 1968 garage is not over fifty years old. Buildings less than fifty years old of those that have lost integrity are not considered eligible for listing in the California Register of Historic Places. The Vincent Nola house is the only building over fifty years old that retains integrity.

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.

   The house is associated with the Nola Fruit Ranch and the Suni Brand of dried fruit that was part of, although not a significant contributor to, the important agricultural economy of the Santa Clara Valley. Constructed in 1920, the house appears at the start of the Inter-War era 1918-1945, but is

**B 10 Significance Continued:**

more associated with the end of the Horticultural Expansion Era that lasted from 1870 until 1918. The Nola family operated a relatively small fruit ranch at the largest less than 80 acres, and is typical of many immigrants who came to the Santa Clara Valley after the turn of the century and were associated with raising fruit for the fruit processing industry. Like many others, they dried fruit on the ranch and sold it to brokers and at local outlets, including a roadside fruit stand. The house, designed by local architect Charles McKenzie is a Craftsman Bungalow that was constructed also at the end of the period when McKenzie is noted for using the Craftsman design, of which many fine examples from the prime period exist in San Jose. The building was present during the operation of the fruit ranch however it does not appear to have been more than the residence of the family and does not have definitive characteristics that would convey an additional association to that industry. Located on the site of the Nola Fruit Ranch, it is one of several family houses from the first quarter of the twentieth-century that remain in the Berryessa District and hearken from the active fruit ranch period. The building appears to qualify for listing in the California Register of Historical Resources for the design and association with Charles McKenzie, a prominent and prolific local architect primarily known for his urban setting homes and building.

1. *It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.*

   The Nola family fruit ranch is primarily associated with the Horticultural Era, and was typical of family ranches that were part of the 1870-1918 era. The Nola prune ranch – later a fresh fruit ranch was typical of many prune ranches but does not appear to have innovated or been associated with significant events that advanced orchard production. It was not individually associated with significant contributions to the broad pattern of local regional history or the heritage of California.

2. *It is associated with the lives of persons important to local, California, or national history;*

   The Vincent Nola house is associated with Charles McKenzie a prolific and important architect in San Jose. The design is one of his many bungalow styles and appears to have been produced past the time he preferred the Craftsman Bungalow style. This is the only association with a person important in the history of San Jose and not important in the development of the City or County. Later buildings on the parcel are associated only with the family and not with persons important to local, California or national history. The original owners, Vincent and Isabelle Nola appear to have spent their energy in developing a small fruit ranch and in raising their family. There is no evidence that they or their family members who lived in the house were involved in significant historical developments in San Jose, California or the nation.

3 *It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values;*

   The house is a Craftsman Bungalow style, typical of those designed by San Jose architect Charles McKenzie in the period 1911-1915. This house appears a "production design" as the drawings were not specific in identifying the owner or location. Constructed in 1920, some five years after the peak of McKenzie's Craftsman Bungalow period, it is not know when the drawings were created. Although not an outstanding example of the architect's work or of the style, it is a good

**B 10: .Significance cont**

example and one of the few outside the urban core. The construction, including the redesigned and constructed front porch and rear kitchen area remodeling is good quality, but not unusual or exemplary. The remodeling work is compatible with the original architectural design.

The other building on the parcel that is over 50 years old is the water tank-house. This building has lost integrity due to the removal of siding and the tank. The frame is now covered with contemporary materials and is not eligible for the CRHR.

4. *It has yielded, or is likely to yield, information important to the prehistory or history of the local area, California, or the nations.*

The site has a low probability to yield information important to the prehistory of history due to extensive agricultural use and construction.

National Register of Historic Places – Standards (Criteria)
The National Register of Historic Places has established standards for evaluating the significance of resources that are important in the heritage of the nation. Historic resources may be considered important at the local level, state level or national level. To apply the standards the resource must be considered within significant historical contexts. The standards, age and integrity statements follow;

1. *A property must be fifty years old*
2. *The resource must retain architectural and historical integrity.*
3. *The resources must meet at least one of the following criteria*
   a. *are associated with events that have made a significant contribution to the broad patterns of our history; or*
   b. *are associated with the lives of persons significant in our past; or*
   c. *embody the distinctive characteristics of a type, period, or method that possess high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; or*
   d. *have yielded, or may be likely to yield, information important in prehistory or history.*

The Nola House and water-tank house are over 50 years old.
Integrity: Of the seven aspects of integrity the overall site is diminished in feeling and in setting due to the loss of the significance defining feature of a fruit ranch, the orchard and surrounding contemporary residential development. The water-tank house has lost integrity due to the extensive loss of historic materials, including the water-tank, and extensive remodeling with contemporary materials. Considering that the basic elements of architectural integrity of the house are present, it was evaluated for significance.

*3.a. are associated with events that have made a significant contribution to the broad patterns of our history;*

The home of an immigrant couple who operated a relatively small fruit ranch, the records do not show any significant contributions to agricultural production or innovative processing of fruit. The house is not associated with events that have made a significant contribution to the broad patterns of out history.

**B 10 Significance- continued**

*3.b. are associated with the lives of persons significant in our past*

The Vincent Nola family was a hard working ranch family, but are not persons individually significant in our past.

*3.c. embody the distinctive characteristics of a type, period, or method that possess high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction.*

The Vincent Nola house was designed by a local architect of note who was prolific in producing a large body of work. His work is divided into design styles that were popular at the time and partnerships. When this house was constructed in 1920, it was more than five years after the bulk of McKenzie's Craftsman Bungalow designs and a period of revival designs. This house does not represent the high artistic values associated with the Craftsman Bungalow style when compared to the many fine examples that exist in San Jose including many designed by Charles McKenzie.

*3.d. have yielded, or may be likely to yield, information important in prehistory or history*

The site has been substantially disturbed by the former orchard activity and development and demolition of several buildings. It is unlikely that the site would yield information important in prehistory or history.

Based upon the research and existing buildings, the properties do not posses significance, as defined under the four criteria of the National Register of Historic Places, and are thus not eligible for listing in the National Register of Historic Places.

Impacts of the proposed project

The proposed project is to develop new residential buildings and a commercial area on the site. This proposed use may cause a substantial; adverse impact to the Vincent Nola House, a property eligible for listing in the California Register of Historic Resources, and a Structure of Merit as determined under the San Jose Historic Preservation Criteria..

The California Environmental Quality Act (CEQA) defines historic resources as those that are eligible for listing in the California Register or the National Register of Historic Places. The City of San Jose considers a resource listed as a Candidate City Landmark to be eligible for the California Register.

The Vincent and Isabelle Nola House at 13100 Berryessa Road, appears eligible for the California Register of Historic Resources under Criteria 3. The other buildings do not to qualify for the California Register of Historic Places.

Buildings that are eligible for listing in the California Register of Historic Resources are significant and require consideration under the California Environmental Quality Act if they are proposed for alteration or demolition and mitigation if the action proposed creates a "substantial adverse change"

**B10 Significance Continued:**

The alteration or removal of buildings that are not eligible for listing in the California Register of Historic Resources does not create a "substantial adverse change" therefore the removal is not considered an impact under the CEQA Guidelines. No mitigation is required for actions to these buildings.

None of the buildings exhibit significance or integrity that is required to qualify for listing in the National Register of Historic Places.

Relocating the Vincent Nola house to a compatible site and rehabilitating it in conformance with the Secretary of the Interior's Standards would mitigate the adverse impact under CEQA to less than significant

Any new development should retain a connection to the history of the area with names or other identifying elements.

**B 12 References Consulted:**

City of San Jose; Glory Ann Laffy, *Historic Resources Inventory Survey Phase II*; Archives and Architecture, November 17, 1992 as amended and updated

City Building Permits 1998-2007

Sanborn Map Company, *FIRE INSURANCE MAPS OF SAN JOSE CALIFORNIA; 1884; 1889; 1891,1915, 1915 updated to 1930,* 1915-1961 (not shown on any maps)

Santa Clara County Official Records: County Recorder's Office:

Santa Clara County Permit and Building Records; 1928-1998

**Published Works - History; San Jose and Santa Clara County**

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Espanola, George, Cottages, Flats, Buildings & Bungalows-102 Designs from Wolfe & McKenzie 1907. Bay & Valley Publishers, San Jose CA, 2004.

Foote, H. S., Pen Pictures From the Garden of the World. The Lewis Publishing Co., Chicago, Ill 1888

**B 12 References Consulted:**

Guinn, J.M. History of the State of California and Biographical Record of the Coast Counties, California, Chapman Publishing Company, Chicago, 1904

Hall, Frederic, History of San Jose and Surroundings, A.L. Bancroft & Co.,San Francisco, 1871

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Jacobson, Y. Passing Farms Enduring Values-California's Santa Clara V*alley*, W. Kaufmann, Los Altos, CA 1984

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Santa Clara County Historical Heritage Commission, Santa Clara County Heritage Resource Inventory, San Jose, CA, 1979

Sawyer, Eugene T., History of Santa Clara County, Historic Records Company, Los Angles CA 1922

Thomson & West, 1876 Historical Atlas of Santa Clara Co. California, (reprint) Smith McKay, San Jose, 1973

**Periodicals**:

Hubka, Thomas C.,"The Americanization of the Barn", National Building Museum; Spring 1994

San Jose Mercury News; Mike Cassidy, "End To Cherry Season Evokes Sweet Memories Of S.J." June 24, 2001, page 1A

San Jose Mercury News; Death Notice; Josephine Nola, December 31, 2002

San Jose Mercury News; Death Notice; Grace Rosalie Nola, December 28, 2003

San Jose Mercury News; Obituary; "A Way of Life Passes in Valley, At Age 98, She was last Great Boss of the Orchards San Jose's Grace Nola Lived And Died In A Place Unknown To Us, And That Is A Reason To Mourn", January 17, 2004 page 1A

**B 12 References Consulted:**

## Published Works - Architecture

Kauffman, H.J. The American Farmhouse, Bonanza Books, New York, 1988

McAlester, V & L. *A Field Guide to American Houses*, A. Knopf, New York,1985

Rifkind, C. *A Field Guide to American Architecture*, Times Mirror, New York 1980

Sloane, Eric, An Age Of Barns, Ballantine Books, New York1967

Thollander, Earl, Barns of California, A Collection by Earl Thollander, California Historical Society, San Francisco, 1974

Whiffin, Marcus, American Architecture Since 1780, A Guide to Styles, *M.I.T.Press, Cambridge Mass. 1981*

## Repositories Consulted

Martin Luther King Jr. Memorial Library, San Jose Main Library, California Room.
Santa Clara County Recorder's Office, Official Records and Deeds
US Census and Citizenship records- Internet repository
Pacific Aerial Survey; Aerial photographs of the site, 1954-1990

## Interviews:

George Espinola, email September 29, 2007 regarding the work of Charles McKenzie

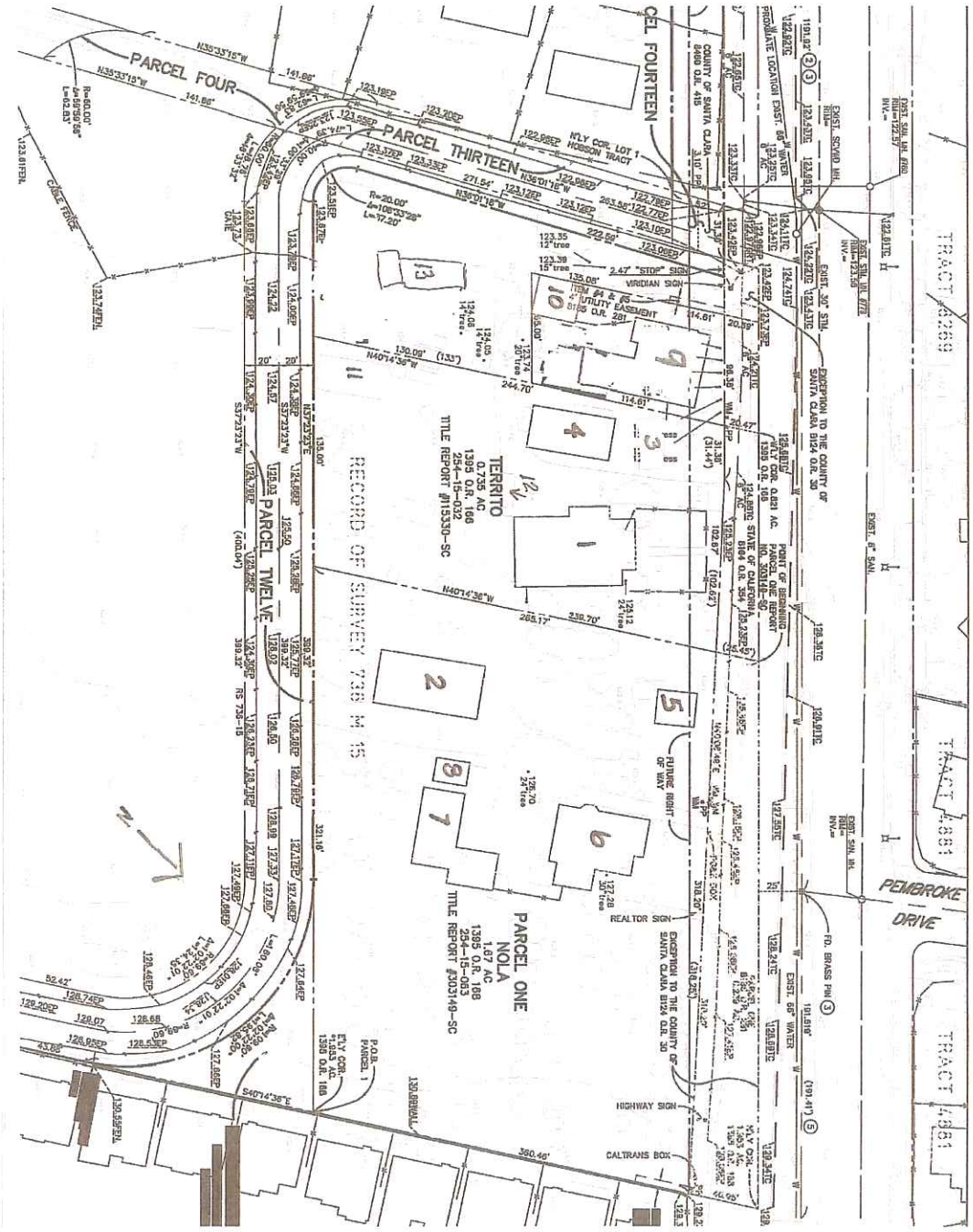
Dr. Vincent F. Nola; regarding the family history and fruit ranching; August 20 and August 28, 2005, 10/11/,07 regarding the early buildings, barns and how the families lived prior to constructing the houses.

Charles Territo, Phone interview, regarding the construction of the buildings 10/12/07

Joseph Territo, on site, regarding the buildings and family history, September 17, 2007; Phone conversation September 18, 2007

| State of California The Resources Agency<br>DEPARTMENT OF PARKS AND RECREATION<br>**SKETCH MAP** | Primary #<br>HRI#<br>Trinomial |
|---|---|

**Page** 14 **of** 14 ***Resource Name or #** (Assigned by recorder) 13100 Berryessa Rd. San Jose
***Drawn by:** Pulte Homes/Urban Programmers ***Date of map:** 10/10/07




Vincent Nola House (Territo) 13100 Berryessa Rd.

#1 1920 House

#3 Water-tank house

#4 Garage c.1968

#11 Open Shed c. 1959

#12 garage c. 1930

**NOTE: Include bar scale and north arrow. Not to scale**

Photo# 1
Front porch
Camera
Facing SE
Date:
10/11/07

Photo #2
Front façade
Camera
facing: SE
Date:0/11/07

Photo# 3
West side porch (remodeled)
Camera Facing E
Date: 9/05/07

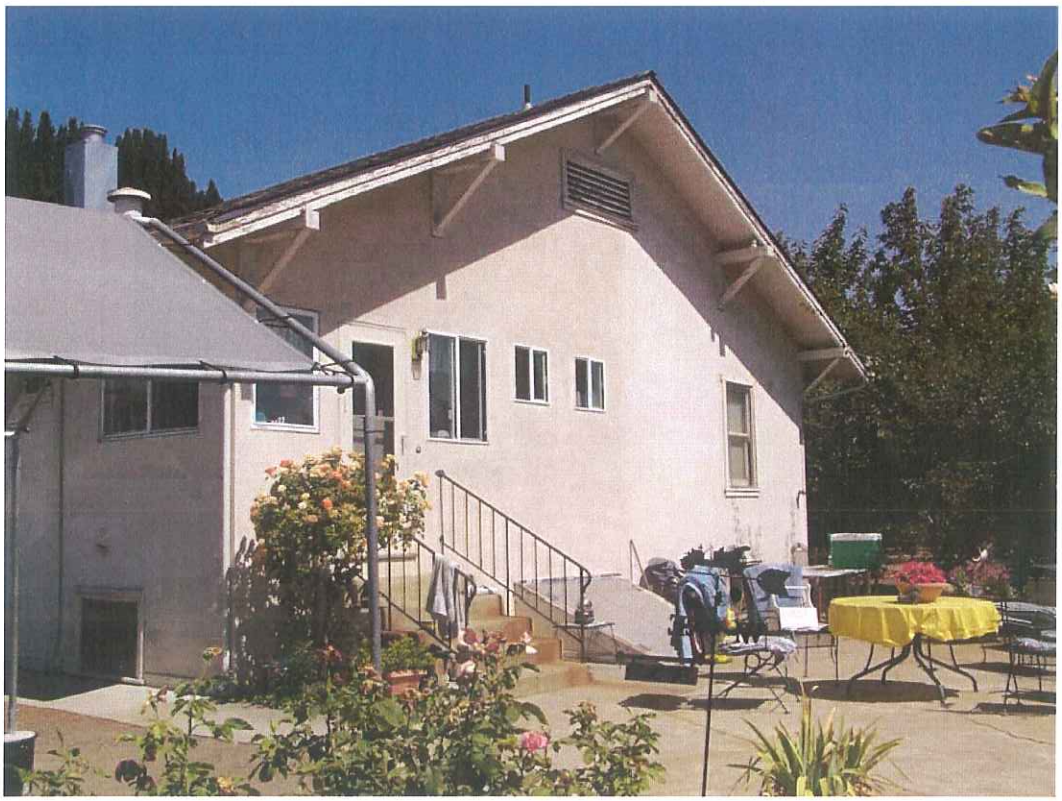


Photo #4
Rear façade (altered/re-modeled)
Camera facing: NE
Date:9/01/05

Photo# 5
Garage
East facade
Camera
Facing NW
Date:
9/05/05

Photo #6
Water Tank-house(altered/re-modeled)
Camera facing: NW
Date:9/01/07

Photo# 7
Shed APN-254-15-164
Recycled wood from barn.
East facade
Camera Facing NW
Date: 9/05/07

Photo # 8
Shed N end
Recycled wood from barn.
Camera facing: SE
Date:9/01/07

# HISTORIC EVALUATION SHEET

HISTORIC RESOURCE NAME: Vincent & Isabella Nola House
HISTORIC RESOURCE ADDRESS: 13100 Berryessa Road, San Jose
(APN 254-15-032) Building # 1

A. VISUAL QUALIFICATIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | EXTERIOR Identifiable design value | E | VG | [G] | FP |
| 2 | STYLE California Bungalow | E | VG | [G] | FP |
| 3 | DESIGNER Charles McKenzie | E | [VG] | G | FP |
| 4 | CONSTRUCTION - Common materials and methods | E | VG | G | [FP] |
| 5 | SUPPORTIVE ELEMENTS Fruit Trees and ancillary buildings | E | VG | [G] | FP |

B. HISTORY/ASSOCIATION

| | | | | | |
|---|---|---|---|---|---|
| 6 | PERSON/ORGANIZATION Vincent Nola | E | VG | G | [FP] |
| 7 | EVENT none of individual significance | E | VG | G | [FP] |
| 8 | PATTERNS Horticultural Era- Immigrant developed Fruit ranch | [E] | VG | G | FP |
| 9 | AGE c.1920 | E | VG | [G] | FP |

C. ENVIRONMENTAL/CONTEXT

| | | | | | |
|---|---|---|---|---|---|
| 10 | CONTINUITY Not located in an area of Prime Importance | E | VG | G | [FP] |
| 11 | SETTING not compatible in style or setting with other residential development | E | VG | G | [FP] |
| 12 | FAMILIARITY large house and paved area with trees around the site known more for the fruit stand in front | E | VG | [G] | FP |

D. INTEGRITY

| | | | | | |
|---|---|---|---|---|---|
| 13 | CONDITION surface wear | E | [VG] | G | FP |
| 14 | EXTERIOR ALTERATIONS porch addition | E | [VG] | G | FP |
| 15 | STRUCTURAL REMOVALS | [E] | VG | G | FP |
| 16 | SITE | [E] | VG | G | FP |

E. REVERSIBILITY

| | | | | | |
|---|---|---|---|---|---|
| 17 | EXTERIOR primarily deffered maintenance items | [E] | VG | G | FP |

F. ADDITIONAL CONSIDERATIONS/BONUS POINTS

| | | | | | |
|---|---|---|---|---|---|
| 18 | INTERIOR VISUAL | E | VG | [G] | FP |
| 19 | INTERIOR HISTORY | E | VG | G | [FP] |
| 20 | INTERIOR ALTERATIONS | E | [VG] | G | FP |
| 21 | INTERIOR REVERSIBILITY | E | [VG] | G | FP |
| 22 | NATIONAL OR CALIFORNIA REGISTER | E | [VG] | G | FP |

REVIEWED BY: Bonnie Bamburg

DATE: September 26, 2007

# EVALUATION TALLY SHEET
# (PART 1)

HISTORIC RESOURCE ADDRESS: 13100 Berryessa Road, San Jose

| | | | E | VG | G | FP | |
|---|---|---|---|---|---|---|---|
| A | | VISUAL QUALITY/DESIGN | | | | | |
| | 1 | EXTERIOR | 16 | 12 | 6 | 0 | 6 |
| | 2 | STYLE | 10 | 8 | 4 | 0 | 4 |
| | 3 | DESIGNER | 6 | 4 | 2 | 0 | 4 |
| | 4 | CONSTRUCTION | 10 | 8 | 4 | 0 | 0 |
| | 5 | SUPPORTIVE ELEMENTS | 8 | 6 | 3 | 0 | 3 |
| | | | | | Subtotal: | | 17 |
| B. | | HISTORY/ASSOCIATION | | | | | |
| | 6 | PERSON/ORGANIZATION | 20 | 15 | 7 | 0 | 0 |
| | 7 | EVENT | 20 | 15 | 7 | 0 | 0 |
| | 8 | PATTERNS | 12 | 9 | 5 | 0 | 12 |
| | 9 | AGE | 8 | 6 | 3 | 0 | 3 |
| | | | | | Subtotal: | | 15 |
| C. | | ENVIRONMENTAL/ CONTEXT | | | | | |
| | 10 | CONTINUITY | 8 | 6 | 3 | 0 | 0 |
| | 11 | SETTING | 6 | 4 | 2 | 0 | 0 |
| | 12 | FAMILIARITY | 10 | 8 | 4 | 0 | 4 |
| | | | | | SUBTOTAL: | | 4 |
| | | | A & C SUBTOTAL: | | | | 21 |
| | | | B SUBTOTAL: | | | | 15 |
| | | | PRELIMINARY TOTAL: (sum of A. B. & C.) | | | | 36 |

# EVALUATION TALLY SHEET
# (PART II)

HISTORIC RESOURCE ADDRESS: 13100 Berryessa Road, San Jose

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| D. | INTEGRITY | E | VG | G | FP | | | | |
| | 13 CONDITION | | 0.03 | 0.05 | 0.1 | 36 X | 0.03 = | | 1.08 |
| | SUBTOTAL A,B&C | | | | | | | | |
| | 14 EXTERIOR ALTERATIONS | | 0.05 | 0.1 | 0.2 | 21 X | 0.05 = | | 1.05 |
| | SUBTOTAL A&C | | | | | | | | |
| | | | 0.03 | 0.05 | 0.1 | 15 X | 0.03 = | | 0.45 |
| | FROM B | | | | | | | | |
| | 15 STRUCTURAL REMOVALS | | 0.2 | 0.3 | 0.4 | 21 X | 0 = | | 0 |
| | SUBTOTAL: A & C | | | | | | | | |
| | | | 0.1 | 0.2 | 0.4 | 15 X | 0 = | | 0 |
| | FROM B | | | | | | | | |
| | 16 SITE | | 0.1 | 0.2 | 0.4 | 15 X | 0 = | | 0 |
| | FROM B | | | | | | | | |
| | | INTEGRITY DEDUCTIONS SUBTOTAL | | | | | | | 2.58 |
| | | ADJUSTED SUBTOTAL: | | | | 36 - | 2.58 | | 33.42 |
| | | (Preliminary Total minus Integrity Deductions) | | | | | | | |
| | | VALUE | | | | | | | |
| E | REVERSIBILITY | E | VG | G | FP | | | | |
| | 17 EXTERIOR | 3 | 3 | 2 | 2 | | | | 3 |
| | | | | Total: | | 3 | | | |
| F. | ADDITIONAL CONSIDERATIONS BONUS POINTS | | | | | | | | |
| | 18 INTERIOR HISTORY ASSOCIATION | 3 | 3 | 1 | 0 | 0 | | | |
| | 19 INTERIOR VISUAL QUALITY | 3 | 3 | 1 | 0 | 0 | | | |
| | 20 INTERIOR ALTERATIONS | 4 | 4 | 3 | 1 | 4 | | | |
| | 21 INTERIOR REVERSIBILITY | 4 | 4 | 2 | 0 | 4 | | | |
| | 22 NATIONAL OR CALIFORNIA REGISTER | 20 | 15 | 10 | 0 | 15 | | | |
| | | BONUS POINTS SUBTOTAL: | | | | | | | 23 |
| | | ADJUSTED TOTAL: | | | | | | | 59.42 |

# HISTORIC EVALUATION SHEET

HISTORIC RESOURCE NAME: V. Nola (Territo) Water tank tower
HISTORIC RESOURCE ADDRESS: APN 254-15-032( 13100 Berryessa Road), San Jose
Water tower frame with contemproary siding Structure # 3

A. VISUAL QUALIFICATIONS

| | | | | | |
|---|---|---|---|---|---|
| 1 | EXTERIOR remodeled tank tower-no design value | E | VG | G | [FP] |
| 2 | STYLE utilitarian frame | E | VG | G | [FP] |
| 3 | DESIGNER | E | VG | G | [FP] |
| 4 | CONSTRUCTION - Nola/Territo Family -recycled common materials | E | VG | [G] | FP |
| 5 | SUPPORTIVE ELEMENTS residential buildings and sheds | E | VG | [G] | FP |

B. HISTORY/ASSOCIATION

| | | | | | |
|---|---|---|---|---|---|
| 6 | PERSON/ORGANIZATION | E | VG | G | [FP] |
| 7 | EVENT | E | VG | G | [FP] |
| 8 | PATTERNS ancillary to ranch use (1920-1960) | E | [VG] | G | FP |
| 9 | AGE c.1920 tower frame | E | VG | [G] | FP |

C. ENVIRONMENTAL/CONTEXT

| | | | | | |
|---|---|---|---|---|---|
| 10 | CONTINUITY Not located in an area of Prime Importance | E | VG | G | [FP] |
| 11 | SETTING not compatible with residential development in the area | E | VG | G | [FP] |
| 12 | FAMILIARITY not particularly familiar | E | VG | [G] | FP |

D. INTEGRITY

| | | | | | |
|---|---|---|---|---|---|
| 13 | CONDITION deteriorated | E | VG | G | [FP] |
| 14 | EXTERIOR ALTERATIONS removal of tank and siding | E | VG | [G] | FP |
| 15 | STRUCTURAL REMOVALS tank | E | [VG] | G | FP |
| 16 | SITE constructed on site | [E] | VG | G | FP |

E. REVERSIBILITY

| | | | | | |
|---|---|---|---|---|---|
| 17 | EXTERIOR extensive demolition or severe deterioration | E | VG | G | [FP] |

F. ADDITIONAL CONSIDERATIONS/BONUS POINTS

| | | | | | |
|---|---|---|---|---|---|
| 18 | INTERIOR VISUAL | E | VG | G | [FP] |
| 19 | INTERIOR HISTORY Maintenance areas for ranch operations | E | VG | G | [FP] |
| 20 | INTERIOR ALTERATIONS Substantial alterations and deterioration | E | VG | G | [FP] |
| 21 | INTERIOR REVERSIBILITY very difficult - no estimate | E | VG | G | [FP] |
| 22 | NATIONAL OR CALIFORNIA REGISTER | E | VG | G | [FP] |

REVIEWED BY: Bonnie Bamburg

DATE: September 26, 2007

# EVALUATION TALLY SHEET
# (PART 1)

HISTORIC RESOURCE ADDRESS: APN 254-15-032( 13100 Berryessa Road), San Jose

| | | | E | VG | G | FP | |
|---|---|---|---|---|---|---|---|
| A | VISUAL QUALITY/DESIGN | | | | | | |
| | 1 | EXTERIOR | 16 | 12 | 6 | 0 | 0 |
| | 2 | STYLE | 10 | 8 | 4 | 0 | 0 |
| | 3 | DESIGNER | 6 | 4 | 2 | 0 | 0 |
| | 4 | CONSTRUCTION | 10 | 8 | 4 | 0 | 4 |
| | 5 | SUPPORTIVE ELEMENTS | 8 | 6 | 3 | 0 | 3 |
| | | | | | Subtotal: | | 7 |
| B. | HISTORY/ASSOCIATION | | | | | | |
| | 6 | PERSON/ORGANIZATION | 20 | 15 | 7 | 0 | 0 |
| | 7 | EVENT | 20 | 15 | 7 | 0 | 0 |
| | 8 | PATTERNS | 12 | 9 | 5 | 0 | 9 |
| | 9 | AGE | 8 | 6 | 3 | 0 | 3 |
| | | | | | Subtotal: | | 12 |
| C. | ENVIRONMENTAL/ CONTEXT | | | | | | |
| | 10 | CONTINUITY | 8 | 6 | 3 | 0 | 0 |
| | 11 | SETTING | 6 | 4 | 2 | 0 | 0 |
| | 12 | FAMILIARITY | 10 | 8 | 4 | 0 | 4 |
| | | | | | SUBTOTAL: | | 4 |
| | | | A & C SUBTOTAL: | | | | 11 |
| | | | B SUBTOTAL: | | | | 12 |
| | | | PRELIMINARY TOTAL: (sum of A. B. & C.) | | | | 23 |

# EVALUATION TALLY SHEET
# (PART II)

HISTORIC RESOURCE ADDRESS: APN 254-15-032( 13100 Berryessa Road), San Jose

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| D. | INTEGRITY | E | VG | G | FP | | | | |
| | 13 CONDITION | | 0.03 | 0.05 | 0.1 | 23 X | 0.1 = | | 2.3 |
| | | SUBTOTAL A,B&C | | | | | | | |
| | 14 EXTERIOR ALTERATIONS | | 0.05 | 0.1 | 0.2 | 11 X | 0.1 = | | 1.1 |
| | | SUBTOTAL A&C | | | | | | | |
| | | | 0.03 | 0.05 | 0.1 | 12 X | 0.05 = | | 0.6 |
| | | FROM B | | | | | | | |
| | 15 STRUCTURAL REMOVALS | | 0.2 | 0.3 | 0.4 | 11 X | 0.2 = | | 2.2 |
| | | SUBTOTAL: A & C | | | | | | | |
| | | | 0.1 | 0.2 | 0.4 | 12 X | 0.1 = | | 1.2 |
| | | FROM B | | | | | | | |
| | 16 SITE | | 0.1 | 0.2 | 0.4 | 12 X | 0 = | | 0 |
| | | FROM B | | | | | | | |
| | | INTEGRITY DEDUCTIONS SUBTOTAL | | | | | | | 7.4 |
| | | ADJUSTED SUBTOTAL: | | | | 23 - | 7.4 | | 15.6 |
| | | (Preliminary Total minus Integrity Deductions) | | | | | | | |
| | | VALUE | | | | | | | |
| E | REVERSIBILITY | E | VG | G | FP | | | | |
| | 17 EXTERIOR | 3 | 3 | 2 | 2 | | | | 2 |
| | | | | Total: | | 2 | | | |
| F. | ADDITIONAL CONSIDERATIONS BONUS POINTS | | | | | | | | |
| | 18 INTERIOR HISTORY ASSOCIATION | 3 | 3 | 1 | 0 | 0 | | | |
| | 19 INTERIOR VISUAL QUALITY | 3 | 3 | 1 | 0 | 0 | | | |
| | 20 INTERIOR ALTERATIONS | 4 | 4 | 3 | 1 | 0 | | | |
| | 21 INTERIOR REVERSIBILITY | 4 | 4 | 2 | 0 | 0 | | | |
| | 22 NATIONAL OR CALIFORNIA REGISTER | 20 | 15 | 10 | 0 | 0 | | | |
| | | BONUS POINTS SUBTOTAL: | | | | | | | 0 |
| | | ADJUSTED TOTAL: | | | | | | | 17.6 |

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
**PRIMARY RECORD**

Primary #
HRI #
Trinomial
**NRHP Status Code** NA

Other Listings _____
Review Code _____ Reviewer _____ Date

 ***Resource Name or #:** (Assigned by recorder)

**P1. Other Identifier:**

***P2. Location: Not for Publication** X **Unrestricted**

***a. County** Santa Clara **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** San Jose East **Date** 1980 **T** __; **R** __; __ **3 of** __ **3 of Sec** __; _____ **B.M.**

c. Address 13060 City San Jose Zip 95133

d. UTM: (Give more than one for large and/or linear resources) Zone 10, 600543 mE/ 41 37582 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN 254-15-031

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The house is not eligible for the National Register or the California Register of Historic Resources because it lacks significance under the criteria.

Located facing Berryessa Road, the house was constructed for Vincent Genco on property that had been part of the estate of Vincent Nola who established a fruit orchard to the south in 1912. The house is on the western most parcel, of what had been the Nola Orchards, between new single-family development and vacant lands (formerly orchards) to the west and south.

The house is a c. 1950 mid-century California Ranch style, with a hipped tile roof over exposed eaves exhibiting straight cut rafter tails. The front façade, a typical low concrete porch with a shed roof, is supported on square wood posts and shades the entry and a large pane tripartite picture window. The remaining wall of the front façade has a second tripartite window. ( Continued on page 3)

***P3b. Resource Attributes:** (List attributes and codes) HP 2 Single family detached house

**P4. Resources Present:** X Building Structure Object Site District Element of District Other (Isolates, etc.)

**P5b. Description of Photo:** (view, date, accession #) View N Front Façade, 9/09/, 2007

***P6. Date Constructed/Age and Source:** X Historic Prehistoric Both
Constructed: 1950 Family records, City directories

***P7. Owner and Address:**
Vincent M. & Jane P. Genco Trust
13060 Barryessa Rd, San Jose CA

***P8. Recorded by:** (Name, affiliation, and address)
Bonnie Bamburg
Urban Programmers
10710 Ridgeview Avenue
San Jose CA 95127

***P9. Date Recorded:** 1/17/2008

***P10. Survey Type:** (Describe) Project Specific

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") None

***Attachments:** NONE Location Map Continuation Sheet X Building, Structure, and Object Record
Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
Artifact Record Photograph Record Other (List):

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HRI#

# BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code NA

Page 2 of 4 *Resource Name or # (Assigned by recorder), 13100 Berryessa Rd San Jose

B1. Historic Name: Vincent Genco Jr. House

B2. Common Name: Genco House

B3. Original Use: Residential-single family B4. Present Use: Residential single family

*B5. Architectural Style: Mid-century (Modern) Ranch

*B6. Construction History: (Construction date, alterations, and date of alterations)

Constructed 1950

*B7. Moved? X No Yes Unknown Date: _____ Original Location:

*B8. Related Features:

garage on site - ancillary buildings on other parcels - not significant, most not 50 years old

B9a. Architect: none b. Builder:

*B10. Significance: Theme Residential Architecture Area San Jose

Period of Significance 1945-1991 Property Type house Applicable Criteria NA (Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The house does not appear eligible for listing in the National Register of Historic Places or the California Register of Historic Resources because it does not meet the criteria of significance. The house received an adjusted rate of 24.26 (non-significant) under the San Jose Historic Evaluation Tally.

The Vincent Genco house was constructed in 1950, as a family residence adjacent to the Nola Fruit Ranch for the grandson of fruit rancher Vincent Nola. The era of significance is the Industrialization Era 1945 - 1991, the period 1950-1976 with the theme of residential architecture. The 1950's was after the Santa Clara Valley experienced significantly diminished markets for locally grown fruit and family fruit ranches were restructuring to lesser production and more fresh fruit distribution. The historical context is the post WWII period when the population of San Jose was dramatically increased and the need for new houses pushed their development into the former fruit ranches, particularly along major connector streets.

The building is an example of the architectural style known as Mid-century Ranch or Modern Ranch. The style originated in California loosely adapted from the Craftsman design with reverence to the early California rancho houses, to became the dominate style during the 1950's. Typical of the style, the (Continued page 3)

B11. Additional Resource Attributes: (List attributes and codes) HP 4 Ancillary Buildings, HP 33 Ranch Buildings

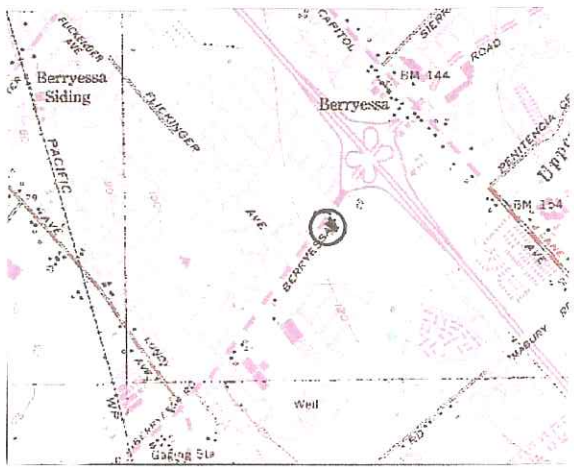
*B12. References: Arbuckle, C., Clyde Arbuckle's History of San Jose, 1984, aerial photographs - See Report

B13. Remarks:

*B14. Evaluator: Bonnie Bamburg

*Date of Evaluation: 10/23/07

(This space reserved for official comments.)



P3.Description cont

The concrete floored porch is almost hidden by large Italian cypress trees. A decorative low brick element extends from the front façade around to the sides where it stops in approximately four feet. Above the decorative brick, the walls are smooth stucco. The west façade is punctuated with three windows spaced the length of the façade. The rear- south façade projects to the rear and, as the east façade is flat stucco walls with casement or single-hung windows. A double car garage in the same style is behind the house. Landscaping is minimal, flowers along the side of the house; however, Italian cypress trees hide the front façade. The majority of the area around the house is hardscape or paving. The house is located with the front portion extending into the Berryessa Road right of way.

B10) Significance Continued.

Genco house has a sprawling feeling from the front, with a long façade that includes a recessed porch where the roof extends to cover the concrete porch and is supported by simple corner posts. Other stylistic elements include the exposed rafter in the overhanging eave that is reminiscent of the Craftsman designs, and brick veneer on part of the wall. Unlike the most popular version where the garage is attached, this house has a detached double car garage to the rear. The landscaping is a contributing element with crushed colored rock and very low maintenance plants sparsely placed. This was a prevalent treatment for the modern house, not often found in rural settings. The large and overgrown trees in the front yard may have been part of early landscaping, but have exceeded the proportions of the original design concept. While representative of the ubiquitous style as constructed by builder/designers, the house is not an example of fine design, it is efficient more than "rambling" in articulation, without the finer proportions or materials of more distinctive designs provided by local architects such as William Higgins, Chester Root, Ralph Wyckoff, and Donnell Jaekle or Contractor/designers like Bob Dodge.

Evaluation:
**San Jose Historic Landmark**
The San Jose Historic Preservation Ordinance #17927, as amended, contains the criteria that were used to evaluate the property and building. The criteria are as follows.

Historical, Architectural, Cultural, Aesthetic or Engineering Interest or Value of an Historical Nature is defined as, "historical, architectural, cultural, aesthetic, or engineering interest or value of an historical nature" shall mean a quality that derives from, is based upon, or related to any of the following factors:

*1. 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;*
*2. 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;*

B10) Significance Continued.

*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.*

San Jose Historic Landmarks Commission's Evaluation for Significance establishes the following levels of significance:

| | |
|---|---|
| 67-134 | Candidate City Landmark |
| 33-66 | Structure of Merit |
| 33-66 | Contributing structure to a historic district |
| 32-0 | Non-significant |

*Criteria # 1. 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;*

*Criteria # 1:* The property is not associated with persons or events that have contributed to local, regional, state or national history, heritage or culture in a distinctive, significant or important way;

The house was constructed for and occupied by Vincent Genco, grandson of Vincent Isabelle Nola, shortly after his marriage. His parents did not live on the property that was part of Vincent Nola's estate. Members of the Genco family worked in San Jose and helped on the ranch. Vincent Genco Jr., was employed as a furniture warehouseman prior to moving to Berryessa Road. Research did not uncover any individually significant people or events associated with the house.

*Criteria #2. 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.*

*Criteria #2*: The House and garage on the property are not identified as, or associated with, a distinctive, significant or important work or vestige. The eclectic Modern Ranch style architecture does not represent high artistic work or the work of a master architect or builder, nor does it exhibit unusually excellent craftsmanship.

The San Jose Historic Evaluation Tally resulted in the Genco house and garage rating an adjusted total of 24.26 points categorized as non- significant. Properties that rate non-significant under the San Jose Historic Evaluation Tally are not eligible for listing in the National Register of Historic Places or the California Register of Historic Resources.

# HISTORIC EVALUATION SHEET

HISTORIC RESOURCE NAME: Genco house & garage
HISTORIC RESOURCE ADDRESS: 13060 Berryessa Road, San Jose

## A. VISUAL QUALIFICATIONS

| | | | | | |
|---|---|---|---|---|---|
| 1 | EXTERIOR | E | VG | [G] | FP |
| 2 | STYLE Mid-Century California Ranch | E | VG | [G] | FP |
| 3 | DESIGNER unknown | E | VG | G | [FP] |
| 4 | CONSTRUCTION common materials | E | VG | G | [FP] |
| 5 | SUPPORTIVE ELEMENTS garage - not significant | E | [VG] | G | FP |

## B. HISTORY/ASSOCIATION

| | | | | | |
|---|---|---|---|---|---|
| 6 | PERSON/ORGANIZATION | E | VG | G | [FP] |
| 7 | EVENT | E | VG | G | [FP] |
| 8 | PATTERNS constructed after eras of significance for horticultural development | E | VG | [G] | FP |
| 9 | AGE c.1950 | E | VG | G | [FP] |

## C. ENVIRONMENTAL/CONTEXT

| | | | | | |
|---|---|---|---|---|---|
| 10 | CONTINUITY Not located in an area of Prime Importance | E | VG | G | [FP] |
| 11 | SETTING compatible with other residential development | E | VG | [G] | FP |
| 12 | FAMILIARITY not particularly familiar | E | VG | G | [FP] |

## D. INTEGRITY

| | | | | | |
|---|---|---|---|---|---|
| 13 | CONDITION surface wear | E | [VG] | G | FP |
| 14 | EXTERIOR ALTERATIONS | E | [VG] | G | FP |
| 15 | STRUCTURAL REMOVALS non seen | [E] | VG | G | FP |
| 16 | SITE original location | [E] | VG | G | FP |

## E. REVERSIBILITY

| | | | | | |
|---|---|---|---|---|---|
| 17 | EXTERIOR | [E] | VG | G | FP |

## F. ADDITIONAL CONSIDERATIONS/BONUS POINTS

| | | | | | |
|---|---|---|---|---|---|
| 18 | INTERIOR VISUAL | E | VG | G | [FP] |
| 19 | INTERIOR HISTORY | E | VG | G | [FP] |
| 20 | INTERIOR ALTERATIONS | E | VG | G | [FP] |
| 21 | INTERIOR REVERSIBILITY | E | VG | G | [FP] |
| 22 | NATIONAL OR CALIFORNIA REGISTER | E | VG | G | [FP] |

REVIEWED BY: Bonnie Bamburg

DATE: September 2

26, 2007

# EVALUATION TALLY SHEET
# (PART 1)

HISTORIC RESOURCE ADDRESS: 13060 Berryessa Road, San Jose

| | | | E | VG | G | FP | |
|---|---|---|---|---|---|---|---|
| A | VISUAL QUALITY/DESIGN | | | | | | |
| | 1 | EXTERIOR | 16 | 12 | 6 | 0 | 6 |
| | 2 | STYLE | 10 | 8 | 4 | 0 | 4 |
| | 3 | DESIGNER | 6 | 4 | 2 | 0 | 0 |
| | 4 | CONSTRUCTION | 10 | 8 | 4 | 0 | 0 |
| | 5 | SUPPORTIVE ELEMENTS | 8 | 6 | 3 | 0 | 6 |
| | | | | | Subtotal: | | 16 |
| B. | HISTORY/ASSOCIATION | | | | | | |
| | 6 | PERSON/ORGANIZATION | 20 | 15 | 7 | 0 | 0 |
| | 7 | EVENT | 20 | 15 | 7 | 0 | 0 |
| | 8 | PATTERNS | 12 | 9 | 5 | 0 | 5 |
| | 9 | AGE | 8 | 6 | 3 | 0 | 0 |
| | | | | | Subtotal: | | 5 |
| C. | ENVIRONMENTAL/ CONTEXT | | | | | | |
| | 10 | CONTINUITY | 8 | 6 | 3 | 0 | 0 |
| | 11 | SETTING | 6 | 4 | 2 | 0 | 2 |
| | 12 | FAMILIARITY | 10 | 8 | 4 | 0 | 0 |
| | | | | | SUBTOTAL: | | 2 |
| | | | A & C SUBTOTAL: | | | | 18 |
| | | | B SUBTOTAL: | | | | 5 |
| | | | PRELIMINARY TOTAL: (sum of A. B. & C.) | | | | 23 |

# EVALUATION TALLY SHEET
# (PART II)

HISTORIC RESOURCE ADDRESS: 13060 Berryessa Road, San Jose

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| D. | INTEGRITY | E | VG | G | FP | | | | |
| | 13 CONDITION | | 0.03 | 0.05 | 0.1 | 23 X | 0.03 = | | 0.69 |
| | SUBTOTAL A,B&C | | | | | | | | |
| | 14 EXTERIOR ALTERATIONS | | 0.05 | 0.1 | 0.2 | 18 X | 0.05 = | | 0.9 |
| | SUBTOTAL A&C | | | | | | | | |
| | | | 0.03 | 0.05 | 0.1 | 5 X | 0.03 = | | 0.15 |
| | FROM B | | | | | | | | |
| | 15 STRUCTURAL REMOVALS | | 0.2 | 0.3 | 0.4 | 18 X | 0 = | | 0 |
| | SUBTOTAL: A & C | | | | | | | | |
| | | | 0.1 | 0.2 | 0.4 | 5 X | 0 = | | 0 |
| | FROM B | | | | | | | | |
| | 16 SITE | | 0.1 | 0.2 | 0.4 | 5 X | 0 = | | 0 |
| | FROM B | | | | | | | | |
| | | INTEGRITY DEDUCTIONS SUBTOTAL | | | | | | | 1.74 |
| | | ADJUSTED SUBTOTAL: | | | | 23 - | 1.74 | | 21.26 |
| | | (Preliminary Total minus Integrity Deductions) | | | | | | | |
| | | VALUE | | | | | | | |
| E | REVERSIBILITY | E | VG | G | FP | | | | |
| | 17 EXTERIOR | 3 | 3 | 2 | 2 | | | | 3 |
| | | | | Total: | | 3 | | | |
| F. | ADDITIONAL CONSIDERATIONS BONUS POINTS | | | | | | | | |
| | 18 INTERIOR HISTORY ASSOCIATION | 3 | 3 | 1 | 0 | 0 | | | |
| | 19 INTERIOR VISUAL QUALITY | 3 | 3 | 1 | 0 | 0 | | | |
| | 20 INTERIOR ALTERATIONS | 4 | 4 | 3 | 1 | 0 | | | |
| | 21 INTERIOR REVERSIBILITY | 4 | 4 | 2 | 0 | 0 | | | |
| | 22 NATIONAL OR CALIFORNIA REGISTER | 20 | 15 | 10 | 0 | 0 | | | |
| | | BONUS POINTS SUBTOTAL: | | | | | | | 0 |
| | | ADJUSTED TOTAL: | | | | | | | 24.26 |

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
**PRIMARY RECORD**

Primary #
HRI #
Trinomial
**NRHP Status Code** NA

Other Listings _____
Review Code _____ Reviewer _____ Date

**Page** 1 **of** 8 ***Resource Name or #:** (Assigned by recorder)

**P1. Other Identifier:**

***P2. Location: Not for Publication** X **Unrestricted**

***a. County** Santa Clara **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** San Jose East **Date** 1980 **T** __; **R** __; __ **3 of** __ **3 of Sec** __; _____ **B.M.**

c. Address 13120 Berryessa Rd City San Jose Zip 95133

d. UTM: (Give more than one for large and/or linear resources) Zone 10, 600594 mE/ 41 37628 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN 254-15-063 APN 254-25-064

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The house is not eligible for the National Register or the California Register of Historic Resources because it lacks integrity and significance under the criteria.

Located facing Berryessa Road, the house was constructed for Frank Nola on property that was part of the Nola orchard property established in 1912 by Vincent Nola his father. The house is on the eastern most parcel, of what had been the Nola Orchards, between new single-family development and vacant lands (formerly orchards) to the west and south.

The house is a single-story house in an eclectic California Bungalow style, c. 1930, constructed with a wood frame and sheathed in stucco. The hipped roof is covered in red tile above open eaves with exposed rafter tails. A full basement is evident by the occurrence of hopper windows at grade. The front façade is divided with a projecting porch extending across two-thirds of the ( Continued on page 3)

***P3b. Resource Attributes:** (List attributes and codes) HP 2 Single family detached house

**P4. Resources Present:** X Building Structure Object Site District Element of District Other (Isolates, etc.)

**P5b. Description of Photo:** (view, date, accession #) View N Front Façade, 9/09/, 2007

***P6. Date Constructed/Age and Source:** X Historic Prehistoric Both
Constructed: 1950 Family records, City directories

***P7. Owner and Address:**
Nola Trust
13120 Barryessa Rd, San Jose CA

***P8. Recorded by:** (Name, affiliation, and address)
Bonnie Bamburg
Urban Programmers
10710 Ridgeview Avenue
San Jose CA 95127

***P9. Date Recorded:** 1/17/2008

***P10. Survey Type:** (Describe) Project Specific

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") None

***Attachments:** NONE Location Map Continuation Sheet X Building, Structure, and Object Record
Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
Artifact Record Photograph Record Other (List):

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HRI#

# BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code NA

Page 2 of 8 *Resource Name or # (Assigned by recorder), 13120 Berryessa Rd San Jose

B1. Historic Name: Frank S. Nola House

B2. Common Name: Frank Nola House

B3. Original Use: Residential-single family B4. Present Use: Residential single family

*B5. Architectural Style: Eclectic Craftsman Bungalow

*B6. Construction History: (Construction date, alterations, and date of alterations)

Constructed 1929

*B7. Moved? X No Yes Unknown Date: _____ Original Location:

*B8. Related Features:

garage on site - ancillary buildings on other parcels - not significant, most not 50 years old

B9a. Architect: none b. Builder:

*B10. Significance: Theme Residential Architecture Area San Jose

Period of Significance 1919-1945 Property Type house Applicable Criteria NA (Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The house does not appear eligible for listing in the National Register of Historic Places or the California Register of Historic Resources because it does not meet the criteria of integrity or significance. The house received an adjusted total points of 33.78 a Structure of Merit under the San Jose Historic Evaluation Tally.

The house was constructed in 1929 and occupied in 1930 by Frank Nola, the son of Vincent Nola who established the prune orchard in 1912. The house is from the Inter-War Era 1919-1945, under the themes of architecture and shelter and agriculture.

The house is an eclectic Craftsman Bungalow, created by the Nola's and a local contractor. The stucco covered variant of the Craftsman style was very popular in the period 1905-1915 and less so after 1920. An efficient and economical house, well suited to the smaller lots and weather, the style was repeated on hundreds of sites within Santa Clara Valley. Compared to the remaining Craftsman houses, this is a pleasant but not outstanding example. The size and shape of the house has been considerably increased in the rear and east, although the front façade retains the basic design elements. (Continued page 3)

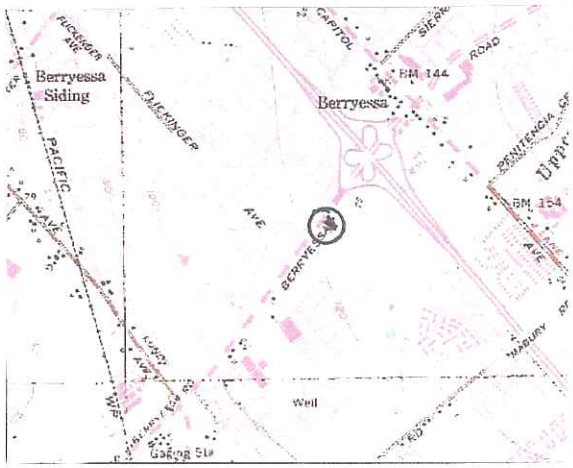
B11. Additional Resource Attributes: (List attributes and codes) HP 4 Ancillary Buildings, HP 33 Ranch Buildings

*B12. References: Arbuckle, C., Clyde Arbuckle's History of San Jose, 1984, aerial photographs - See Report

B13. Remarks:

*B14. Evaluator: Bonnie Bamburg

*Date of Evaluation: 1/17/2008




(This space reserved for official comments.)

P3.Description cont

width, the remainder in line with the main building's wall. Truncated columns at the two front corners of the porch meet the flat arch opening that is sculpted with an arrow point in the center. A half wall with a flat cap extends around the raised porch on all three sides. Six red concrete steps led to the entry door and a square single-pane window. A second window of the same type is on the other side of the façade. The west façade has a projecting bay with simple double-hung windows on each side. The remaining smaller windows are in the same style. The rear façade (east) has a back-door atop a raised porch with a metal railing. Windows punctuate the upper part of the façade and a slanted wood double door enters the basement. An addition to the east and rear facades that follows the original style was made c. 1940. The east façade is flat with the same style simple frame wood windows that are found throughout the house. The house was designed and constructed by a local contractor, believed to have been Aug R. Calvelli. When the house was expanded to the rear the same contractor did the remodeling.

Behind the house, a single car garage, in the same style as the house, is protected from the main drive by a wood lattice wall. Separated by a walkway on the other side is a three bay garage made of horizontal board siding with composition roofing. At a right angle to the garages is a c.1960's building that was used for entertainment and storage. It has metal frame windows, decorative brick on the lower part of the wall and red tile on the roof that faces into the courtyard. The surface surrounding the buildings and in the courtyard is paved. The front yard is also hardscape. Landscaping is very minimal consisting of a bush or small tree against the buildings. The buildings are in good condition, but a lack of recent maintenance is evident in the deteriorating porch columns and the need for repair and painting.

To the west behind the garages is a large horizontal board sided shed that has a pitched roof covered with metal sheets, and a concrete slab foundation/floor inscribed with the date 1962. The north façade has a large lift up door in the center of the façade, and two windows, one on each side. The east façade has a single pedestrian door and is also punctuated with windows; however, the larger of these are contemporary metal systems. Constructed in c. 1962, much of the materials used in the construction were recycled from buildings that were demolished on site. The south façade is like the north with a large opening and two windows. The shed was used for packing and sorting fruit into the 1970's and is currently used for domestic storage.

To the west, in front of the house, located in the Berryessa Road right- of-way is a small wood frame shed from which fresh fruit is sold. The roadside fruit stand was constructed in 1992.

**B10. Significance Continued.**

The Frank Nola house, was set amid orchard land to the east and large barns and sheds were between the house and the orchard on the south. Within a few years, the prune market collapsed causing the Nola's to replant the orchard. For the next three to six yeas, the orchard was in transition as the new trees, particularly cherries, matured. During this time, Frank and Grace Nola became parents to

**B10. Significance Continued.**

three sons after which the house was enlarged to accommodate the growing family. The generations worked hard to create family income from the orchard by packing and selling to brokers, direct sources and at a roadside fruit stand in order to send their sons to college. As fruit sales began softening in the 1950's, sections of orchard land around San Jose were sold to be developed with residential tracts. The Nola's began selling land for homes in the late 1970's.

Perhaps the best known of the family activity occurred after the commercial ranch ceased operations. For many years in the 1980's-90's Grace Nola, with the help of children and grandchildren sold fruit from a stand in front of the house. Although the stand sold mostly fruit that came from the Central Valley, it became a seasonal feature on Berryessa Road. In 1992, the stand was constructed as a permanent building. Viewed in 2007, the integrity of the ranch house setting has been eroded by the loss of the orchards, barns, equipment, and sheds. The house provided the residence for the Frank Nola family but was ancillary to the operations of the orchard, packing barns and selling fruit, activities that occurred in other buildings and areas of the property. The house has been removed from those elements appearing only as a semi- rural residence.

The house rated an adjusted total of 33.76 points the category of Structure of Merit. Due to the loss of integrity the house is not eligible for listing in the National Register of Historic Places or the California Register of Historic Resources.

Background and Evaluation:

Frank S. Nola, Vincent and Isabella's oldest son, married Grace Rosalie Pilotti in 1928. A year later they had a house constructed on the property adjacent to his parents (13120 Berryessa Road). The generations worked together tending the fruit ranch and in the packing business that was operated from a large barn on the property (Joseph Territo 9/17/07). The children of Frank and Grace, Vincent born in 1931, Richard born in 1934 and Gerald (Jerry) born in 1940, grew up working on the ranch as did their cousins. After the deaths of Vincent and Isabella Nola, the title to the ranch was divided among their children. Other than Frank, the children did not build their houses on the ranch, but returned to help with ranch chores and at harvest time. Daughter Mary A. married Vincent V. Genco moving to town where they owned the house at 392 N. 13th Street and worked for McKinley & Glans Furniture Company. Later they moved to N. 11th Street. Carmela Nola Territo worked as a bookkeeper residing on the ranch until she married. The fruit ranch operations extended to the next generation and Vincent Genco, Jr., the son of Mary Nola Genco and grandson of Vincent and Isabella, constructed his home on the family property in 1950 (13060 Berryessa Road).

As the residential and commercial development extended to the Berryessa district, the children and grandchildren of Vincent and Isabella Nola continued to operate the ranch even as surrounding land was sold for development. In the late 1970's, Peter Nola's ranch, one of the first to practice organic methods of ranching, was sold for residential development as was 20 acres of Frank and Grace Nola's ranch. A road was constructed across the Vincent Nola ranch property to access property to the east isolating the existing approximately 3 acres fronting on Berryessa Road. After Frank S. Nola died on June 10, 1976, Grace Nola, her children and grandchildren continued limited fresh fruit ranch operations selling from a fruit stand that was constructed each year to sell fresh cherries and pears grown on the remaining trees and augmented with fruit from the Central Valley. Frank and Grace Nola's children did not remain on the ranch. Vincent F. Nola

**B10. Significance Continued.**
help Grace Nola care for the ranch and sell the fruit at the roadside Nola Ranch fruit stand. In the early1990's, the family decided that the pieces of the "temporary" fruit stand were dilapidated and the dirt floor was difficult for Grace Nola. In 1992, the family constructed a permanent stand, with a concrete floor and sides that could be closed when not in use (V. Nola 8/20/05). In 2003, when Grace Nola died at age 98, the ranch consisted of 200 trees on two acres. The *San Jose Mercury News* carried a front page article on January 17, 2004, titled "A Way of Life Passes in the Valley"; the article commemorated the life of Grace Nola. The article describes the changes that occurred to the agricultural way of life during in the past century and the anticipated end of the Nola Orchard and roadside fruit stand. In 2004 the fruit stand was operated by family members selling cherries from the Berryessa trees, but primarily fruit from Jerry Nola's ranch in the Central Valley (V. Nola 8/20/05). As residential development surrounded the Nola property and the family was dispersed, the continued use of the Nola Ranch as agricultural land did not appear feasible. Selling the property for residential development appeared immanent and much of the equipment used to care for the ranch was sold or transferred to other locations. Fruit drying and packing equipment had been sold, transferred or destroyed years earlier.

In 2007, there are very few fruit trees on the property producing marketable fruit. Most of the orchards trees have been removed; others are dead or dying. The houses on the property continue to be occupied by family members, or are vacant. The sheds and buildings became household and hobby storage for family and friends. In the summer of 2007, family members operated the Nola Orchards fruit stand for a few weeks, again primarily offering fruit grown in the orchards of the central valley.

**Evaluation:**
**San Jose Historic Landmark**
The San Jose Historic Preservation Ordinance #17927, as amended, contains the criteria that were used to evaluate the property and building. The criteria are as follows.

Historical, Architectural, Cultural, Aesthetic or Engineering Interest or Value of an Historical Nature is defined as, "historical, architectural, cultural, aesthetic, or engineering interest or value of an historical nature" shall mean a quality that derives from, is based upon, or related to any of the following factors:
*1. 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;*
*2. 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;*
*f. That the construction materials or engineering methods used in the proposed landmark are unusual or significant or uniquely effective.*

**B10. Significance Continued.**

*Criteria # 1. 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;*

*Criteria # 1:* The property is not associated with persons or events that have contributed to local, regional, state or national history, heritage or culture in a distinctive, significant or important way;

Frank S. Nola, son of Vincent and Isabelle had the house constructed in 1930 on land owned by his father. Frank and his wife Grace worked on the ranch while raising their three sons. After most of the orchard was sold, Grace continued to tend a few fruit trees around the house and to sell fruit at a roadside stand until the year she died in 2003 at the age of 98.

The Frank S. Nola family is associated with fruit growing and packaging, an important economic industry during the period 1919-1945 and into the 1970's. They are not associated with individual events that were distinctive, significant, or important to local, regional, state or national history heritage or culture.

*Criteria #2. 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.*

*Criteria #2*: The buildings on the property are not identified as, or associated with, a distinctive, significant or important work or vestige. The eclectic California bungalow style architecture does not represent high artistic work or the work of a master architect, or builder, nor does it exhibit unusually excellent craftsmanship. The garages and game room are utilitarian wood frame structures that were not significant examples of design or workmanship. The ancillary buildings, including the 1968 packing shed are also utilitarian architecture without identifying elements. The contemporary ancillary buildings, including the 1992, fruit stand are not 50 years old.

The Frank Nola house rated 33.76 a Structure of Merit. The 1968 packing shed rated 23.2 points categorized not significant. Sheds on a separate parcel rated 13.95 categorized non-significant.

**B10. Significance Continued.**

California Register- Eligibility Statement

The criteria for listing historical resources in the California Register are consistent with those developed by the National Park Service for listing resources in the National Register of Historic Places, but have been modified for state use in order to include a range of historical resources which better reflect the history of California. An historical resource must be significant at the local, state or national level under one or more of the following four criteria;

1. *It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.*
2. *It is associated with the lives of persons important to local, California, or national history;*
3. *It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or*
4. *It has yielded, or is likely to yield, information important to the prehistory or history of the local area, California, or the nations.*

In addition, the resource must retain enough of its historic character or appearance to be recognizable as a historic property, and to convey the reason for its significance.

Architectural and historic integrity are determined by the presence of seven attributes, location, design, setting, materials, workmanship, feeling and association which together form the ability of a property to convey its significance (National Register Bulletin – How to Apply the National Register Criteria for Evaluation; page 44-47). The buildings retain the aspects of location, design, materials, and workmanship however, the attributes of setting and feeling that were present when there was substantial orchard acreage associated with the buildings, the original barn and equipment sheds that are no longer present are further diminished by the surrounding contemporary residential development and the loss of orchard acreage. Because the buildings individually meet the basic standard of integrity, the buildings were evaluated under the criteria the California Register for Historic Resources.

The parcel contains one house (c. 1929-1930 ), garages and a recreation room c.. 1970 and a former fruit packing and storage shed c. 1962, and a roadside fruit stand c. 1992-94, and a few cherry trees. The detached vehicle shed (c.1952-1995), is an amalgam of attached sheds and storage lockers and has lost integrity. Buildings less than fifty years old of those that have lost integrity are not considered eligible for listing in the California Register of Historic Places. The Frank Nola house is the only building over fifty years old that retains integrity. The cherry trees have past productive maturity and are in decline.

*1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.*

The Frank Nola house, c. 1929-30 is associated with the Nola Fruit Ranch and the Suni Brand of dried fruit that was part of, although not a significant contributor to, the agricultural economy of the Santa Clara Valley. The Nola family operated a relatively small fruit ranch and is typical of many where the second generation constructed a house on the orchard property and worked on the ranch. The building was present during the operation of the fruit ranch however it does not appear to have been more than the residence of the family and does not have definitive characteristics that would convey an additional association to the agricultural economy. Located on the site of the Nola Fruit Ranch, the

**B10. Significance Continued.**

house is also associated with Grace Nola who, with family members, sold fruit from the family fruit ranches until her death in 2003. While interesting to the Berryessa neighborhood, the association of the house to the fruit ranch industry does not appear to qualify the building for listing in the California Register of Historical Resources under Criteria 1. as exemplifying an association with events that have made a significant contribution to the broad patterns of local or regional history.

2. *It is associated with the lives of persons important to local, California, or national history;*

The Frank Nola house is not associated with persons important in the history of San Jose., California or the Nation.

3. *It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values;*

The house, 1929-1930 is a California Bungalow style, that is not a distinctive example of the style, nor is it of high artistic value. Including the rear addition, the building is good quality construction, but not unusual or exemplary craftsmanship.

4. *It has yielded, or is likely to yield, information important to the prehistory or history of the local area, California, or the nations.*

The site has a low probability to yield information important to the prehistory of history due to extensive agricultural use and both original and later construction.

The Frank Nola house and adjacent buildings do not appear to be eligible for listing in the California Register of Historic Resources.

<u>National Register of Historic Places</u> – Standards (Criteria)
The National Register of Historic Places has established standards for evaluating the significance of resources that are important in the heritage of the nation. Historic resources may be considered important at the local level, state level or national level. To apply the standards the resource must be considered within significant historical contexts. The standards, age and integrity statements follow;

1. *A property must be fifty years old*
2. *The resource must retain architectural and historical integrity.*
3. *The resources must meet at least one of the following criteria*
   a. *are associated with events that have made a significant contribution to the broad patterns of our history; or*
   b. *are associated with the lives of persons significant in our past; or*
   c. *embody the distinctive characteristics of a type, period, or method that possess high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; or*
   d. *have yielded, or may be likely to yield, information important in prehistory or history.*

The Frank Nola House is not eligible for listing in the National Register due to the loss of integrity.

# HISTORIC EVALUATION SHEET

HISTORIC RESOURCE NAME: Frank S. Nola House
HISTORIC RESOURCE ADDRESS: 13120 Berryessa Road, San Jose

## A. VISUAL QUALIFICATIONS

| | | | | | |
|---|---|---|---|---|---|
| 1 | EXTERIOR good design presentation | E | VG | **G** | FP |
| 2 | STYLE Eclectic California Bungalow | E | VG | **G** | FP |
| 3 | DESIGNER unknown; | E | VG | G | **FP** |
| 4 | CONSTRUCTION common materials and methods | E | VG | G | **FP** |
| 5 | SUPPORTIVE ELEMENTS Fruit Ranch trees and ancillary buildings | E | VG | **G** | FP |

## B. HISTORY/ASSOCIATION

| | | | | | |
|---|---|---|---|---|---|
| 6 | PERSON/ORGANIZATION | E | VG | G | **FP** |
| 7 | EVENT | E | VG | G | **FP** |
| 8 | PATTERNS Fruit Ranch Operations - secondary residential use | E | **VG** | G | FP |
| 9 | AGE c.1930 | E | VG | **G** | FP |

## C. ENVIRONMENTAL/CONTEXT

| | | | | | |
|---|---|---|---|---|---|
| 10 | CONTINUITY Not located in an area of Prime Importance | E | VG | G | **FP** |
| 11 | SETTING compatible with residential development in the area | E | VG | **G** | FP |
| 12 | FAMILIARITY neighborhood | E | VG | **G** | FP |

## D. INTEGRITY

| | | | | | |
|---|---|---|---|---|---|
| 13 | CONDITION surface wear | E | **VG** | G | FP |
| 14 | EXTERIOR ALTERATIONS addition to the rear | E | **VG** | G | FP |
| 15 | STRUCTURAL REMOVALS no significant removals | **E** | VG | G | FP |
| 16 | SITE | **E** | VG | G | FP |

## E. REVERSIBILITY

| | | | | | |
|---|---|---|---|---|---|
| 17 | EXTERIOR | **E** | VG | G | FP |

## F. ADDITIONAL CONSIDERATIONS/BONUS POINTS

| | | | | | |
|---|---|---|---|---|---|
| 18 | INTERIOR VISUAL interior design and detail is fair | E | VG | G | **FP** |
| 19 | INTERIOR HISTORY: residence of Frank and Grace Nola Family - fair | E | VG | G | **FP** |
| 20 | INTERIOR ALTERATIONS no important interior design elements | E | VG | G | **FP** |
| 21 | INTERIOR REVERSIBILITY: no significant interiors - integrity not an issue | E | VG | **G** | FP |
| 22 | NATIONAL OR CALIFORNIA REGISTER | E | VG | G | **FP** |

REVIEWED BY: Bonnie Bamburg

DATE: September 27, 2007

# EVALUATION TALLY SHEET
# (PART 1)

HISTORIC RESOURCE ADDRESS: 13120 Berryessa Road, San Jose

| | | | E | VG | G | FP | |
|---|---|---|---|---|---|---|---|
| A | VISUAL QUALITY/DESIGN | | | | | | |
| | 1 | EXTERIOR | 16 | 12 | 6 | 0 | 6 |
| | 2 | STYLE | 10 | 8 | 4 | 0 | 4 |
| | 3 | DESIGNER | 6 | 4 | 2 | 0 | 0 |
| | 4 | CONSTRUCTION | 10 | 8 | 4 | 0 | 0 |
| | 5 | SUPPORTIVE ELEMENTS | 8 | 6 | 3 | 0 | 3 |
| | | | | | Subtotal: | | 13 |
| B. | HISTORY/ASSOCIATION | | | | | | |
| | 6 | PERSON/ORGANIZATION | 20 | 15 | 7 | 0 | 0 |
| | 7 | EVENT | 20 | 15 | 7 | 0 | 0 |
| | 8 | PATTERNS | 12 | 9 | 5 | 0 | 9 |
| | 9 | AGE | 8 | 6 | 3 | 0 | 3 |
| | | | | | Subtotal: | | 12 |
| C. | ENVIRONMENTAL/ CONTEXT | | | | | | |
| | 10 | CONTINUITY | 8 | 6 | 3 | 0 | 0 |
| | 11 | SETTING | 6 | 4 | 2 | 0 | 2 |
| | 12 | FAMILIARITY | 10 | 8 | 4 | 0 | 4 |
| | | | | | SUBTOTAL: | | 6 |
| | | | A & C SUBTOTAL: | | | | 19 |
| | | | B SUBTOTAL: | | | | 12 |
| | | | PRELIMINARY TOTAL: (sum of A. B. & C.) | | | | 31 |

# EVALUATION TALLY SHEET
# (PART II)

HISTORIC RESOURCE ADDRESS: 13120 Berryessa Road, San Jose

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| D. | INTEGRITY | E | VG | G | FP | | | | |
| | 13 CONDITION | | 0.03 | 0.05 | 0.1 | 31 X | 0.03 = | | 0.93 |
| | | SUBTOTAL A,B&C | | | | | | | |
| | 14 EXTERIOR ALTERATIONS | | 0.05 | 0.1 | 0.2 | 19 X | 0.05 = | | 0.95 |
| | | SUBTOTAL A&C | | | | | | | |
| | | | 0.03 | 0.05 | 0.1 | 12 X | 0.03 = | | 0.36 |
| | | FROM B | | | | | | | |
| | 15 STRUCTURAL REMOVALS | | 0.2 | 0.3 | 0.4 | 19 X | 0 = | | 0 |
| | | SUBTOTAL: A & C | | | | | | | |
| | | | 0.1 | 0.2 | 0.4 | 12 X | 0 = | | 0 |
| | | FROM B | | | | | | | |
| | 16 SITE | | 0.1 | 0.2 | 0.4 | 12 X | 0 = | | 0 |
| | | FROM B | | | | | | | |
| | | INTEGRITY DEDUCTIONS SUBTOTAL | | | | | | | 2.24 |
| | | ADJUSTED SUBTOTAL: | | | | 31 - | 2.24 | | 28.76 |
| | | (Preliminary Total minus Integrity Deductions) | | | | | | | |
| | | VALUE | | | | | | | |
| E | REVERSIBILITY | E | VG | G | FP | | | | |
| | 17 EXTERIOR | 3 | 3 | 2 | 2 | | | | 3 |
| | | | | Total: | | 3 | | | |
| F. | ADDITIONAL CONSIDERATIONS BONUS POINTS | | | | | | | | |
| | 18 INTERIOR HISTORY ASSOCIATION | 3 | 3 | 1 | 0 | 0 | | | |
| | 19 INTERIOR VISUAL QUALITY | 3 | 3 | 1 | 0 | 0 | | | |
| | 20 INTERIOR ALTERATIONS | 4 | 4 | 3 | 1 | 0 | | | |
| | 21 INTERIOR REVERSIBILITY | 4 | 4 | 2 | 0 | 2 | | | |
| | 22 NATIONAL OR CALIFORNIA REGISTER | 20 | 15 | 10 | 0 | 0 | | | |
| | | BONUS POINTS SUBTOTAL: | | | | | | | 2 |
| | | ADJUSTED TOTAL: | | | | | | | 33.76 |

# HISTORIC EVALUATION SHEET

HISTORIC RESOURCE NAME: Nola Orchard Fruit Packing/storage Shed
HISTORIC RESOURCE ADDRESS: 13120 Berryessa Road, San Jose
APN 245-15-063 Building # 2

A. VISUAL QUALIFICATIONS

| | | | | | |
|---|---|---|---|---|---|
| 1 | EXTERIOR No detailing or ornament- composition is utilitarian and functional | E | VG | G | [FP] |
| 2 | STYLE Vernacular - Utilitarian Box | E | VG | [G] | FP |
| 3 | DESIGNER Nola/Genco/ TerritoFamily design/build | E | VG | G | [FP] |
| 4 | CONSTRUCTION Common & recycled materials and methods | E | VG | G | [FP] |
| 5 | SUPPORTIVE ELEMENTS House & Sheds | E | VG | [G] | FP |

B. HISTORY/ASSOCIATION

| | | | | | |
|---|---|---|---|---|---|
| 6 | PERSON/ORGANIZATION one of significance | E | VG | G | [FP] |
| 7 | EVENT none of significance | E | VG | G | [FP] |
| 8 | PATTERNS Horticultural building late era Fruit Ranch | E | [VG] | G | FP |
| 9 | AGE c.1962 | E | VG | G | [FP] |

C. ENVIRONMENTAL/CONTEXT

| | | | | | |
|---|---|---|---|---|---|
| 10 | CONTINUITY Not located in an area of Prime Importance | E | VG | G | [FP] |
| 11 | SETTING not compatible with new residential development | E | VG | G | [FP] |
| 12 | FAMILIARITY Shed is not visible outside the site | E | VG | G | [FP] |

D. INTEGRITY

| | | | | | |
|---|---|---|---|---|---|
| 13 | CONDITION surface wear | E | VG | [G] | FP |
| 14 | EXTERIOR ALTERATIONS no observable alterations | [E] | VG | G | FP |
| 15 | STRUCTURAL REMOVALS none observed | [E] | VG | G | FP |
| 16 | SITE constructed on the original site | [E] | VG | G | FP |

E. REVERSIBILITY

| | | | | | |
|---|---|---|---|---|---|
| 17 | EXTERIOR | [E] | VG | G | FP |

F. ADDITIONAL CONSIDERATIONS/BONUS POINTS

| | | | | | |
|---|---|---|---|---|---|
| 18 | INTERIOR VISUAL open space no unusual design or equipment | E | VG | G | [FP] |
| 19 | INTERIOR HISTORY Fruit packing and storage | [E] | VG | G | FP |
| 20 | INTERIOR ALTERATIONS loss of equipment | E | VG | [G] | FP |
| 21 | INTERIOR REVERSIBILITY not estimated | E | VG | G | [FP] |
| 22 | NATIONAL OR CALIFORNIA REGISTER - not 50 yrs old; does not exhibit difinative qualities, equipment or distinguishing features | E | VG | G | [FP] |

REVIEWED BY: Bonnie Bamburg DATE: September 26, 2007

# EVALUATION TALLY SHEET
# (PART 1)

HISTORIC RESOURCE ADDRESS: 13120 Berryessa Road, San Jose

| | | | E | VG | G | FP | |
|---|---|---|---|---|---|---|---|
| A | VISUAL QUALITY/DESIGN | | | | | | |
| | 1 | EXTERIOR | 16 | 12 | 6 | 0 | 0 |
| | 2 | STYLE | 10 | 8 | 4 | 0 | 4 |
| | 3 | DESIGNER | 6 | 4 | 2 | 0 | 0 |
| | 4 | CONSTRUCTION | 10 | 8 | 4 | 0 | 0 |
| | 5 | SUPPORTIVE ELEMENTS | 8 | 6 | 3 | 0 | 3 |
| | | | | | Subtotal: | | 7 |
| B. | HISTORY/ASSOCIATION | | | | | | |
| | 6 | PERSON/ORGANIZATION | 20 | 15 | 7 | 0 | 0 |
| | 7 | EVENT | 20 | 15 | 7 | 0 | 0 |
| | 8 | PATTERNS | 12 | 9 | 5 | 0 | 9 |
| | 9 | AGE | 8 | 6 | 3 | 0 | 0 |
| | | | | | Subtotal: | | 9 |
| C. | ENVIRONMENTAL/ CONTEXT | | | | | | |
| | 10 | CONTINUITY | 8 | 6 | 3 | 0 | 0 |
| | 11 | SETTING | 6 | 4 | 2 | 0 | 0 |
| | 12 | FAMILIARITY | 10 | 8 | 4 | 0 | 0 |
| | | | | | SUBTOTAL: | | 0 |
| | | | A & C SUBTOTAL: | | | | 7 |
| | | | B SUBTOTAL: | | | | 9 |
| | | | PRELIMINARY TOTAL: (sum of A. B. & C.) | | | | 16 |

# EVALUATION TALLY SHEET
# (PART II)

HISTORIC RESOURCE ADDRESS: 13120 Berryessa Road, San Jose

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| D. | INTEGRITY | E | VG | G | FP | | | | |
| | 13 CONDITION | | 0.03 | 0.05 | 0.1 | 16 X | 0.05 = | | 0.8 |
| | SUBTOTAL A,B&C | | | | | | | | |
| | 14 EXTERIOR ALTERATIONS | | 0.05 | 0.1 | 0.2 | 7 X | 0 = | | 0 |
| | SUBTOTAL A&C | | | | | | | | |
| | | | 0.03 | 0.05 | 0.1 | 9 X | 0 = | | 0 |
| | FROM B | | | | | | | | |
| | 15 STRUCTURAL REMOVALS | | 0.2 | 0.3 | 0.4 | 7 X | 0 = | | 0 |
| | SUBTOTAL: A & C | | | | | | | | |
| | | | 0.1 | 0.2 | 0.4 | 9 X | 0 = | | 0 |
| | FROM B | | | | | | | | |
| | 16 SITE | | 0.1 | 0.2 | 0.4 | 9 X | 0 = | | 0 |
| | FROM B | | | | | | | | |
| | | INTEGRITY DEDUCTIONS SUBTOTAL | | | | | | | 0.8 |
| | | ADJUSTED SUBTOTAL: | | | | 16 - | 0.8 | | 15.2 |
| | | (Preliminary Total minus Integrity Deductions) | | | | | | | |
| | | VALUE | | | | | | | |
| E | REVERSIBILITY | E | VG | G | FP | | | | |
| | 17 EXTERIOR | 3 | 3 | 2 | 2 | | | | 3 |
| | | | | Total: | | 3 | | | |
| F. | ADDITIONAL CONSIDERATIONS BONUS POINTS | | | | | | | | |
| | 18 INTERIOR HISTORY ASSOCIATION | 3 | 3 | 1 | 0 | 3 | | | |
| | 19 INTERIOR VISUAL QUALITY | 3 | 3 | 1 | 0 | 0 | | | |
| | 20 INTERIOR ALTERATIONS | 4 | 4 | 3 | 1 | 2 | | | |
| | 21 INTERIOR REVERSIBILITY | 4 | 4 | 2 | 0 | 0 | | | |
| | 22 NATIONAL OR CALIFORNIA REGISTER | 20 | 15 | 10 | 0 | 0 | | | |
| | | BONUS POINTS SUBTOTAL: | | | | | | | 5 |
| | | ADJUSTED TOTAL: | | | | | | | 23.2 |

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
**PRIMARY RECORD**

Primary #
HRI #
Trinomial
**NRHP Status Code** NA

Other Listings _____
Review Code _____ Reviewer _____ Date

 ***Resource Name or #:** (Assigned by recorder)

**P1. Other Identifier:**

***P2. Location: Not for Publication** X **Unrestricted**

***a. County** Santa Clara **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** San Jose East **Date** 1980 **T** __; **R** __; __ **3 of** __ **3 of Sec** __; _____ **B.M.**

c. Address 13060-13120 Berryessa Road City San Jose Zip 95133

d. UTM: (Give more than one for large and/or linear resources) Zone 10, mE/ 41 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN 224-24-059

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Nola Fruit Ranch consists of approximately three acres bounded by the Berryessa Road right-of–way on the north, the former CALTRANS access Road on the west and south and a single family residential development on the east. The site is relatively flat with 12 buildings and sheds and is divided into three ownerships of four parcels.The surrounding area has been developed with single family residential tracts that date from the late 1970's.

The Nola Ranch is visually identified by three residential buildings that front on to Berryessa Road and several storage sheds behind the houses. The commercial orchard associated with the property was sold many years ago, leaving a few fruit trees on the eastern edge of the residential parcels, and most of these are dead. The integrity of the site is severely diminished without with out the orchard and many of the buildings that were part of the operating ranch. The 12 buildings on site include; Vincent Nola House c. 1920; a fruit packing shed c. 1962; remains of a water tank-house, the Frank Nola house c. 1929, a two story storage/garage c. 1965, the Genco house c.1950 and various sheds, many constructed of recycled lumber after the demolition of large barns and drying houses. ( cont. page 3)

***P3b. Resource Attributes:** (List attributes and codes) HP 33 Fruit Ranch

**P4. Resources Present:** X Building X Structure Object Site District Element of District Other (Isolates, etc.)

**P5b. Description of Photo:** (view, date, accession #) View E
Former fruit orchard

***P6. Date Constructed/Age and Source:**
X Historic Prehistoric Both
1912-1976

***P7. Owner and Address:**
Nola Family Trust, Territo Trust & Genco Trust
13060,13100, 13120 Berryessa Rd San Jose CA 95133

***P8. Recorded by:** (Name, affiliation, and address)
Bonnie Bamburg
Urban Programmers
10710 Ridgeview Avenue
San Jose CA 95127

***P9. Date Recorded:** 1/15,2008

***P10. Survey Type:** (Describe) Project Specific

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") None

***Attachments:** NONE Location Map X Continuation Sheet X Building, Structure, and Object Record
Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
Artifact Record X Photograph Record Other (List):

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HRI#

# BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code NA

 *Resource Name or # (Assigned by recorder) 13060,13100, 13120 Berryessa Rd. San Jose

B1. Historic Name: Nola Fruit Ranch

B2. Common Name: Nola Orchards

B3. Original Use: Agricultural - fruit orchard B4. Present Use: residential property

*B5. Architectural Style: see DPR # P3

*B6. Construction History: (Construction date, alterations, and date of alterations)
The buildings were constructed between 1920 and 1968 with continuing modifications.

*B7. Moved? X No Yes Unknown Date: _____ Original Location:

*B8. Related Features:
landscaping – not significant

B9a. Architect: Charles McKenzie (13100 Berryessa Rd) B9 b. Builder: various contractors

*B10. Significance: Theme agricultural - Prune Ranch Area San Jose
Period of Significance 1912-1935 Property Type Portion of a Fruit Ranch Applicable Criteria NA
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Agriculture provided the economic base that propelled Santa Clara County for over 100 years. By 1870, and the beginning of the Horticultural Expansion Era, fruit orchards replaced grain as the leading crop. The era benefited from the division of the large grain holdings into small units of less than 100 acres, and the large number of immigrants, who were familiar with fruit crops. The small acreages and excellent growing conditions made it possible for immigrant families to buy land and establish an orchard from which they could receive significant return on the investment, a scenario that was promoted by Santa Clara County, Cal, in the September Quarterly of the Board of Trade of San Jose, 1887. The crop that was in demand throughout the world and also relatively inexpensive to raise was the prune. For these reasons it became the leading crop for the County. In 1919 the County listed 7,652,000 prune trees, 7,000,000 more than the next largest crop, apricots (Sawyer: 1922:135). The species Petite d'Agen prune, ideally suited to the area, is arguably the most important crop to have been cultivated in the Santa Clara Valley. A few years later, an average crop for the County would be 90 to 120 millions pounds of dried prune (Polk,1926:16). Supplying approximately 1/3 of the world supply, shipments of prunes were sent to all parts of the world by the 1920's. While there were many large orchards and cooperatives, it remained possible for a small prune ranch to be successful until world conditions prior to WWII altered the market. After working for ten years in San Jose and recognizing the potential in the prune industry, Italian immigrants Vincent and Isabella Nola purchased land on Berryessa Road to establish a prune ranch in 1912 achieving the "American Dream", Santa Clara Valley style. As part of the horticultural expansion (1879-1918), the Nola family ranch was one of the small (cont' page 6)

B11. Additional Resource Attributes: (List attributes and codes) HP 33 Fruit Ranch

*B12. References: Official documents and deeds, Polk City Directories, 1984, Arbuckle,C.,Clyde Arbuckle's History of San Jose, 1984-see attached

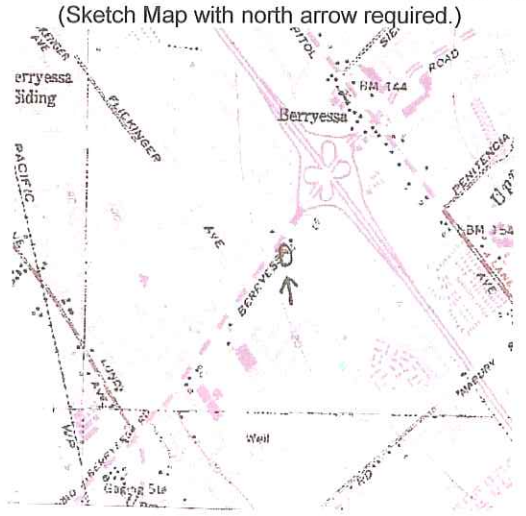
B13. Remarks:

*B14. Evaluator: Bonnie Bamburg

*Date of Evaluation: 1/17/08

(This space reserved for official comments.)

(Sketch Map with north arrow required.)






*Required information

P3.Description cont

Buildings and Structures:

13060 Berryessa Road: Vincent Genco House, c 1950. A single story mid-century California Ranch style house. with a hipped tile roof over exposed eaves exhibiting straight cut rafter tails. The front façade, a typical low concrete porch with a shed roof, is supported on square wood posts and shades the entry and a large pane tripartite picture window. The remaining wall of the front façade has a second tripartite window. The porch is almost hidden by large Italian cypress trees. A decorative low brick element extends from the front façade around to the sides where it stops in approximately four feet. Above the decorative brick, the walls are smooth stucco. The west façade is punctuated with three windows spaced the length of the façade. The rear- south façade projects to the rear and, as the east façade is flat stucco walls with casement or single-hung windows. A double car garage in the same style is behind the house. Landscaping is minimal, flowers along the side of the house; however Italian cypress trees hide the front façade. The majority of the area around the house is hardscape or paving.

13100 Berryessa Road: Vincent Nola House, c 1920. The main house is a large single-story California Bungalow c.1920, constructed on a wood frame and sheathed with stucco. The plan of the house is irregular created by intersecting gables. Typical of the bungalow style, the shingle covered roof extends over the wall with the truss style brackets on all sides of the house. The front façade is composed of projecting gable that creates a recessed porch in front. The porch is raised five steps sided with low, stucco covered walls, topped with bricks, that end level with the fourth step. The porch has half walls, also stucco covered with a molded cap that extends around to the west façade creating a veranda. The front entry door is a single width and not adorned. To the west is a tripartite window with a large pane in the center and small square divided panes in a panel at the top of each section, a pattern that is replicated on other facades. The corner posts are slightly truncated, stout and covered with stucco. They have two projecting bands, one a foot above the porch wall and the other at the point where it joins the sculpted flat arch opening. Beneath the gable point is an eight-pane window centered between two of the decorative truss-brackets that surround the roof under the eave. A decorative trim board is a fastened a few inches below the actual eave. The south façade is almost as prominent as the front façade (west). A projecting gable extends from the center of the façade where the veranda wraps around to create a second porch with a stair at the end. This gable is very similar to the one on the front, with stout columns, a flat arch opening, and an identical tripartite window next to the door. Other features are a chimney and wood frame windows high in the wall with twelve small square panes and a basement window close to the rear corner. The main roof exhibits exposed rafter tails. The rear façade is an alteration to the original design where the corner porch was filled with a wall, covered with smooth stucco that surrounds contemporary metal frame paired windows. A back door is at the top of a stair with wrought iron railings on each side. The flat façade has a cellar door next to the stairs and a wood double hung window on the east quarter of the façade. The east façade is relatively simple with double hung window systems randomly located in the wall. The house is typical of architect Charles McKenzie's bungalow designs, particularly those from 1911-1925 (G. Espinola 9/29/07)

P3.Description cont - Buildings and Structures:

13100 Berryessa Road: Vincent Nola House, c 1920. (continued)

To the rear is a concrete patio with small patches for flowers or other gardens. A small front yard consists of lawn, a walkway to the front, a small patch of flowers, and a tree in front of the porch. Between the house and the two-story garage is a paved driveway. In front of the garage is the remains of a wood frame tower for a water-tank. The tank on top of the structure has been demolished, leaving the frame. It appears the structure was remodeled for other uses, including removing the original sheathing and replacing it with a combination of materials and a roof. The structure has lost integrity.

To the west of the house is a two story garage c. 1968, building with two double lift-up doors on each side, and small metal windows close to the roof line. The pitched roof building is sheathed in smooth stucco without decoration. A large Pegasus sign, the symbol of Mobile Oil Company, is mounted above the doors on the east façade.

13120 Berryessa Road: Frank Nola House c. 1929. The single-story house is an eclectic California Bungalow style, c. 1930, constructed with a wood frame and sheathed in stucco. The hipped roof is covered in red tile above open eaves with exposed rafter tails. A full basement is evident by the occurrence of hopper windows at grade. The front façade is divided with a projecting porch extending across two-thirds of the width, the remainder in line with the main building's wall. Truncated columns at the two front corners of the porch meet the flat arch opening that is sculpted with an arrow point in the center. A half wall with a flat cap extends around the raised porch on all three sides. Six red concrete steps led to the entry door and a square single-pane window. A second window of the same type is on the other side of the façade. The west façade has a projecting bay with simple double-hung windows on each side. The remaining smaller windows are in the same style. The rear façade (east) has a back-door atop a raised porch with a metal railing. Windows punctuate the upper part of the façade and a slanted wood double door enters the basement. An addition to the east and rear facades that follows the original style was made c. 1940. The east façade is flat with the same style simple frame wood windows that are found throughout the house. The house was designed and constructed and remodeled by a local contractor, believed to have been Aug R. Calvelli.

Behind the house, a single car garage, in the same style as the house, is protected from the main drive by a wood lattice wall. Separated by a walkway on the other side is a three bay garage made of horizontal board siding with composition roofing. At a right angle to the garages is a c.1960's building that was used for entertainment and storage. It has metal frame windows, decorative brick on the lower part of the wall and red tile on the roof that faces into the courtyard. The surface surrounding the buildings and in the courtyard is paved. The front yard is also hardscape. Landscaping is very minimal consisting of a bush or small tree against the buildings.

P3.Description cont

Buildings and Structures:

13120 Berryessa Road: Frank Nola House c. 1929. (Continued)

The buildings are in good condition, but a lack of recent maintenance is evident in the deteriorating porch columns and the need for repair and painting.

To the west behind the garages is a horizontal board sided shed in a utilitarian rectangular form that has a pitched roof covered with metal sheets and a concrete slab foundation/floor inscribed with the date 1962. The north façade has a large lift up door in the center of the façade, and two windows, one on each side. The east façade is punctuated with contemporary metal frame windows and a pedestrian door. The shed was constructed using much of the materials recycled from buildings that were demolished on site. The south façade is like the north with a large opening and two windows. The shed was used for packing and sorting fruit into the 1970's, and is currently used for general domestic storage.

In summary the buildings on the multiple parcels are representative of houses and sheds that were typical styles for the time they were constructed. The residences they were occupied by members of the extended Nola family while some, particularly the second generation worked in the family business and tended the orchards. As the orchard land was sold, the ranch was reduced to residential sized parcels, which contained houses, sheds, a few fruit trees, and miscellaneous storage-mostly for domestic items and collected vehicles. The houses and sheds are not high quality design, unusual construction methods and the materials are in common use. The Vincent Nola house designed by architect Charles McKenzie is a good example of a Craftsman Bungalow, but is not among his best works. The condition of building and sheds ranges in proportion to the amount of maintenance given each building, from good to severely deteriorated.

Without the orchards and barns and equipment sheds and operating spaces for drying trays and dehydrator, the site has lost integrity of the primary period of significance when the prune was the primary crop 1912-1935. Without the orchards, equipment sheds, and operations spaces, the integrity is severely diminished in communicating the fresh fruit ranch operations of the secondary period 1936-1976.

B 10: Significance cont.

ranches that grew prunes and was associated with the Horticultural expansion in Santa Clara Valley. After 1935 the prune ranch was replanted to raise fresh fruit crops, primarily cherries. The operations of the ranch were reorganized after 1935 with substantial changes from 1952-1970 that removed the buildings, sheds, and spaces that had supported the dried fruit process. Removed were the dehydrator, a large, two-story barn and packing sheds, as well as the flat open spaces where trays of fruit could dry in the sun. In the late 1970's orchard acreage was sold for residential development. The property is reduced to approximately three acres containing residential buildings and storage sheds, garages and patios. The orchard was reduced to a few trees at the east side of the property and these appear to have passed the point of producing fruit. With these changes the Nola Ranch that grew and processed prunes has lost integrity. Alterations to the site have also diminished the historic integrity of the fresh fruit era. Historic integrity is defined as "the unimpaired ability of a property to convey is historical significance". Properties that have lost historical significance are not eligible for listing in the National Register of Historic Places or the California Register of Historic Resources. The City of San Jose adopted criteria that allows a broader definition and categorizes properties as non-significant, Structures of Merit or Candidate City Landmarks. Using the San Jose Evaluation Tally, the ranch rated a point total of 41.8 within the Structure of Merit category.

Background:

During the later years of the Horticultural Expansion Era 1870-1919, Nola Orchards (fruit ranch) was established on land that had previously been used for grazing and may have been planted with orchard trees. Throughout the Santa Clara Valley, orchards produced the fruit that became the resource to an expanding fruit processing industry, an industry that would see the Santa Clara Valley producing 25% of the world's prunes by the 1930's (Laffy, G.A.: 1992). Through the Inter-War Period 1918-1945, agriculture remained the most important industry of the Valley; however, the stage was set for a new era of technology after WWII, as residential and industrial development expanded into the agricultural lands leading to the Era of Industrialization and Urbanization 1945-1991. Throughout the years when it was in full operation, 1912-1976, the Nola Fruit Ranch was one of the family ranches contributing to the fruit economy of the Santa Clara Valley. After 1976, the ranch was significantly reduced in size when the family sold land for development. Thus the origins are within the context of the Horticultural Era, a time when immigrants from Italy arrived in the Valley finding that agriculture was their new life. Of the many families who followed this pattern, most of the ranches lasted into the 1950's before the agricultural economy began to decline and the land reused. As a relatively small family ranch, the Vincent Nola Ranch is recognized as a example of immigration and hard work. The ranch provided opportunities leading to second and third generations of family success and the opportunity to maintain the tradition of the agricultural existence with a road side fruit stand supported by importing fruit from other parts of California. The ranch and Nola family are noted for their hard work, rather than for an individually significant contribution to the Horticultural Era or to the history of San Jose.

The property that became the Nola Ranch in 1912, was included within the Pueblo Lands as Tract #1, established with el Pueblo de San Jose de Guadalupe in 1777-78. As the lands passed through the period of Mexican rule into statehood, the owners used the land for agricultural purposes, primarily grazing. By the mid 1870's the land was owned by Isaiah Shaw who emigrated from New York, settling in Berryessa in 1853. He is listed in the 1876 Thompson and West Historical Atlas of Santa Clara County as a farmer

B 10: Significance cont.

Background:
and stock raiser with 852 acres. The official map titled the Map of the Subdivision of a Part of the Isaiah Shaw Orchard, recorded on August 24, 1889, divided portions of his land creating parcels along Berryessa Road. In 1895 Italian immigrants Vincent Nola and his brothers came to the United States through New Orleans where they worked for the railroad. Finding the south both hot and humid, they took the train to California to visit relatives in Pleasanton. Vincent returned to Italy and in 1902 brought his wife Isabella and daughter Mary to San Jose where they resided on N. 13th Street at Jackson Avenue (V. Nola 8/20/05). By 1912 they had acquired land that included the subject parcels planting, tending and harvesting the orchards. They constructed barns, in which the families of two brothers lived, and sheds, but did not immediately construct a house on the ranch. In 1920 the Nola's engaged Charles McKenzie to design the house at 13100 Berryessa Road (McKenzie documents:1920). It appears that Peter Nola also constructed a house on his adjoining property (Charles Territo 10/12/07). At that time the Vincent Nola family included daughter Mary born in Italy and children born in San Jose: Frank, Manuel, Carmela, Josephine and Adeline.

The Nola brothers, Vincent, Peter and Gaetano, entered the orchard business just a few years apart. The adjacent ranch on Berryessa Road was owned by Peter Nola, Vincent's younger brother while Gaetano chose the Willow Glen district for his ranch. The brothers were all fruit ranchers who raised a variety of fruit trees: prunes, cherries, pears and apricots. Up until the early 1930's, Vincent Nola raised predominantly prunes, but also some cherries and apricots (V. Nola 8/20/05). The petite prune d'Agen and apricots were dried on the ranch and packed for shipping as Suni-Best, the Nola Packing Company label (SMN 6/24/01) . Entering the 1930's, the German market purchased almost 50% of the dried prunes and a large quantity of other dried fruit from Santa Clara County, and ranchers planted more prune trees to accommodate the growing demand. Then in 1933, when the German Reich (Nazi Germany) came to power under Chancellor Adolph Hitler, he forbid German markets to purchase California dried fruit. This resulted in a glut of California prunes, fruit that had to be sold at very low prices and/or stored. Ranchers, who had other crops to carry them through the three years necessary for new trees to mature, immediately replaced their prune trees with new trees to supply the fresh fruit market (Couchman, R. 1967:89). The Nola brothers were in this group replacing the prune trees with trees that bore fresh fruit for the commercial market, particularly cherry trees. This was the beginning of the decline in agricultural production for the ranch. After replanting the orchard in the mid 1930's, fruit raised on the ranch was sold fresh to local brokers and at the roadside stand, or dried on site and sent to distributors. The drying and packing were done in two large barns and packing sheds that originated before 1915, and were demolished in the late 1950-60's, when the market for local packaged fruit had significantly declined. Some of the wood from these buildings was used to construct a vehicle shed and a much smaller packing house constructed in 1962 (J. Territo 9/17/07).

Frank S. Nola, Vincent and Isabella's oldest son, married Grace Rosalie Pilotti in 1928. A year later they had a house constructed on the property adjacent to his parents (13120 Berryessa Road). The generations worked together tending the fruit ranch and in the packing business that was operated from a large barn on the property (Joseph Territo 9/17/07). The children of Frank and Grace, Vincent born in 1931, Richard born in 1934 and Gerald (Jerry) born in 1940, grew up working on the ranch as did their cousins. After the deaths of Vincent and Isabella Nola, the title to the ranch was divided among their children. Other than

B 10: Significance cont.

Background:

Frank, the children did not build their houses on the ranch, but returned to help with ranch chores and at harvest time. Daughter Mary A. married Vincent V. Genco moving to town where they owned the house at 392 N. 13th Street and worked for McKinley & Glans Furniture Company. Later they moved to N. 11th Street. Carmela Nola Territo worked as a bookkeeper residing on the ranch until she married. The fruit ranch operations extended to the next generation and Vincent Genco, Jr., the son of Mary Nola Genco and grandson of Vincent and Isabella, constructed his home on the family property in 1950 (13060 Berryessa Road).

As the residential and commercial development extended to the Berryessa district, the children and grandchildren of Vincent and Isabella Nola continued to operate the ranch even as surrounding land was sold for development. In the late 1970's, Peter Nola's ranch, one of the first to practice organic methods of ranching, was sold for residential development as was 20 acres of Frank and Grace Nola's ranch. A road was constructed across the Vincent Nola ranch property to access property to the east isolating the existing approximately 3 acres fronting on Berryessa Road. After Frank S. Nola died on June 10, 1976, Grace Nola, her children and grandchildren continued limited fresh fruit ranch operations selling from a fruit stand that was constructed each year to sell fresh cherries and pears grown on the remaining trees and augmented with fruit from the Central Valley. Frank and Grace Nola's children did not remain on the ranch. Vincent F. Nola became a physician and psychiatrist eventually locating his office in Indian Wells, California; Richard Nola became the owner of Vacaville Fruit Company in Yolo County, and Jerry Nola a rancher/farmer in the Stockton area. Each year, the children and grandchildren returned to San Jose to help Grace Nola care for the ranch and sell the fruit at the roadside Nola Ranch fruit stand. In the mid 1990's, the family decided that the pieces of the "temporary" fruit stand were dilapidated and the dirt floor was difficult for Grace Nola. In 1992, the family constructed a permanent stand, with a concrete floor and sides that could be closed when not in use (V. Nola 8/20/05). In 2003, when Grace Nola died at age 98, the ranch consisted of 200 trees on two acres. The *San Jose Mercury News* carried a front page article on January 17, 2004, titled "A Way of Life Passes in the Valley"; the article commemorated the life of Grace Nola. The article describes the changes that occurred to the agricultural way of life during in the past century and the anticipated end of the Nola Orchard and roadside fruit stand. In 2004 the fruit stand was operated by family members selling cherries from the Berryessa trees, but primarily fruit from Jerry Nola's ranch in the Central Valley (V. Nola 8/20/05). As residential development surrounded the Nola property and the family was dispersed, the continued use of the Nola Ranch as agricultural land did not appear feasible. Selling the property for residential development appeared immanent and much of the equipment used to care for the ranch was sold or transferred to other locations. Fruit drying and packing equipment had been sold, transferred or destroyed years earlier.

In 2007, there are very few fruit trees on the property producing marketable fruit. Most of the orchards trees have been removed; others are dead or dying. The houses on the property continue to be occupied by family members, or are vacant. The sheds and buildings became household and hobby storage for family and friends. In the summer of 2007, (continued)

B 10: Significance cont.

Background continued:

family members operated the Nola Orchards fruit stand for a few weeks, again primarily offering fruit grown in the orchards of the Central Valley.

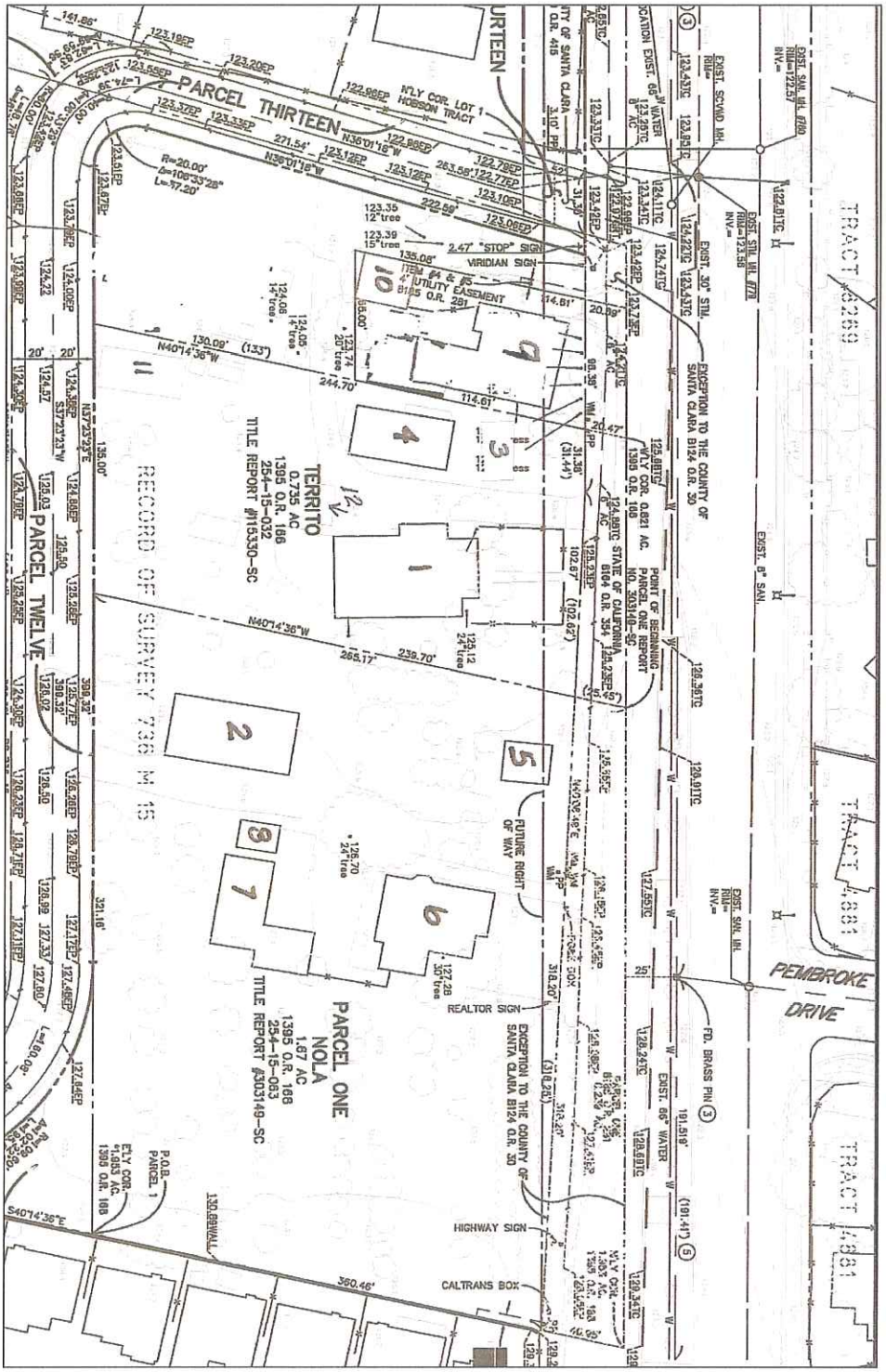
The story of the Nola family and Nola Fruit Ranch is typical of many stories of immigrants who came to the Santa Clara Valley and established fruit orchards and who contributed to the horticultural expansion that was the primary economy of the area from 1870-1918. The prune ranch continued into the mid 1930's. Located outside the City of San Jose, the family identified with the Berryessa District of the County. Within this district, there were many family ranches whose names are now found on the suburban streets in the area of their former ranches. Nola Road appears to commemorate lands owned by Peter and Vincent Nola. Based upon research and interviews with family members, it does not appear the Vincent Nola family held a significant position in the government, social or cultural development of the area. Perhaps the best known of the family was Grace Nola who lived into her 90's and each year she would spend a few weeks operating the small fruit stand (1992), in front of the property.

The property known as the Nola, Territo and Genco parcels was annexed into the City of San Jose in 1997. The history of the property relates to the context of Santa Clara County and the Berryessa District, during the Horticultural Era 1870-1919 when the prune ranch was established and secondarily to the Inter-War Era 1918-1945, producing fresh market fruit, contexts which are very similar in the City of San Jose and Santa Clara County. The possible exception is that the Berryessa District was one of the later districts to divide large acreages allowing it to develop with family farms.

The property, multiple parcels and ownerships is not eligible for listing in the National Register of Historic Places or the California Register of Historic Resources due to a loss of integrity and buildings that are not over 50 years. Rated a San Jose "Structure of Merit" property the collection achieves local importance with buildings that support each other; The Vincent Nola House (1920), together with the Frank Nola house (1929) and packing shed (1962), from the secondary era of fresh fruit packing. The Vincent Nola house appears eligible for individual listing in the California Register of Historic Resources due to the design and association with Architect Charles McKenzie.

| State of California The Resources Agency<br>DEPARTMENT OF PARKS AND RECREATION<br>**SKETCH MAP** | Primary #<br>HRI#<br>Trinomial |
|---|---|

**Page** 10 **of** 10 ***Resource Name or #** (Assigned by recorder) 13060-13120 Berryessa Rd.CA ***Drawn by:** Pulte Homes ***Date of map:** 2007




Key to Buildings

1 house c.1920

2 Fruit packing shed c.1962

3 Water tank

4 Garage c.1968

5 Fruit stand c.1992

6 House c.1929

7 Storage/office c 1965

8 Garage

9 House c. 1950

10 Garage c. 1950

11 Utility Shed c.1956

12 Garage c.1930

**Include bar scale and north arrow. Not to scale**

# HISTORIC EVALUATION SHEET

HISTORIC RESOURCE NAME: Nola Fruit Ranch
HISTORIC RESOURCE ADDRESS: 13060-13120 Berryessa Road

## A. VISUAL QUALIFICATIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | EXTERIOR Does not retain all elements of a working ranch | E | VG | **G** | FP |
| 2 | STYLE The residential style are not significant examples with the exception of the Craftsman Bungalow -Vincent Nola House | E | VG | **G** | FP |
| 3 | DESIGNER Ranches follow a plan, usually vernacular. The plan has been altered by domestic storage buildings. The Vincent Nola house, the exception was designed by Charles McKenzie | E | **VG** | G | FP |
| 4 | CONSTRUCTION there are no buildings of unusual constrution | E | VG | G | **FP** |
| 5 | SUPPORTIVE ELEMENTS In total the buildings provide support to each other. Missing is the orchard, the most important element,and working equipment and areas | E | VG | **G** | FP |

## B. HISTORY/ASSOCIATION

| | | | | | |
|---|---|---|---|---|---|
| 6 | PERSON/ORGANIZATION V. Nola - alterations and loss of orchards diminish the quality of association. | E | VG | **G** | FP |
| 7 | EVENT none of significance | E | VG | G | **FP** |
| 8 | PATTERNS Fruit Ranch - loss of orchards diminish the visual recognition. | E | **VG** | G | FP |
| 9 | AGE 1912-1935 up to 1976 | E | VG | **G** | FP |

## C. ENVIRONMENTAL/CONTEXT

| | | | | | |
|---|---|---|---|---|---|
| 10 | CONTINUITY not located in an area of prime or secondary importance | E | VG | G | **FP** |
| 11 | SETTING loss of orchard, not compatible with newer development | E | VG | G | **FP** |
| 12 | FAMILIARITY Berryessa Area -Primarily the 1992 fruit stand | E | VG | **G** | FP |

## D. INTEGRITY

| | | | | | |
|---|---|---|---|---|---|
| 13 | CONDITION loss of orchards and barns | E | **VG** | G | FP |
| 14 | EXTERIOR ALTERATIONS modifications to houses -loss of features | **E** | VG | G | FP |
| 15 | STRUCTURAL REMOVALS buildings have been removed. | **E** | VG | G | FP |
| 16 | SITE original site | **E** | VG | G | FP |

## E. REVERSIBILITY

| | | | | | |
|---|---|---|---|---|---|
| 17 | EXTERIOR - modifications are identified but would be difficult to remove | E | **VG** | G | FP |

## F. ADDITIONAL CONSIDERATIONS/BONUS POINTS

| | | | | | |
|---|---|---|---|---|---|
| 18 | INTERIOR VISUAL | E | VG | G | **FP** |
| 19 | INTERIOR HISTORY | E | VG | G | **FP** |
| 20 | INTERIOR ALTERATIONS | E | VG | G | **FP** |
| 21 | INTERIOR REVERSIBILITY | E | VG | G | **FP** |
| 22 | NATIONAL OR CALIFORNIA REGISTER | E | VG | G | **FP** |

REVIEWED BY: Bonnie Bamburg

DATE: January 17, 2007

# EVALUATION TALLY SHEET
# (PART 1)

HISTORIC RESOURCE ADDRESS: 13060-13120 Berryessa Road

| | | | E | VG | G | FP | |
|---|---|---|---|---|---|---|---|
| A | | VISUAL QUALITY/DESIGN | | | | | |
| | 1 | EXTERIOR | 16 | 12 | 6 | 0 | 6 |
| | 2 | STYLE | 10 | 8 | 4 | 0 | 4 |
| | 3 | DESIGNER | 6 | 4 | 2 | 0 | 4 |
| | 4 | CONSTRUCTION | 10 | 8 | 4 | 0 | 0 |
| | 5 | SUPPORTIVE ELEMENTS | 8 | 6 | 3 | 0 | 3 |
| | | | | | Subtotal: | | 17 |
| B. | | HISTORY/ASSOCIATION | | | | | |
| | 6 | PERSON/ORGANIZATION | 20 | 15 | 7 | 0 | 7 |
| | 7 | EVENT | 20 | 15 | 7 | 0 | 0 |
| | 8 | PATTERNS | 12 | 9 | 5 | 0 | 9 |
| | 9 | AGE | 8 | 6 | 3 | 0 | 3 |
| | | | | | Subtotal: | | 19 |
| C. | | ENVIRONMENTAL/ CONTEXT | | | | | |
| | 10 | CONTINUITY | 8 | 6 | 3 | 0 | 0 |
| | 11 | SETTING | 6 | 4 | 2 | 0 | 0 |
| | 12 | FAMILIARITY | 10 | 8 | 4 | 0 | 4 |
| | | | | | SUBTOTAL: | | 4 |
| | | | A & C SUBTOTAL: | | | | 21 |
| | | | B SUBTOTAL: | | | | 19 |
| | | | PRELIMINARY TOTAL: (sum of A. B. & C.) | | | | 40 |

# EVALUATION TALLY SHEET
# (PART II)

HISTORIC RESOURCE ADDRESS: 13060-13120 Berryessa Road

| D. | INTEGRITY | E | VG | G | FP | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 13 CONDITION | | 0.03 | 0.05 | 0.1 | 40 X | 0.03 = | | 1.2 |
| | | SUBTOTAL A,B&C | | | | | | | |
| | 14 EXTERIOR ALTERATIONS | | 0.05 | 0.1 | 0.2 | 21 X | 0 = | | 0 |
| | | SUBTOTAL A&C | | | | | | | |
| | | | 0.03 | 0.05 | 0.1 | 19 X | 0 = | | 0 |
| | | FROM B | | | | | | | |
| | 15 STRUCTURAL REMOVALS | | 0.2 | 0.3 | 0.4 | 21 X | 0 = | | 0 |
| | | SUBTOTAL: A & C | | | | | | | |
| | | | 0.1 | 0.2 | 0.4 | 19 X | 0 = | | 0 |
| | | FROM B | | | | | | | |
| | 16 SITE | | 0.1 | 0.2 | 0.4 | 19 X | 0 = | | 0 |
| | | FROM B | | | | | | | |
| | | INTEGRITY DEDUCTIONS SUBTOTAL | | | | | | | 1.2 |
| | | ADJUSTED SUBTOTAL: | | | | 40 - | 1.2 | | 38.8 |
| | | (Preliminary Total minus Integrity Deductions) | | | | | | | |
| | | VALUE | | | | | | | |
| E | REVERSIBILITY | E | VG | G | FP | | | | |
| | 17 EXTERIOR | 3 | 3 | 2 | 2 | | | | 3 |
| | | | | Total: | | 3 | | | |
| F. | ADDITIONAL CONSIDERATIONS BONUS POINTS | | | | | | | | |
| | 18 INTERIOR HISTORY ASSOCIATION | 3 | 3 | 1 | 0 | 0 | | | |
| | 19 INTERIOR VISUAL QUALITY | 3 | 3 | 1 | 0 | 0 | | | |
| | 20 INTERIOR ALTERATIONS | 4 | 4 | 3 | 1 | 0 | | | |
| | 21 INTERIOR REVERSIBILITY | 4 | 4 | 2 | 0 | 0 | | | |
| | 22 NATIONAL OR CALIFORNIA REGISTER | 20 | 15 | 10 | 0 | 0 | | | |
| | | BONUS POINTS SUBTOTAL: | | | | | | | 0 |
| | | ADJUSTED TOTAL: | | | | | | | 41.8 |

URBAN PROGRAMMERS

March 18, 2008

Sally N. Zarnowitz, AIA
Historic Preservation Officer
San Jose Planning Department
200 E. Santa Clara St. Fl 3
San Jose CA 95112

Re: Vincent Nola House, 13100 Berryessa Road – Preservation Plan

Dear Sally,

The Pepper Lane residential and commercial redevelopment of the Nola, Territo and Genra land at 13120-13060 Berryessa Road did not initially include the preservation of the Vincent Nola House, a building that has been determined to be a Structure of Merit in San Jose and appears eligible for listing in the California Register of Historic Resources under criteria # 3.

With this letter, you will find three scenarios for preserving the Vincent Nola House and retaining the eligibility for listing in the California Register of Historic Resources and as eligible for listing in the San Jose Historic Resources Inventory as a Structure of Merit.

Prior to analyzing possible scenarios, a set of criteria was developed to identify the elements that would be required to maintain the historic significance of the house and its association with architect Charles McKenzie. The Criteria for Relocation and Receiver Sites is attached It was also necessary to determine what be required to retain eligibility if the building were retained on its original site as part of the new development. The setbacks required to buffer the historic building was determined using the criteria for relocation and a receiver sites. Because the proposed plan submitted by Pulte Homes did not have the flexibility to adjust development, the parcel, including buffer is larger than would be required in a relocation plan.

Please contact me with any comments regarding this analysis.

Best regards,

Bonnie Bamburg

Bonnie Bamburg

Bonnie Bamburg, owner
10710 Ridgeview Avenue
San Jose California
95127
USA

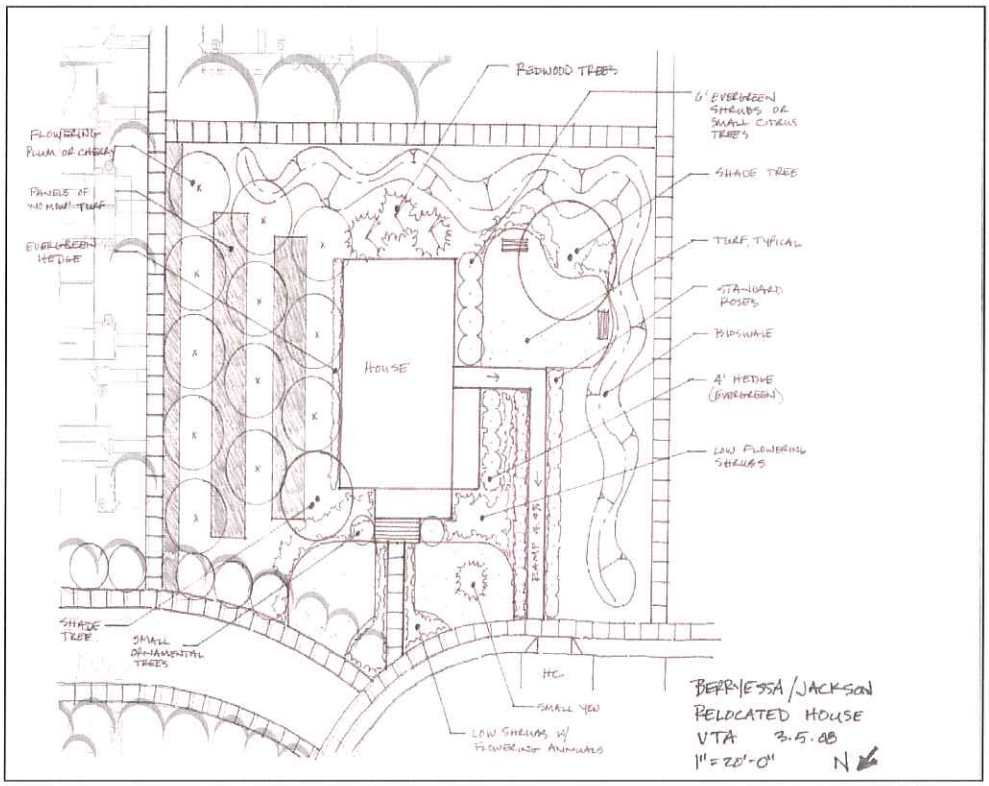
Phone: 408-254-7171
Fax: 408-254-0969
E-mail: bbamburg@USA.net

**Pepper Lane Park Site:** The proposed site is within the former orchard and will become a community recreation area and park/open space. The park is 25,000 square feet. The use would be quasi-public, the club house for the Pepper Lane homeowners and maintained by the Pepper Lane Homeowners Association. The relocation to this site allows the significant facades to be retained and interior spaces would not be altered unless required by health and safety codes.

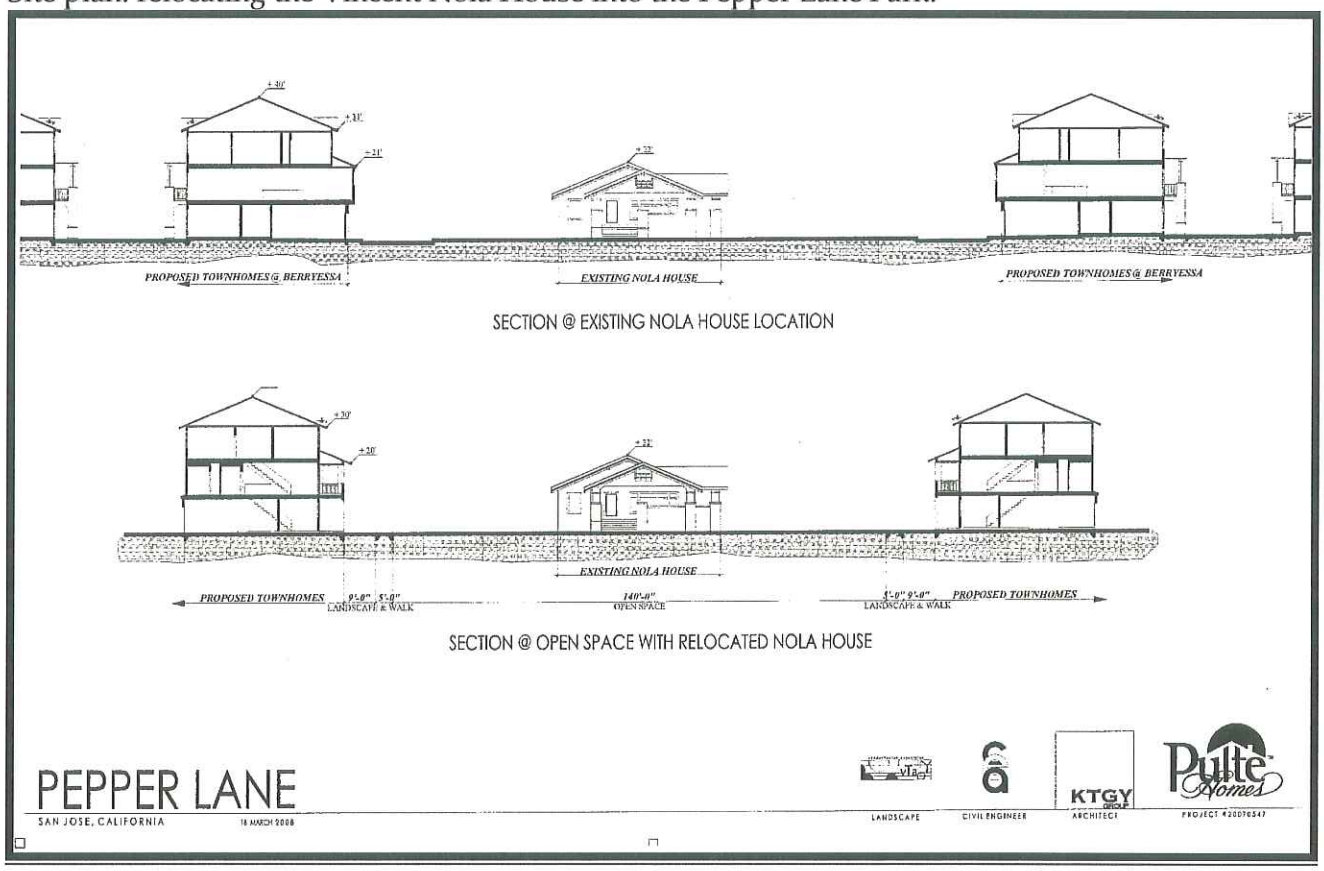
The site allows the building to face onto the street, have a minimum 15 foot front setback from the street, and large side setbacks, to allow the primary facades to be visible from the street. The park setting with landscaping, fruit trees and open space would present a site similar in feeling to the original rural setting. The neighborhood will be residential with houses on three sides of the park and across the street. A detailed site and landscaping plan must be prepared to confirm the assumptions.

The change in use appears to meet criteria #1 of the Secretary of the Interior's Standards for Rehabilitating Historic Property. *A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.* The rehabilitation must be in conformance with the Secretary of the Interior's Standards for Rehabilitating Historic Property.

The relocation to the Pepper Lane Park and rehabilitation in conformance with the Secretary of the Interior's Standards for Rehabilitating Historic Property would maintain the eligibility for listing in the California Register of Historic Resources under criteria 3., for its association with Charles McKenzie and the Craftsman Bungalow he designed.



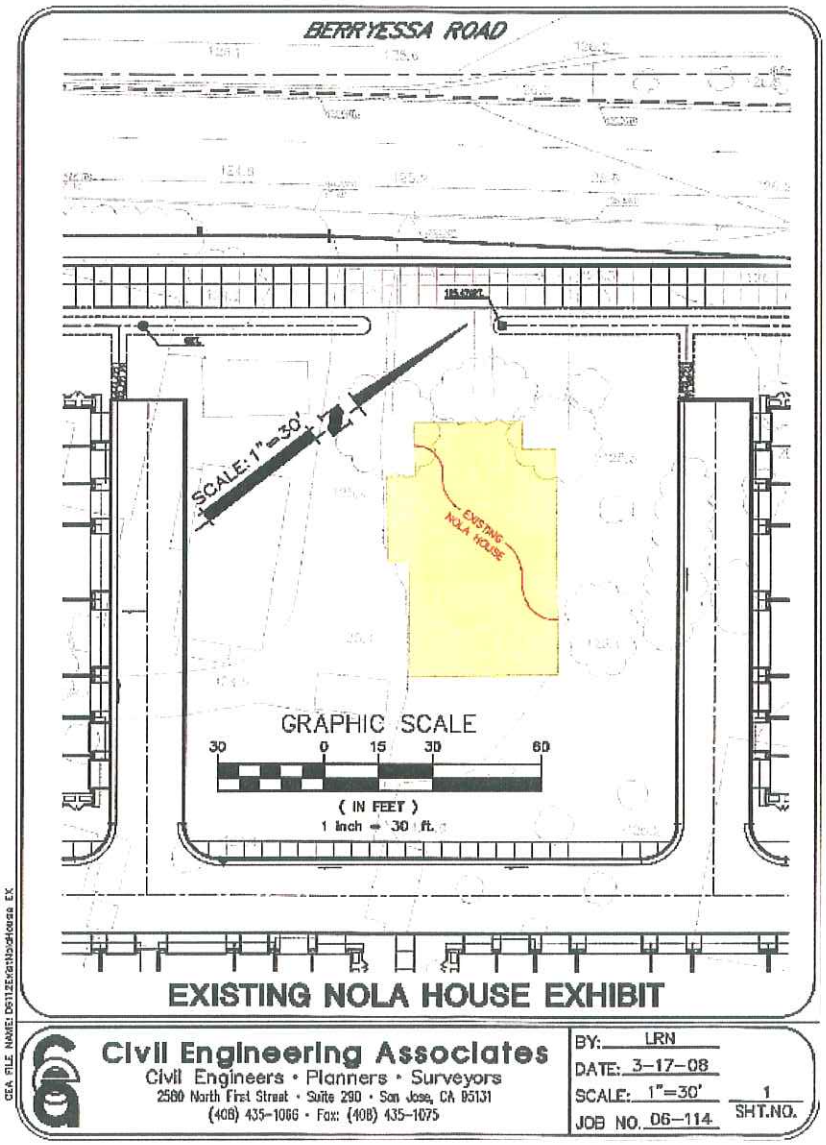
Site plan: relocating the Vincent Nola House into the Pepper Lane Park.




Section drawing showing the relocated house in relationship to the new development

**Retain on original site:** The retention of the Vincent Nola House on its original location requir5es a parcel be created that allows sufficient buffer area between the historic building and the new three-story residential or commercial development. A setback of 25 feet on each side, and 35 feet in the rear with the front retaining the yard to the back of the sidewalk on Berryessa Road would provide sufficient land for a landscaped buffer. The Pepper Land plan is divided into blocks with streets in a regular grid plan. The current location of the house is on a block that is not divisible and still meet the criteria. Therefore, the parcel for the house will encompass the block shown as Buildings 10 & 11 on the site plan for Pepper Lane. The new parcel will extend from the back of sidewalk along Berryessa Road to the back of sidewalk on the new street to the south, roughly 46 feet from the rear of the back wall of the house. The set back from Berryessa Road allows a front yard of approximately 30 feet deep. This includes the curbed front yard of the historic setting. On the east side the parcel will extend 34 feet from the east wall of the house to the back of sidewalk on a new street. On the west side the parcel will extend from the west wall of the house 55 feet to the back of sidewalk on a new street. Overall the parcel will be 18,360 sq. ft., and will be separated from the new residential development by the width of the new streets on three sides. The house will continue to face to Berryessa Road, its historic orientation.

The new parcel will retain the Vincent Nola house on its original site and provides sufficient land for additional landscaping to the side and rear of the house using fruit trees that are symbolic of the former Nola Orchard. A change the use to commercial or quasi-public use would require that the work must conform to the Secretary of the Interior's Standards for Rehabilitating Historic Property. Retaining the building on its original site with a landscaped buffer zone would meet all the applicable criteria for receiver site and retain eligibility for listing in the California Register of Historic Resources, under criteria 3., for its association with Charles McKenzie and the design of the Craftsman Bungalow he designed. Rehabilitation with a compatible new use that follows the Secretary of the Interior's Standards for Rehabilitating Historic Property would also preserve eligibility.




Site plan showing the Vincent Nola House in its current location separated from new development by new streets and broad setbacks.

**Relocation to a currently undetermined site**. A site that is not included in this list may be approved if it meets the criteria for relocation and receiver sites approved by the San Jose Planning Department and the building is relocated and rehabilitated in conformance with the Secretary of the Interior's Standards for Rehabilitating Historic Property. When the criteria is met, the house would retain eligibility for listing in the California Register of Historic Resources, under criteria 3., for its association with architect Charles McKenzie and the design of the Craftsman Bungalow he designed.

## CRITERIA FOR RELOCATING THE NOLA HOUSE

### I. General Guideline:

Relocation of historic resources should only be undertaken when it is deemed the resource left on the original site cannot be rehabilitated or reused to provide for the reasonable beneficial use of the property and that relocation is necessary to preserve the historic resource and those qualities for which the resource is found to be significant to the history or architectural or engineering heritage of the City of San Jose. Relocation methods must follow the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Relocation must consider the receiver site and how the resource will be rehabilitated to retain those qualities of the original site that contribute to the significance of the historic resource. Consideration must be given to the context of the original site during the time, the resource is found to be significant, this is the period of significance.

The characteristics and features of the original site that are important in defining the significant historic character of the resource must be identified and should be included in the relocation plan and criteria for the receiver site.

The characteristics and features of the original site that are important in defining the overall historic character of the resource must be identified and to the greatest extent possible included in the relocation plan for a receiver site.

> Site features defined by the National Park Service include, *circulation systems such as walks, paths, roads, or parking; vegetation such as trees, shrubs, fields, or herbaceous plant material; landforms such as terracing, berms or grading; furnishings such as lights, fences, or benches; decorative elements such as sculpture, statuary or monuments; water features including fountains, streams, pools, or lakes; and subsurface archeological features which are important in defining the history of the site."* (The Secretary of the Interior's Standards for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Properties 2007:102)."

The receiver site should reflect the same or similar relationship of the site and neighborhood as the original location. It must also provide a similar orientation and context for the public to understand the elements for which the resource is determined to be significant to the history

and/or heritage of San Jose. The receiver site must be within the City of San Jose or within the City's sphere of influence in unincorporated Santa Clara County.

The receiver site must provide for the historic resource to be compatible with the site and adjacent properties. The architectural character of the historic resource should be compatible with the character of the receiving neighborhood and the historic resource should not diminish the integrity or character of the neighborhood of the receiving site.

The selection of a receiver site with similar attributes to the original location is critical to maintaining the historic significance of the building. After the historic building has been relocated, it must retain historic features that convey its architecture and retain integrity of design, materials, workmanship, feeling and association.

**II. Description of the historic resource proposed for relocation and the historic setting.**

The Vincent Nola House, a Structure of Merit property located at 13100 Berryessa Road is proposed for relocation to allow a new residential/commercial development on the property. Relocation has been identified as a possible solution to preserve the building. The building is important for its association with Charles McKenzie, prolific local architect who is noted for his craftsman bungalow designs, and the Vincent Nola Family who were prune ranchers 1912-1936 during the extremely important era of fruit ranching and processing. Fruit ranching was continued to the next generation who raised market fruit, primarily cherries and apricots. The house was constructed in 1920 and is on the original site although there are modifications to the porch and rear of the building. The site is in an area of relatively flat terrain without notable natural features. Site features include the orientation to Berryessa Road, front landscaping of grass, flowering bushes and trees. The building's primary façades are the front and west side. The east is a secondary façade and the rear (south) is a secondary façade that has bee altered. When the house was constructed it was the only residential building on the ranch property. Subsequently houses were constructed for a son (1930) and later a grandson (1950), only the son's house (1929-30). Historically, the setting for the house was behind a curbed landscaped front "yard" with grass and flowering bushes, fruit trees including citrus on the side and boarder flowers along the concrete walkway. A wide driveway-work area was on the west side to access the rear operation area, barn and orchard. The side and rear were packed dirt with gravel in some locations. The adjacent land had two large barns, sheds and large open areas where trays were laid out to dry prunes. There are no extant ranch buildings from this era. The other feature was the orchards that covered 80 acres. The orchards were removed several years ago leaving a few fruit trees that appear more as landscaping than commercial plantings. During the period of significance the neighborhood was rural, with houses separated set far apart amid orchards.

**III. Criteria for identifying a receiver site for the Vincent Nola House.**

The receiver site must comply with the general definition for a receiver site and the following specific characteristics.

1. The building is a single story California Craftsman style house constructed primarily of wood with a stucco façades and shingle roof. The orientation is to the street with the primary facades, the front and west side that share a large porch that wraps around incorporating a second entrance on the side. A site of sufficient size and shape to accommodate a minimum 15 foot set back that allows the reconstruction of a front landscaped yard is important. Additionally, the west façade setback should be wide enough to allow the wrap around porch to be visible from the street. These facades communicate the essence of McKenzie's design and are most important to have visible to the public. Additional landscape should incorporate fruit trees reminiscent of those grown on the original site, however these should not block the view of the house.

2. Buildings adjacent to the historic building should be compatible in scale and mass or the historic building should be separated from other homes by sufficient distance and landscaping to convey the rural character of the original site. For an area where the buildings are three-stories, the minimum buffer would be 25 feet on a side and 30 feet in the front and rear.

# APPENDIX E

# GEOTECHNICAL INVESTIGATIONS

Stevens, Ferrone & Bailey
Engineering Company, Inc.

*Geotechnical Engineering*
*Engineering Geolology*
*Storm Water Management*
*Construction Observation & Testing Services*

August 11, 2006

# GEOTECHNICAL INVESTIGATION
# BERRYESSA ROAD RESIDENTIAL DEVELOPMENT
# SAN JOSE, CALIFORNIA
## *SFB PROJECT NO. 168-34*

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## TABLE OF CONTENTS


**1.0 INTRODUCTION** ..... **1**

**2.0 SCOPE OF WORK** ..... **2**

**3.0 SITE INVESTIGATION** ..... **3**

3.1 Surface ..... 3
3.2 Subsurface ..... 3
3.3 Ground Water ..... 4
3.4 Geology and Seismicity ..... 4
3.5 Seismic Design Criteria ..... 6
3.6 Liquefaction and Lateral Spreading ..... 6

**4.0 CONCLUSIONS AND RECOMMENDATIONS** ..... **9**

4.1 Earthwork ..... 10
4.1.1 Clearing and Site Preparation ..... 10
4.1.2 Existing Fill Removal ..... 11
4.1.3 Subgrade Preparation ..... 11
4.1.4 Fill Material ..... 11
4.1.5 Compaction ..... 12
4.1.6 Trench Backfill ..... 12
4.1.7 Exterior Flatwork, Curbs, and Gutters ..... 13
4.1.8 Drainage and Landscape Considerations ..... 13
4.1.9 Construction During Wet Weather Conditions ..... 14
4.1.10 Future Maintenance ..... 14
4.2 Foundation Support ..... 14
4.2.1 Post-Tensioned Slabs ..... 14
4.2.2 Concrete or Masonry Retaining Walls and Soundwalls ..... 17
4.3 Pavements ..... 18

**5.0 CONDITIONS AND LIMITATIONS** ..... **20**

## TABLE OF CONTENTS
(Continued)

### FIGURES


| | | |
|---|---|---|
| 1 | Site Plan | |


### APPENDICES


| | | |
|---|---|---|
| A | Field Investigation<br>Figure A-1, Key to Exploratory Boring Logs<br>SFB Exploratory Boring Logs (SFB-1 through SFB-4) | A-1 |
| B | Laboratory Investigation | B-1 |
| C | Logs of Previous Explorations by Others | C-1 |
| D | Liquefaction Analyses Results | D-1 |
| E | ASFE Report Information | E-1 |

# 1.0 INTRODUCTION

This report presents the results of our geotechnical investigation for the proposed Berryessa Road Residential Development (APN No. 254-15-031, -032, -063 & -064) in San Jose, California, as shown on the Site Plan, Figure 1. The purpose of our investigation was to evaluate the foundation soils and provide recommendations regarding the geotechnical engineering aspects of the project.

As part of our scope of work, we are performing a corrosion potential investigation for the project. The results of the corrosion potential investigation will be submitted in report form under separate cover.

Based on the information indicated on the Site Plan, as well as information provided by Mr. Jeff Ganje of Taylor Woodrow Homes, Inc., it is our understanding that the project will consist of developing approximately 2.87 acres of land for a 34-unit residential subdivision. Associated underground utilities and typical paved access roads are also proposed. Nominal grading is anticipated. The existing structures and associated facilities will be demolished prior to the new construction. The conclusions and recommendations provided in this report are based upon the information presented above; SFB should be consulted if any changes to the project occur to assess if the changes affect the validity of this report.

## 2.0 SCOPE OF WORK

This investigation included the following scope of work:

- Reviewing published and unpublished geotechnical and geological literature relevant to the development of the site and the vicinity, including the logs of previous subsurface explorations performed by others onsite;
- Performing a reconnaissance of the site and surrounding area;
- Performing a subsurface exploration program, including drilling four exploratory borings to depths of about 16 to 51-1/2 feet;
- Performing laboratory testing of samples retrieved from the exploratory borings;
- Performing engineering analysis of the field and laboratory data; and
- Preparing this report.

The data obtained and the analyses performed were for the purpose of providing design and construction criteria for site earthwork, installation of underground utilities, building foundations, retaining walls/soundwalls, and pavements. Assessing environmental/toxicity potential (including mold) of onsite materials, soils, or ground water and their impact on proposed improvements was beyond our scope of work. we recommend the appropriate experts be consulted to address these issues.

# 3.0 SITE INVESTIGATION

SFB performed a reconnaissance of the site and surrounding area on July 26, 2006. Subsurface exploration was performed by using a truck-mounted drill rig equipped with 8-inch diameter, continuous flight, hollow-stem augers. Four exploratory borings were drilled on July 26, 2006, to a maximum depth of about 51-1/2 feet. Previously, three Cone Penetration Tests (CPT's) were performed by others onsite on April 25, 2006 to a maximum depth of about 44-1/2 feet. The approximate locations of all the exploratory borings and previous CPT's are shown on the Site Plan, Figure 1. Logs of SFB's exploratory borings and details regarding SFB's field investigation are included in Appendix A. The results of SFB's laboratory tests are discussed in Appendix B. Logs of the previous exploration by others are provided in Appendix C. It should be noted that changes in the surface and subsurface conditions can occur over time as a result of either natural processes or human activity and may affect the validity of the conclusions and recommendations in this report.

## 3.1 Surface

At the time of our investigation and as shown on Figure 1, the site was bounded by Berryessa Road on the northwest, a residential subdivision on the northeast, and undeveloped lands on the southeast and southwest. This site is approximately rectangular in shape, essentially level, and has a plan area of approximate 2.87 acres. The site was occupied by cherry orchards, and several residential and farm buildings with associated facilities. Portions of the buildings may contain basements. A water well and several septic systems may exist onsite. It is our understanding that several underground storage tanks have been removed from the site in the 1970's and in 2005.

## 3.2 Subsurface

The near-surface materials encountered in SFB's borings generally consisted of interbedded firm to very stiff sandy clay and silts, and medium dense to very dense sands and gravels that extended to the maximum depth explored by SFB at about 51-1/2 feet. The upper 1 foot of soil is generally soft or loose due to agricultural operations. Boring SFB-3, located on a gravel-paved driveway near the southwestern boundary of the site, also encountered fill materials that extended to a depth of about 1 foot below the existing ground surface. These fill materials are weak, heterogeneous, and potentially compressible.

According to the results of laboratory testing, the near-surface materials have a low plasticity and low expansion potential. The explorations previously performed by others encountered similar conditions to the maximum depth of about 44-1/2 feet. Penetration refusal was previously

encountered by a 20-ton CPT rig at CPT-1 and CPT-2 at depths of about 44-1/2 feet and 30 feet, respectively, below the existing ground surface. However, CPT-3 (located near the east end of the site) encountered refusal at a shallow depth below the ground surface and may have encountered an obstruction.

Detailed descriptions of the materials encountered in each of the exploratory borings are presented on the boring logs in Appendix A. SFB's exploratory boring logs and related information depict location specific subsurface conditions encountered during our field investigation. The approximate locations of SFB's exploratory borings were determined by pacing or using landmark references, and should be considered accurate only to the degree implied by the method used.

### 3.3 Ground Water

Free ground water was encountered in Boring SFB-1 at a depth of about 37 feet at the time of our exploration. Historically, ground water has been reported being located at a depth of over 40 feet below the ground surface in the vicinity of the site[1]. All SFB's borings were backfilled with lean cement grout in accordance with Santa Clara Valley Water District requirements prior to leaving the site. It should be noted that the borings might not have been left open for a sufficient period of time to establish equilibrium ground water conditions. In addition, fluctuations in the ground water level could occur due to change in seasons, variations in rainfall, and other factors.

### 3.4 Geology and Seismicity

According to Wentworth, et al. (1999)[2], the site is underlain by Holocene alluvial fan deposits. These deposits are generally described as brown gravelly sand and sandy and clayey gravel, grading upward to sandy and silty clay.

The project site is located in the San Francisco Bay Area that is considered one of the most seismically active regions in the United States. Significant earthquakes have occurred in the San Francisco Bay Area and are believed to be associated with crustal movements along a system of subparallel fault zones that generally trend in a northwesterly direction. The approximate direction and distance from the site to nearby active faults are summarized in the table below[3].

---

[1]State of California, Department of Conservation, Division of Mines and Geology, 2001, *Seismic Hazard Zone Report for the Calaveras Reservoir, 7.5-Minute Quadrangle, Santa Clara County, California*, Seismic Hazard Zone Report 048.

[2]Wentworth, Blake, Mclaughlin, and Graymer, 1999, *Preliminary Geologic Map of The San Jose 30 X 60-Minute Quadrangle, California*, USGS Open File Report 98-795.

[3]Information based on Jennings, 1994, *Fault Activity Map of California and Adjacent Areas*, CDMG Geological Data Map No.6.

| No. | Fault Name | Approximate Distance to Fault (Miles) | Direction to Fault |
|---|---|---|---|
| 1 | Crosley | 1.2 | Northeast |
| 2 | Hayward – SE Extension | 2.0 | Northeast |
| 3 | Calaveras | 5.0 | Northeast |
| 4 | Hayward | 6.0 | Northwest |
| 5 | San Andreas | 15.0 | Southwest |
| 6 | Verona | 16.0 | Northeast |
| 7 | Sargent | 17.6 | Southwest |
| 8 | Greenville | 19.2 | Northeast |
| 9 | Pleasanton | 21.0 | Northeast |
| 10 | Marsh Creek | 28.0 | Northeast |
| 11 | San Gregorio | 29.1 | Southwest |

According to the Alquist-Priolo Earthquake Fault Zones Map of the Calaveras Reservoir Quadrangle, the site is not located in an earthquake fault zone as designated by the State of California[4]. The site is also not located within a County of Santa Clara designated fault rupture hazard zone (2002)[5]. The site is not located within an area characterized as being impacted by earthquake-induced landslides[6].

Earthquake intensities will vary throughout the Bay Area, depending upon numerous factors including the magnitude of earthquake, the distance of the site from the causative fault, and the type of materials underlying the site. The U.S. Geological Survey (2003) indicated that there is a 62 percent chance of at least one magnitude 6.7 or greater earthquake striking the San Francisco Bay region between 2003 and 2032[7]. Therefore, the site will probably be subjected to at least one moderate to severe earthquake that will cause strong ground shaking.

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[4]Hart and Bryant, Revised 1997 (Supplements 1 and 2 added 1999), *Fault-Rupture Hazard Zones in California*, CDMG Special Publication 42.

[5]Santa Clara County, 2002, *Fault Rupture Hazard Zone, Calaveras Reservoir Quadrangle*, Released February 26, 2002.

[6]State of California, 2001, *Seismic Hazard Zones, Calaveras Reservoir Quadrangle*, Official Map Released October 17, 2001.

[7]U.S. Geological Survey, 2003, Fact Sheet 039-03.

According to the U.S. Geological Survey and California Geological Survey Probabilistic Seismic Hazards Assessment Model (2002), the site has a 10% probability of exceeding a peak ground acceleration of about 0.59g in 50 years (design basis ground motion based on alluvium site condition). The actual ground surface acceleration might vary depending upon the seismic characteristics of the onsite bedrock and the overlying unconsolidated soils.

### 3.5 Seismic Design Criteria

For seismic design using the 2001 California Building Code (CBC), the Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada, prepared by California Department of Conservation, Division of Mines and Geology (1998), shows that the site is located approximately 3.8 km from the Hayward fault – Southeast Extension (a Type B fault) and approximately 8.6 km from the Hayward fault (a Type A fault). Based on the distances and types of other faults presented in the publication, the Hayward fault – Southeast Extension controls the seismic design criteria. Based on the CBC, we recommend the following seismic design parameters be used.

| 2001 CBC SEISMIC DESIGN PARAMETRS | | |
|---|---|---|
| Seismic Parameter | Design Value | Reference |
| Seismic Zone | 4 | Figure 16-2 |
| Soil Type | $S_D$ | Table 16-J |
| $N_a$ | 1.12 | Table 16-S |
| $N_v$ | 1.36 | Table 16-T |
| $C_a$ | 0.44 $N_a$ | Table 16-Q |
| $C_v$ | 0.64 $C_v$ | Table 16-R |

### 3.6 Liquefaction and Lateral Spreading

Soil liquefaction is a phenomenon primarily associated with saturated, cohesionless, soil layers located close to the ground surface. These soils lose strength during cyclic loading, such as imposed by earthquakes. During the loss of strength, the soil acquires mobility sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface.

According to ABAG and the U.S. Geological Survey, the site is located in an area mapped as having a moderate likelihood of liquefaction in an earthquake and has been characterized as

having a moderate liquefaction susceptibility[8,9]. According to the Seismic Hazard Zones Map of the Calaveras Reservoir Quadrangle, however, the site is not located in a liquefaction seismic hazard zone as designated by the State of California[10]. Cooper-Clark & Associates characterized the site as having a moderate liquefaction potential[11]. Geomatrix characterized the site as having low susceptibility to liquefaction[12].

To assist in our assessment of the liquefaction potential at the site, we have included the results of the previous CPT's in our analyses. The locations of the borings and CPT's are shown on Figure 1 and the boring logs and CPT's logs are included in Appendix A and Appendix C, respectively.

SFB performed both SPT-based and CPT-based liquefaction analyses using procedures described by the Southern California Earthquake Center (SCEC, Martin and Lew, 1999), the recently published research papers by Seed (2001)[13], and the CPT applications guide by Robertson (2001)[14]. A peak ground acceleration having a 10% probability of being exceeded in a 50-year period was used in our analyses (this resulted in an onsite peak ground acceleration of 0.59g after correcting for subsurface soil conditions)[15]. Ground water level measured in borings during our exploration, which is higher than the historically high ground water level, was used in our analyses to assess its impacts on liquefaction and ground surface damage potential. Our detailed calculations are shown in spread sheet form in Appendix D. The parameters used in our analyses are presented on the spread sheets and are defined in the SCEC, Seed (2001), and Robertson (2001) documents. Please refer to those documents for further details regarding the definition of the parameters.

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[8]Association of Bay Area Governments, 1980, *Liquefaction Susceptibility, San Francisco Bay Region.*

[9]Knudsen, Sowers, Witter, Wentworth, and Helly, 2000, "*Preliminary Maps of Quaternary Deposits and Liquefaction Susceptibility, Nine-County San Francisco Bay Region, California*", USGS Open File Report 00-444.

[10]State of California, 2001, *Seismic Hazard Zones, Calaveras Reservoir Quadrangle*, Official Map Released October 17, 2001.

[11]Cooper-Clark & Associates, 1974, *Geotechnical Investigation, City of San Jose's Sphere of Influence, For the City of San Jose.*

[12]Geomatrix, 1992, *Evaluation of Liquefaction Potential in San Jose, California.*

[13]Seed et al., 2001, *Recent Advances in Soil Liquefaction Engineering and Seismic Site Response Evaluation, Fourth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics and Symposium in Honor of Professor W.D. Liam Finn, San Diego, California.*

[14]Robertson et al., 2001, *Cone Penetration Testing, Geotechnical Applications Guide, Third Edition.*

[15]California Geological Survey, 2003, *Probabilistic Seismic Hazards Mapping Ground Motion Page*; http://www.consrv.ca.gov/CGS/rghm/pshamap/pshamap.asp

In order to assess the potential for liquefaction of the encountered sand layers, we established a descriptive classification based upon the probability of liquefaction calculated using the Seed (2001) procedures. The following descriptive classification was established for this project.

Low Potential ..... Less than 50% probability of liquefying
Moderate Potential..... Between 50% and 75% probability of liquefying
High Potential..... Greater than 75% probability of liquefying

The results of our analyses indicate that the several saturated thin sand and silt lenses (about 1 to 5 feet thick) located deeper than 40 feet below the existing ground surface have a moderate to high potential for liquefying when subjected to a design basis earthquake. The earthquake induced liquefaction in these sand and silt layers could result in residual volumetric strains varying from about 1% to 2.5%. It is our opinion, however, that the potential for ground surface damage at the site resulting from liquefaction of these layers is low since the thickness of non-liquefiable soils overlying the liquefiable soils exceeds the limiting values shown by Ishihara[16].

As part of our analyses, we evaluated the potential for lateral spreading adjacent to Penitencia Creek impacting the site. Lateral spreading occurs when soils liquefy during an earthquake event and the liquefied soils with the overlying soils move laterally to unconfined spaces, which causes significant horizontal ground displacements. Since the onsite liquefiable soils generally exist locally and are thin in extent, and the Penitencia Creek is located (at its closest point) approximately 1,400 feet southeast of the site, it is our opinion that the potential for ground surface damage at the site resulting from lateral spreading adjacent to Penitencia Creek is low.

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[16] Ishihara, K., 1985, *Stability of Natural Deposits During Earthquakes*, Proceedings of the Eleventh International Conference on Soil Mechanics and Foundation Engineering, San Francisco, CA Volume 1, p. 321-376, August.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

It is our opinion that the site is suitable for the proposed residential development from a geotechnical engineering standpoint. The conclusions and recommendations presented in this report should be incorporated in the design and construction of the project to reduce soil or foundation related issues. The following are the primary geotechnical considerations for development of the site.

**EXISTING ORCHARD:** The removal of the existing orchard trees and their associated root systems will result in loosening of the soils in the upper 3 to 4 feet. These loosened soils will be weak and potentially compressible, and probably contain abundant root structures. In addition, holes could result from root removal. In order to reduce the potential for damaging differential settlement of overlying improvements, we recommend all trees, stumps, and their associated root systems be removed from the site, and the upper 3 feet of the surface soils (as measured from existing ground surface grade) in the vicinity of the trees be overexcavated and recompacted as engineered fill. This process should consist of overexcavating to a depth of about 3 feet, and scarifying and recompacting the bottom of the excavation to a depth of about 12 inches. The excavations should then be backfilled to finished grade with engineered fill. Provided the organic material is removed from the soil, the native soil may be used as engineered fill. The actual extent of the removal and recompaction will vary across the site and should be determined in the field at the time of construction by SFB.

**EXISTING FILL, PAVEMENT, AND TRENCH BACKFILL MATERIALS:** Weak and potentially compressible fill materials were encountered onsite near the southwestern boundary of the site that extended to a depth of about 1 foot below existing grade. In addition, the backfill of the previous underground storage tanks might not have been compacted to acceptable engineering standards; these fills may extend to depths of about 8 to 10 feet below the existing ground surface. In order to reduce potentially damaging differential settlement of overlying improvements, we recommend that these fills be removed and re-compacted. The removal of fill materials should be performed so that no more than 5 feet of differential fill thickness exists below the proposed slab foundations. The existing fills can be used as new fill provided it is placed and compacted in accordance with the recommendations presented in this report. The actual extent of the removal and re-compaction will vary across the site and should be determined by SFB in the field during the earthwork operations.

Existing utility pipelines should either be completely removed, completely grouted in-place, or crushed. In addition, the existing utility trench backfill should be over-excavated and re-compacted. Existing asphalt concrete can be broken up and placed within new fill under

proposed pavements or directly under proposed building footprints. If separated and crushed, the existing asphalt concrete can be used as aggregate subbase in new pavement sections.

**ADDITIONAL RECOMMENDATIONS:** Detailed earthwork, drainage, and foundation recommendations for use in design and construction of the project are presented below. We recommend SFB review the final design and specifications to confirm that the recommendations presented in this report have been properly interpreted and implemented in the design, plans, and specifications. We can assume no responsibility for misinterpretation of our recommendations if we do not review the plans and specifications.

## 4.1 Earthwork

### 4.1.1 Clearing and Site Preparation

The site should be cleared of all obstructions including the existing structures and their foundation systems, existing septic systems, existing utilities and pipelines and their trench backfill, existing pavement, trees and their entire root systems, wells, irrigation systems, and debris. Existing wells and septic systems should be removed in accordance with county and local ordinances. Holes resulting from the removal of underground obstructions extending below the proposed finish grade should be cleared and backfilled with suitable material compacted to the requirements in Section 4.1.5, *Compaction*. Tree roots may extend to depths of about 3 to 4 feet. We recommend backfilling operations for any excavations to remove deleterious material be carried out under the observation of SFB.

Portions of the site containing heavy surface vegetation should be stripped to an appropriate depth to remove these materials. The amount of actual stripping should be determined in the field by SFB at the time of construction. Stripped materials should be removed from the site or stockpiled for later use in landscaping, if desired.

From a geotechnical standpoint, existing fill and trench backfill that is removed can be used as new fill onsite provided debris is removed and it is broken up to meet the size requirement for fill material in Section 4.1.4, *Fill Material*. We recommend fill materials composed of asphalt concrete or concrete not be located within 3 feet of the ground surface in landscaping areas; consideration should be given to using these materials below pavements, below building footprints, and within deeper excavations.

### 4.1.2 Existing Fill Removal

As described previously, weak and potentially compressible fills were encountered onsite near the southwestern boundary of the site that extended to a depth of about 1 foot below existing grade. In addition, the backfill of the previous underground storage tanks might not have been compacted to acceptable engineering standards; these fills may extend to depths of about 8 to 10 feet below the existing ground surface. These fill materials should be over-excavated. The removal of fill materials should be performed so that no more than 5 feet of differential fill thickness exists below the proposed building foundations. The actual depth and lateral extent of removal should be determined in the field by SFB at the time of the earthwork operations. Removed fill can be used as new fill provided it satisfies the recommendations in Section 4.1.4, *Fill Material.*

### 4.1.3 Subgrade Preparation

After the completion of clearing, stripping, and existing fill removal, soil exposed in areas to receive improvements such as structural fill, slabs-on-grade, or pavements should be scarified to a depth of about 8 to 12 inches, moisture conditioned to approximately 3 percent over optimum water content, and compacted to the requirements for structural fill. If unstable subgrade is exposed prior to fill placement, SFB should be consulted to determine an appropriate method of subgrade stabilization.

### 4.1.4 Fill Material

From a geotechnical standpoint, on-site fills and soils below the stripped layer having an organic content of less than 3 percent by volume can be used as new fill provided all debris is removed from the existing fill materials. Debris should be removed from the site. All fill placed at the site including on-site fills and soils should not contain rocks or lumps larger than 6 inches in greatest dimension with not more than 15 percent larger than 2.5 inches. If required, imported fill should have a plasticity index of 12 or less and have a significant amount of cohesive fines.

In addition to the mechanical properties specifications, all imported fill material should have a resistivity (100% saturated) no less than the resistivity for the onsite soils, a pH of between approximately 6.0 and 8.5 , a total water soluble chloride concentration less than 300 ppm, and a total water soluble sulfate concentration less than 500 ppm.

If imported fill will be used onsite, we recommend import samples be submitted for corrosion and geotechnical testing at least 2 weeks prior to being brought onsite.

### 4.1.5 Compaction

Structural fill should be compacted to at least 90 percent relative compaction at approximately 3 percent over optimum water content, as determined by ASTM Designation D1557 (latest edition). The upper 6 inches of subgrade soils beneath pavements should be compacted to at least 95 percent relative compaction. Structural fill below depths of 5 feet should be entirely compacted to at least 95 percent relative compaction. Fill material should be spread and compacted in lifts not exceeding approximately 8 to 12 inches in uncompacted thickness.

### 4.1.6 Trench Backfill

Pipeline trenches should be backfilled with fill placed in lifts of approximately 8 inches in uncompacted thickness. Thicker lifts can be used provided the method of compaction is approved by SFB and the required minimum degree of compaction is achieved. Backfill should be placed by mechanical means only. Jetting is not permitted.

On-site trench backfill should be compacted to at least 90 percent relative compaction. Imported sand trench backfill should be compacted to at least 95 percent relative compaction and sufficient water is added during backfilling operations to prevent the soil from "bulking" during compaction. The upper 3 feet of trench backfill in slab and pavement areas should be entirely compacted to at least 95 percent relative compaction. To reduce piping and settlement of overlying improvements, we recommend rock bedding and rock backfill be completely surrounded by a filter fabric such as Mirafi 140N (or equivalent); alternatively, if Caltrans Class 2 permeable material is used in lieu of rock bedding and rock backfill, filter fabric would not be necessary.

Sand or gravel backfilled trench laterals that extend toward roadways or under foundations, and are located below irrigated landscaped areas such as lawns or planting strips, should be plugged with low strength concrete, sand/cement slurry, or onsite clays. The plug for the trench lateral should be located below the curb and gutter or edge of roadway, and under the perimeter of the foundation. The plug will reduce piping from water seepage through the granular materials that may cause roadway and trench surface settlement. The plug should be at least 24 inches thick, extend the full width of the trench, and extend from the bottom of the trench to the top of the granular materials.

### 4.1.7 Exterior Flatwork, Curbs, and Gutters

To reduce the potential for water seepage into the pavement subgrade and associated utility trenches, we recommend curb, gutter, and exterior slabs (including sidewalks and other flatwork) be constructed directly on competent, native soils or compacted fills. We do not recommend using baserock, gravel, or crushed rock below exterior flatwork, curbs, or gutters. If a granular material is placed below these elements, subsurface water can seep through the granular material and detrimentally impact the pavement and flatwork subgrade and trenches. Prior to placing concrete, subgrade soils should be moisture conditioned to increase their moisture content to approximately 3 percent above laboratory optimum moisture (ASTM D-1557). If granular materials are required to be placed below the curb and gutter, we recommend the curbs extend into the pavement subgrade to create a water seepage barrier.

### 4.1.8 Drainage and Landscape Considerations

Ponding of surface water must not be allowed adjacent to foundations or on pavement. Ponding of water should also not be allowed on the ground surface adjacent to or near sidewalks, curb and gutter, or edge of roadways.

Positive surface gradients of at least 2 percent must be provided adjacent to foundations to direct surface water toward suitable discharge facilities. We recommend the surface drainage be designed in accordance with the latest edition of the California Building Code.

Landscaping drainage inlets should be provided around the proposed structures that adequately collect irrigation water and direct the water onto pavement or into storm water collection systems. The drainage inlets should be designed and constructed so that the moisture content of the soils surrounding the foundations do not become elevated and no ponding of water occurs.

To reduce moisture changes in the natural soils and fills in landscaped areas, we recommend that drought resistant plants and "drip" irrigation systems be used. If landscaping plans include trees, they should be planted at least one-half the anticipated mature height of the tree away from slabs to reduce potential effects of tree roots on these improvements. Low flow watering systems should be used and inspected for leakage regularly. Adequate landscaping drainage should be provided, including drainage inlets for all lawn and open space areas.

We recommend regular maintenance of the drainage systems be performed, including maintenance prior to rainstorms. The inspection should include checking drainage patterns to make sure they are performing properly, making sure drainage systems and inlets are functional

and not clogged, and erosion control measures are adequate for anticipated storm events. Immediate repair should be performed if any of these measures appears to be inadequate.

#### 4.1.9 Construction During Wet Weather Conditions

If construction proceeds during or shortly after wet weather conditions, the moisture content of the on-site soils could be appreciably above optimum. Consequently, subgrade preparation, placement and/or reworking of on-site soil as structural fill might not be possible. Alternative wet weather construction recommendations can be provided by SFB in the field at the time of construction, if appropriate. All the drainage measures recommended in this report should be implemented and maintained during and after construction, especially during wet weather conditions.

#### 4.1.10 Future Maintenance

In order to reduce water induced issues, we recommend the homeowner's perform regular maintenance of any open-space or landscaped areas, including maintenance prior to rainstorms. Maintenance should include the re-compaction of loosened soils, collapsing and infilling holes and burrows with compacted soils or low strength sand/cement grout, removal and control of burrowing animals, modifying storm water drainage patterns to allow for sheet flow into drainage inlets or ditches rather than concentrated flow or ponding, removal of debris within drainage ditches and inlets, and immediately repairing any erosion or soil flow. The inspection should include checking drainage patterns, making sure drainage systems are functional and not clogged, and erosion control measures are adequate for anticipated storm events. Immediate repair should be performed if any of these measures appears to be inadequate. Additional surface and subsurface drainage control measures may need to be installed if animal infestation is not controlled, and the resulting animal holes, burrows, and animal created loosened soils and rock are not re-compacted or infilled with sand/cement grout. Temporary and permanent erosion and sediment control measures should be installed over any exposed soils immediately after repairs are made.

### 4.2 Foundation Support

#### 4.2.1 Post-Tensioned Slabs

We recommend the residential buildings be supported on post-tensioned slabs that are designed for the expansion potential of the onsite clayey soils. The slab foundations should bear entirely on properly prepared compacted structural fill or native soils. In no case should a slab

foundation bear upon more than one of these materials. Recommendations for subgrade preparation are described in Section 4.1.3, *Subgrade Preparation*. Prior to the concrete pour, we recommend the moisture content of the subgrade materials be at least 3 percent above laboratory optimum moisture (ASTM D-1557).

The slabs should be at least 10 inches thick, however the actual slab thickness should be determined by the Structural Engineer. An allowable bearing pressure of 1,500 pounds per square foot can be used for localized point and line loads. Deflection of the slab foundations should not exceed the values calculated in Chapter 18, Division III of the Uniform Building Code. Lateral loads, such as derived from earthquakes and wind, can be resisted by friction between the post-tensioned slab foundation bottom and the supporting subgrade. A friction coefficient of 0.25 is considered applicable.

A vapor retarder must be placed between the subgrade soils and the bottom of the slabs-on-grade. We recommend the vapor retarder consist of a double layer of water proof impermeable membranes; the membranes should each be at least 10 mil thick. The membrane layers should be placed at 90-degree angles to each other, lapped at least 6 inches, and sealed with a water proof tape in accordance with the manufacturer's specifications. Protrusions where pipes or conduit penetrate the membranes should also be sealed with water proof tape. Care must be taken to protect the membranes from tears and punctures during construction. Slabs must not be poured during or immediately after rainstorms. Any free water trapped on the membranes must be removed prior to the concrete pour. Providing a vapor retarder below slab foundations will not remove moisture from the bottom or top of the foundation slabs. If a thickened edge is used in the slab foundation design, we recommend the interior grade below the slab be raised using compacted fill materials or imported sand prior to placing the vapor retarder so that concrete is poured directly onto the membranes. We do not recommend the use of sand over the membranes.

In order to reduce surface water intrusion, we recommend a 1 to 2 inch wide strip of relatively impermeable material, such as Parastop II or equivalent, be placed between the bottom of the foundation perimeter edge and the supporting subgrade. The strip should be located approximately 4 inches from the edge of the foundation, and should be placed parallel to the edge. We recommend the vapor retarder extend to the inside edge of the impermeable material strip or thickened edge (if used).

We recommend a concrete mix design with low water/cement ratio be used. Concrete slabs retain moisture and often take many months to dry; construction water added during the concrete pour further increases the drying time. If the slabs are not allowed to completely dry prior to constructing the super-structure, the concrete slabs will expel water vapor into the super-

structure and the vapor will be trapped under impermeable flooring. We recommend the concrete mix design have a maximum water/cement ratio of 0.50. A lower water/cement ratio may be necessary for corrosion protection or to reduce concrete permeability. We recommend a concrete specialist and corrosion engineer be consulted to determine if a lower water/cement ratio is necessary.

In order to reduce differential slab movements, consideration should be given to landscaping uniformly adjacent to the slab foundations. Trees should be no closer to the structure than half the mature height of the tree. Irrigation should be performed in a uniform, systematic manner as equally as possible on all sides of the foundation to maintain moist soil conditions; ponding or trapping of water in localized areas adjacent the slab foundation should not be allowed. Over-watering should be avoided.

An experienced Structural Engineer should design the post-tensioned slabs to resist the differential soil movement. The preliminary soil design parameters presented below were generated using the procedures presented in the second edition of the PTI design manual[17] and a PTI preferred computer program, VOLFLO, was employed to simulate the wetting and drying scenarios of the fills/soils beneath the post-tensioned slabs.

These values are based upon the post-tensioned slab foundations being entirely surrounded by uniform, moderately irrigated landscaping; if differing conditions will exist that will cause differential soil moisture adjacent or below the slabs, or if portions of the foundations will be located adjacent to relatively dry or wet soils, then we should be consulted and modifications to the values below be presented in written form. We recommend the slab-subgrade friction values provided in the most recent PTI Manual be used in order to determine the friction that might be expected to exist during tendon stressing.

**SWELLING MODE**

| | Center Lift | Edge Lift |
|---|---|---|
| Edge Moisture Variation Distance ($e_m$) | 5.0 feet | 5.0 feet |
| Differential Soil Movement ($y_m$) | 1.0 inches | 0.5 inches |

[17] Post-Tensioning Institute, 1996, *Design and Construction of Post-Tensioned Slabs-On-Ground*, Second Edition.

We recommend SFB review the foundation drawings and specifications prior to submittal to verify that the recommendations provided in this report have been used in the design of the slabs.

### 4.2.2 Concrete or Masonry Retaining Walls and Soundwalls

Walls that retain soil must be designed to resist both lateral earth pressures and any additional lateral loads caused by surcharging. The recommendations provided below are for retaining walls that are located at least 1.5H feet away from a building, where H is the height of the retaining portion of the walls; SFB should be consulted when retaining walls are closer than this.

We recommend that the unrestrained walls be designed to resist an equivalent fluid pressure of 40 pounds per cubic foot. This assumes a level backfill. Restrained walls should be designed to resist an equivalent fluid pressure of 40 pounds per cubic foot plus a uniform pressure of 8H pounds per square foot, where H is the height of the wall in feet. Walls with inclined backfill should be designed for an additional equivalent fluid pressure of 1 pound per cubic foot for every 2 degrees of slope inclination. Walls subjected to surcharge loads should be designed for an additional uniform lateral pressure equal to one-third and one-half the anticipated surcharge load for unrestrained and restrained walls, respectively.

The recommended lateral pressures assume walls are fully-backdrained to prevent the build-up of hydrostatic pressures. This can be accomplished by using ½ to ¾ inch crushed, uniformly graded gravel entirely wrapped in filter fabric such as Mirafi 140N or equal (an overlap of at least 12 inches should be provided at all fabric joints). The gravel and fabric should be at least 8 inches wide and extend from the base of the wall to within 12 inches of the finished grade at the top (Caltrans Class 2 permeable material may be used in lieu of gravel and filter fabric). A 4-inch diameter, perforated pipe should be installed and centered within the gravel, approximately one inch off the bottom of the trench. The perforated pipe should be connected to a solid collector pipe that transmits the water directly to a storm drain, drainage inlet, or onto pavement. If weep holes are used in the wall, the perforated pipe within the gravel is not necessary provided the weep holes are kept free of debris, are located no higher than approximately 12 inches from the lowest adjacent grade, and are able to function properly. As an alternative to using gravel, drainage panels (such as AWD Amerdrain 200 for walls or equal) may be used behind the walls in conjunction with perforated pipe (connected to solid collector pipe), weep holes, or strip drains (such as AWD Akwadrain). If used, the drainage panels can be spaced on-center at approximately 2 times the panel width.

Retaining wall backfill should be compacted to at least 90 percent relative compaction using light compaction equipment. Backfill greater than 5 feet deep should be entirely compacted to at least 95 percent relative compaction. If heavy compaction equipment is used, the walls should

be appropriately designed to withstand loads exerted by the heavy equipment and/or temporarily braced.

Retaining walls or soundwalls can be supported on drilled, cast-in-place, straight shaft friction piers that develop their load carrying capacity in the materials underlying the site. The piers should have a diameter of at least 12 inches and a center-to-center spacing of at least three times the shaft diameter. The design depth of the piers should be determined using an allowable skin friction of 300 pounds per square foot for dead plus live loads, with a one-third increase for all loads including wind or seismic. Seventy percent of this value can be used to resist uplift. Lateral load resistance can be developed in passive resistance for pier foundations. We recommend that wall piers extend at least 6 feet below grade, however the actual depth should be determined by the Structural Engineer based upon load resistance requirements. Pier reinforcing should be based on structural requirements.

A passive resistance equal to an equivalent fluid weighing 300 pounds per cubic foot acting against twice the projected diameter of pier shafts can be used. The upper two feet of pier shaft should be neglected in the vertical and passive resistance design. Portions of the piers located within 10 feet of the nearest slope face (as measured laterally from the face of slopes to the face of piers) should also be ignored in the vertical and passive resistance design.

The bottoms of the pier excavations should be relatively dry and free of all loose cuttings or slough prior to placing reinforcing steel and concrete. Any accumulated water in pier excavations should be removed prior to placing concrete. We recommend that the excavation of all piers be performed under the direct observation of SFB to confirm that the pier foundations are founded in suitable materials and constructed in accordance with the recommendations presented herein.

Grade beams should be designed to span between the piers in accordance with the structural requirements. In order to reduce the effects of the on-site soils, the connecting grade beams should be designed to resist an uplift pressure of 1,000 pounds per square foot. The pier foundations may be used to resist uplift.

## 4.3 Pavements

Based on the results of laboratory testing of onsite materials, we recommend that an R-value of 20 be used for proposed pavement subgrade. We recommend an R-value test be performed once the pavement subgrade is exposed to confirm the use of this design value; thinner pavement sections may result if the subgrade R-value is higher than the design value.

We developed the following alternative preliminary pavement sections using Topic 608 of the State of California Department of Transportation Highway Design Manual, the recommended R-value, and typical traffic indices for residential developments. The project's Civil Engineer or appropriate public agency should determine actual traffic indices. The City of San Jose has minimum pavement thickness requirements, and it is our understanding that the thicknesses provided below satisfy those requirements.

| PRELIMINARY PAVEMENT DESIGN ALTERNATIVES<br>SUBGRADE R-VALUE = 20 | | | |
|---|---|---|---|
| **Location** | **Pavement Components** | | **Total Thickness (inches)** |
| | **Asphaltic Concrete (inches)** | **Aggregate Base Class 2 (inches)** | |
| T.I. = 4.5 (courtyards) | 4.0 | 6.0 | 10.0 |
| T.I. = 5.0 (access road) | 4.0 | 6.0 | 10.0 |

The pavement sections presented above are meant for automobile and light truck use after completion of the project. If the pavements are planned to be placed prior to or during construction, the traffic indices and pavement sections may not be adequate for support of what is typically more frequent and heavier construction traffic. If the pavement sections will be used for construction access by heavy trucks or construction equipment (especially fork lifts), SFB should be consulted to provide recommendations for alternative pavement sections capable of supporting the heavier use and heavier loads. If requested, SFB can provide recommendations for a phased placement of the asphalt concrete to reduce the potential for mechanical scars caused by construction traffic in the finished grade.

Pavement baserock and asphalt concrete should be compacted to at least 95 percent relative compaction. The asphalt concrete compacted unit weight should be determined using Caltrans Test Method 308-A or ASTM Test Method D1188. Asphalt concrete should also satisfy the S-value requirements by Caltrans.

## 5.0 CONDITIONS AND LIMITATIONS

Stevens, Ferrone & Bailey Engineering Company, Inc. (SFB) cannot be held responsible for the validity or accuracy of information, analyses, test results, or designs provided to SFB by others. The analysis, designs, opinions, and recommendations submitted in this report are based in part upon the data obtained from SFB's field work and upon information provided by others. Site exploration and testing characterizes subsurface conditions only at the locations where the explorations or tests are performed; actual subsurface conditions between explorations or tests may be different than those described in this report. Variations of subsurface conditions from those analyzed or characterized in this report are not uncommon and may become evident during construction. In addition, changes in the condition of the site can occur over time as a result of either natural processes (such as earthquakes, flooding, or changes in ground water levels) or human activity (such as construction adjacent to the site, dumping of fill, or excavating). If changes to the site's surface or subsurface conditions occur since the performance of the field work described in this report, or if differing subsurface conditions are encountered, SFB should be contacted immediately to evaluate the differing conditions to assess if the opinions, conclusions, and recommendations provided in this report are still applicable or should be amended.

We recommend that SFB be retained to provide geotechnical, geological, and storm water management services during design, reviews, earthwork operations, paving operations, and foundation installation to confirm and observe compliance with the design concepts, specifications and recommendations presented in this report. Our presence will also allow us to modify design if unanticipated subsurface conditions are encountered or if changes to the scope of the project, as defined in this report, are made. If we are not retained to provide geotechnical or geological design modifications or observations, as necessary, prior to or during construction activities, or if other persons or entities are retained to provide such services, SFB cannot be held responsible for any or all claims, including but not limited to claims arising from or resulting from the performance of such services by other persons or entities, and any or all claims arising from or resulting from clarifications, adjustments, modifications, discrepancies or other changes necessary to reflect changed field or other conditions.

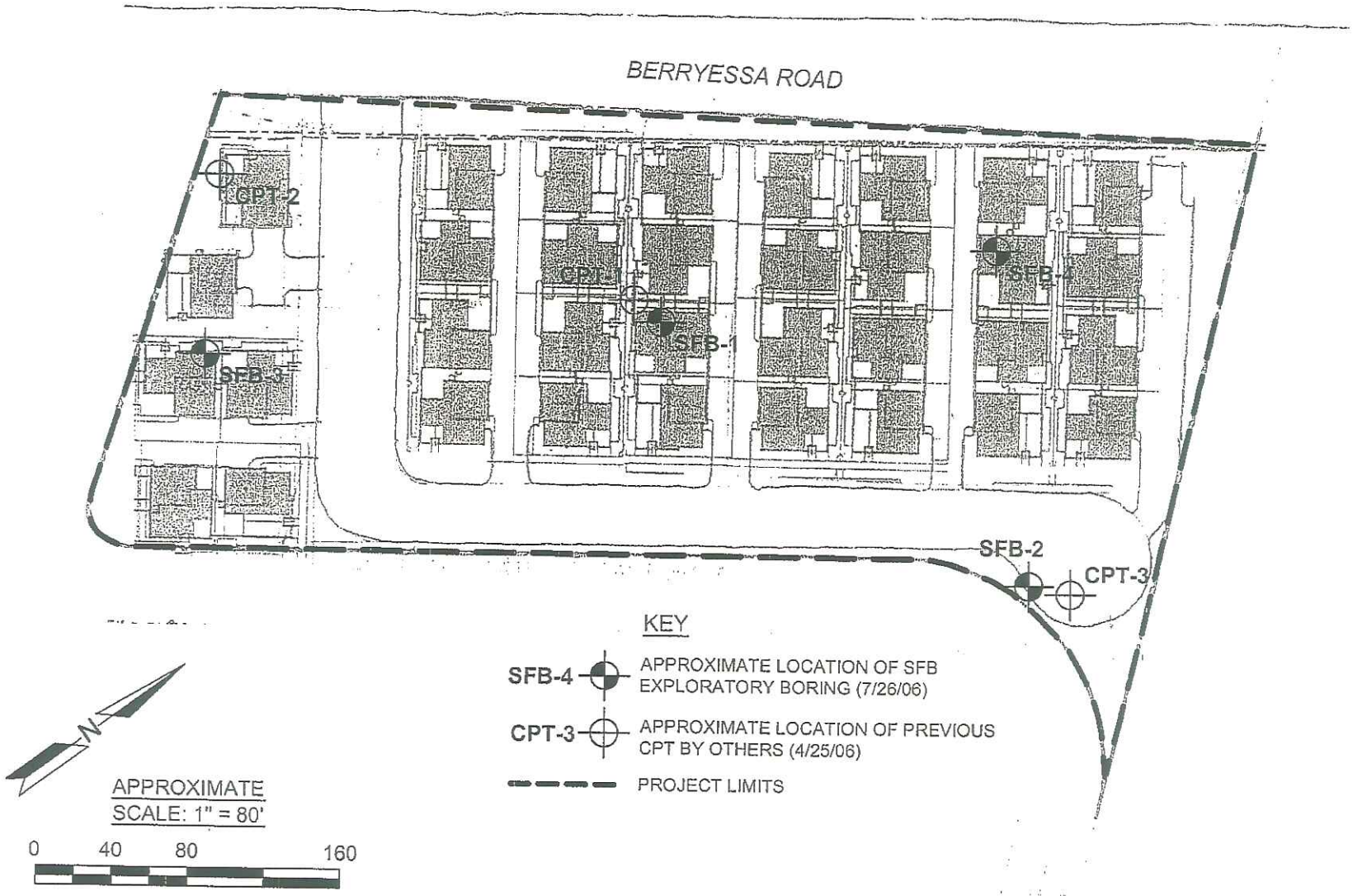
This report is a design document that has been prepared in accordance with generally accepted geological and geotechnical engineering practices for the exclusive use of Taylor Woodrow Homes, Inc. and their consultants for specific application to the proposed Berryessa Road Residential Development in San Jose, California, and is intended to represent our design recommendations to Taylor Woodrow Homes, Inc. for specific application to the proposed Berryessa Road Residential Development. The conclusions and recommendations contained in

this report are solely professional opinions. It is the responsibility of Taylor Woodrow Homes, Inc. to transmit the information and recommendations of this report to those designing and constructing the project. Advancements in the practice of geotechnical engineering and engineering geology, or discovery of differing surface or subsurface conditions, may affect the validity of this report and are not uncommon. SFB strives to perform its services in a proper and professional manner with reasonable care and competence but it is not infallible. We should be consulted immediately if surface or subsurface conditions differ from those described in this report.

In the event that there are any changes in the nature, design or location of the project, as described herein, or if any future additions are planned, the conclusions and recommendations contained in this report should not be considered valid unless we are contacted in writing, the project changes are reviewed by us, and the conclusions and recommendations presented in this report are modified or verified in writing. This report does not necessarily represent all of the information that has been communicated by us to Taylor Woodrow Homes, Inc. and their consultants during the course of this engagement and our rendering of professional services to Taylor Woodrow Homes, Inc. Reliance on this report by parties other than those described above must be at their own risk unless we are first consulted as to the parties' intended use of this report and only after we obtain the written consent of Taylor Woodrow Homes, Inc. to divulge information that may have been communicated to Taylor Woodrow Homes, Inc. We cannot accept consequences for un-consulted use of segregated portions of this report.

Appendix E provides additional information about this report.

# FIGURE




NOTE: Base Map Prepared by Robert Hidey Architects, Dated 7/26/06.

| DATE | | | SITE PLAN | FIGURE |
|---|---|---|---|---|
| AUGUST 2006 | Stevens Ferrone & Bailey Engineering Company, Inc | 1470 Enea Circle #1551<br>Concord, CA 94520<br>Tel 925.688.1001<br>Fax 925.688.1005<br>www.SFandB.com | BERRYESSA ROAD RESIDENTIAL DEVELOPMENT<br>San Jose, California | 1 |
| PROJECT NO. | | | | |
| 168-34 | | | | |

**TRC Lowney**

# Preliminary Geotechnical Investigation

Northeast Corner of Berryessa Road and North Jackson Avenue

San Jose, California

Report No. 1424-55 has been prepared for:

**Pulte Home Corporation**

6210 Stoneridge Mall Road, 5th Floor, Pleasanton, CA 94588

April 28, 2006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## TABLE OF CONTENTS


1.0 INTRODUCTION ..... 1
- 1.1 Project Description ..... 1
- 1.2 Scope of Services ..... 1

2.0 SITE CONDITIONS ..... 2
- 2.1 Exploration Program ..... 2
- 2.2 Surface ..... 2
- 2.3 Subsurface ..... 2
- 2.4 Ground Water ..... 3

3.0 GEOLOGIC HAZARDS ..... 3
- 3.1 Fault Rupture Hazard ..... 3
- 3.2 Ground Shaking ..... 3
- 3.3 Liquefaction ..... 3
  - 3.3.1 General Background ..... 3
  - 3.3.2 Subsurface Conditions Encountered ..... 4
  - Table 1. Granular Layers Considered in Liquefaction Analyses – CPT Logs ..... 4
  - 3.3.3 Methods of Analysis and Results ..... 5
  - Table 2. Results of Liquefaction Analyses – CPT Method ..... 6
  - 3.3.4 Summary of Results ..... 6
- 3.4 Differential Compaction ..... 7
- 3.5 Lateral Spreading ..... 7
- 3.6 Flooding ..... 7

4.0 SEISMICITY ..... 8
- 4.1 Regional Active Faults ..... 8
- 4.2 Maximum Estimated Ground Shaking ..... 8
- 4.3 Future Earthquake Probabilities ..... 8
- 4.4 Preliminary Corrosion Testing ..... 8
- 4.5 CBC Site Coefficient ..... 9
  - Table 5. Seismic Source Definitions ..... 9
  - Table 6. Approximate Distance to Seismic Sources ..... 9
  - Table 7. 2001 CBC Site Categorization and Site Coefficients ..... 10

5.0 CONCLUSIONS AND DEVELOPMENT CONSIDERATIONS ..... 10
- 5.3 Seismically-Induced Settlements ..... 11

6.0 EARTHWORK ..... 11

6.1 Clearing and Site Preparation ..... 11
6.2 Removal of Undocumented Fills and Loose Soils ..... 12
6.3 Subgrade Preparation ..... 12
6.4 Material for Fill ..... 12
6.5 Compaction ..... 13
6.6 Long-Term Slopes ..... 13
6.7 Drainage ..... 13
7.0 PRELIMINARY FOUNDATION RECOMMENDATIONS ..... 13
7.1 Mat Foundations ..... 13
7.2 Lateral Loads ..... 14
7.3 Moisture Protection Considerations ..... 14
8.0 PRELIMINARY PAVEMENT RECOMMENDATIONS ..... 15
Table 8. Recommended Asphalt Concrete Pavement Design Alternatives ..... 15
10.0 FINAL GEOTECHNICAL INVESTIGATION ..... 16
11.0 LIMITATIONS ..... 16
12.0 REFERENCES ..... 17

FIGURE 1 — VICINITY MAP
FIGURE 2 — SITE PLAN
FIGURE 3 — REGIONAL FAULT MAP

APPENDIX A — FIELD INVESTIGATION
APPENDIX B — LABORATORY PROGRAM

# PRELIMINARY GEOTECHNICAL INVESTIGATION
# NORTHEAST CORNER OF BERRYESSA ROAD AND NORTH JACKSON AVENUE
# SAN JOSE, CALIFORNIA

## 1.0 INTRODUCTION

In this report we present the results of our preliminary geotechnical investigation for a residential development to be located at the northeast corner of Berryessa Road and North Jackson Avenue, in San Jose, California. The location of the site is shown on the Vicinity Map, Figure 1. The purpose of our investigation was to evaluate the subsurface conditions at the site and to provide preliminary geotechnical recommendations for conceptual planning of the proposed development.

In preparation of this report, we reviewed the assessor's maps provided by you as well as available aerial photographs and readily available geologic literature.

### 1.1 Project Description

Pulte Home Corporation plans to purchase the site and is considering developing the site for residential construction. We understand that two-story residences founded on mat foundations are being considered. Associated streets and underground utilities are also anticipated. We anticipate that only minor cuts and fills will be required for the project to provide relatively level building pads and proper drainage, however actual grades have not been set.

### 1.2 Scope of Services

Our scope of services was presented in detail in our proposal sent to you dated April 4, 2006. To accomplish this work, we provided the following services:

- Exploration of subsurface conditions by drilling 11 conventional borings, advancing four Cone Penetration Tests (CPTs) and retrieving soil samples for observation and laboratory testing. Due to sequencing of exploration locations, the following location identifications were not used; Boring EB-7, CPT-2, CPT-4, and CPT-6.

- Evaluation of the physical and engineering properties of the subsurface soils by visually classifying the samples and performing various laboratory tests on selected samples.

- Preliminary engineering analysis to evaluate site earthwork and building foundations.

- Preparation of this report to summarize our findings and to present our preliminary recommendations.

Environmental services are being completed by our firm under a separate agreement.

## 2.0 SITE CONDITIONS

### 2.1 Exploration Program

Subsurface exploration was performed on April 5, 6 and 20, 2006, using conventional, truck-mounted hollow-stem drilling and CPT equipment to investigate, sample, and log subsurface soils. Eleven exploratory borings were drilled, each to depths ranging from 23-1/2 to 45 feet. Four CPTs were advanced to depths of approximately 45 feet. At the time of our exploration, much of the ground surface was wet and soft from recent rains. Five of the borings were drilled with a track mounted drill rig.

Borings and CPTs were backfilled in accordance with Santa Clara County Water District guidelines. A permit was obtained from the City of San Jose. The approximate locations of the borings and CPTs are shown on the Site Plan, Figure 2. Logs of our borings and CPTs and details regarding our field investigation are included in Appendix A and our laboratory tests are discussed in Appendix B.

### 2.2 Surface

The approximate 16-acre irregularly shaped site comprises of two parcels (APN 254-15-072 and 254-15-073) The site is bordered on the west by Berryessa Road with residential tracts beyond, on the south by North Jackson Avenue with residential tracts beyond, on the north and east by residential tracts. The approximate 10.3-acre and 5.9-acre parcels have been, generally, used as agricultural land. An unpaved roadway crosses the site in a northwest to southeast direction. An older U.S.G.S. quadrangle sheet shows that the area northeast of this roadway was, at one time, used as an orchard. The orchard trees are no longer present. The area southwest of the road way was used for row crops.

Except for a few sheds adjacent to Berryessa Road, the site is vacant and the ground surface is generally in a loose, plowed condition. About 1-1/3 acres in the northwest portion of the site has been used for storage of dumpsters, trailers and farming equipment.

Based on our field observations, the portion of the site that is to be developed appears to gently slope to the southwest, with a topographic relief on the order of 13 feet with an average gradient of about 1 percent.

### 2.3 Subsurface

Near surface soils generally consist of soft to stiff sandy clay in a very moist condition. Below these surficial soils, our explorations encountered interbedded clays, sandy clays, sandy silty clays, clayey sands, clayey silty sands, clayey sands with gravel, silty sands, poorly graded sands with silt and gravel, poorly graded gravels with silt, to the maximum exploration depth of 45 feet. The fine grained soils varied in consistency from soft to very stiff and the coarse grained soils varied in relative density from loose to very dense. The loose granular soils in Boring EB-1 were encountered at depths between about 12 and about 17-1/2 feet below the surface and at depths between about 12 and about 17-1/2 feet below the surface. In Boring EB-2 the loose granular soils were encountered at depths between about 7 and about 12 feet below the surface. The boring logs associated with our exploration on the site are presented in Appendix B.

Two Plasticity Index (PI) tests were performed on near-surface soil samples resulted in PIs of 11 and 12, indicating a low soil plasticity and expansion potential.

The site has been disced, which has resulted in shallow disturbed soil being present. This is expected to have resulted in disturbance of about the upper 1-foot of soil. Recommendations for compaction of the surface soil are presented in the "Loose Surficial Soils" section of this report.

### 2.4 Ground Water

Free ground water was encountered as shallow as about 30 feet below the existing ground surface in our boring (EB-4) at the intersection of Berryessa Road and North Jackson Avenue to as deep as about 42-1/2 feet below the existing ground surface in our boring (EB-1) at the northeastern corner of the site. The ground water map published in the California Mines and Geology (CDMG) seismic report of the Calaveras Reservoir quadrangle indicates the historically high ground water depth has been about 30 feet below the ground surface on the southwestern end of the site and in excess of 45 feet deep at the northeastern end of the site. Fluctuations in the level of the ground water may occur due to variations in rainfall, underground drainage patterns, and other factors not evident at the time we performed our explorations.

## 3.0 GEOLOGIC HAZARDS

A brief qualitative evaluation of geologic hazards was made during this investigation. Our comments concerning these hazards are presented below.

### 3.1 Fault Rupture Hazard

A Regional Fault Map illustrating known active faults relative to the site is presented in Figure 3. Based on our review, it does not appear that the site is within a currently designated fault hazard zone as denoted by the State of California Alquist-Priolo Special Studies zone maps (known formerly as a Special Studies Zone), or in a designated fault hazard zone by the County of Santa Clara, or the City of San Jose. Based on this information, it is our opinion that the risk of fault ground rupture in the project area is low.

### 3.2 Ground Shaking

Strong ground shaking can be expected at the site during moderate to severe earthquakes in the general region. This is common to virtually all developments in the San Francisco Bay Area. The "Seismicity" section that follows summarizes potential levels of ground shaking at the site.

### 3.3 Liquefaction

#### 3.3.1 General Background

Based on "*Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region, California*" by Witter, et al, (2006), the site is located within an area designated as having a moderate potential for liquefaction. The site is not in an area designated as a Liquefaction Study Zone by the California Seismic Hazard

Zone Map for the Calaveras Reservoir Quadrangle dated October 17, 2001. County of Santa Clara has not mapped the site as being in a liquefaction hazard zone.

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soils most susceptible to liquefaction are loose to moderately dense, saturated granular soils with poor drainage, such as silty sands or sands and gravels capped by or containing seams of impermeable sediment.

When seismic ground shaking occurs, the soil is subjected to cyclic shear stresses that can cause increased hydrostatic pressure that induces liquefaction. Liquefaction can cause softening, and large cyclic deformations can result. In loose granular soils, softening can also be accompanied by a loss of shear strength that may lead to large shear deformations or even flow failure under moderate to high shear stresses, such as beneath a foundation or sloping ground (NCEER/NSF, 1998).

Loose granular soil can also settle (compact) during liquefaction and as pore pressures dissipate following an earthquake. Very limited field data is available on this subject; however, in some cases, settlement on the order of 2 to 3 percent of the thickness of the liquefied zone has been measured.

### 3.3.2 Subsurface Conditions Encountered

The granular soils encountered in the current explorations were generally loose to dense. As hollow-stem drilling methods are not appropriate for determining blow counts, the following discussion of our liquefaction analyses includes only the data collected from our CPTs. The CPTs are distributed in areas of shallow ground water where liquefaction would be more likely. Where granular soils were encountered below the ground water in areas of shallow groundwater, the granular soils were generally medium dense to dense. Generally, between depths of about 30 to 45 feet, we encountered several medium dense sandy silt and silty sand layers. Our visual classifications were confirmed by laboratory testing. No liquefaction analyses were performed on layers above the design ground water depth.

**Table 1. Granular Layers Considered in Liquefaction Analyses – CPT Logs**

| CPT Number | Soil Type | Depth to Top of Sand/Silt Layer (feet) | Thickness of Layer (feet) | *Soil Behavior Type Index ($I_c$) | **Plastic or Non-plastic Fines |
|---|---|---|---|---|---|
| CPT-1 | SM | 37.1 | 2.1 | 2.02 | Non-plastic |
| CPT-3 | SM | 32.0 | 0.7 | 2.10 | Non-plastic |
| CPT-3 | ML | 33.3 | 0.7 | 2.13 | Non-plastic |
| CPT-3 | SM | 35.1 | 0.7 | 2.17 | Non-plastic |
| CPT-3 | SM | 39.7 | 1.3 | 2.03 | Non-plastic |
| CPT-3 | SM | 41.5 | 0.5 | 2.33 | Non-plastic |
| CPT-5 | SM | 34.9 | 0.7 | 2.15 | Non-plastic |
| CPT-7 | SM | 34.9 | 1.0 | 2.07 | Non-plastic |
| CPT-7 | SM | 36.6 | 0.5 | 2.04 | Non-plastic |
| CPT-7 | ML | 37.4 | 0.5 | 2.18 | Non-plastic |
| CPT-7 | SM | 43.8 | 1.0 | 2.18 | Non-plastic |

* Calculated from normalized cone resistance and normalized friction ratio
** The presence of plastic or non-plastic fines determined from $I_c$ values

### 3.3.3 Methods of Analysis and Results

Our liquefaction analyses followed the methods presented by the 1998 NCEER Workshops (Youd, et al., 2001) in accordance with guidelines set forth in CDMG Special Publication 117 (CDMG, 1997). The NCEER methods for SPT and CPT analyses update simplified procedures presented by Seed and Idriss (1971). The analysis method compares the cyclic resistance ratio (CRR) with the earthquake-induced cyclic stress ratio (CSR) at different depths due to the estimated earthquake ground motions. The relationship for CSR is presented as follows:

$$CSR = 0.65\ (a_{max}/g)(\sigma_{vo}/\sigma'_{vo})r_d$$

where $a_{max}$ is the peak horizontal acceleration at the ground surface generated by an earthquake, g is the acceleration of gravity, $\sigma_{vo}$ and $\sigma'_{vo}$ are total and effective overburden stresses, respectively, and $r_d$ is a stress reduction coefficient. CRR is a function of the soil density and grain characteristics.

The factor of safety (FS against liquefaction is expressed as the ratio of the cyclic resistance ratio (CRR) to the cyclic stress ratio (CSR). If the FS is less than 1.0, the soil is considered to be liquefiable during seismic shaking.

$$FS = CRR/CSR$$

We evaluated the liquefaction potential of the medium dense sand and silt strata encountered using both a pseudo-peak horizontal ground acceleration of 0.54g. As discussed in the "Seismicity" section that follows, these are the maximum probable site acceleration based on a prescriptive source (Peterson, et al., 2002).

Our CPT tip pressures were corrected for overburden and fines content. The CPT method utilizes the soil behavior type index ($I_C$) and the exponential factor "n" applied to the Normalized Cone Resistance "Q" to evaluate how likely a layer is to contain significant plastic fines and have a low liquefaction potential.

Cyclic Resistance Ratios (CRR) were calculated for both CPT methods using normalized CPT tip pressures corrected to clean sand values and the CPT clean sand base curves presented in the NCEER method. The CRRs were then corrected for the design ground water level and magnitude scaling factors. The factor of safety against liquefaction is the ratio of the CRR to the CSR (cyclic stress ratio) or seismic demand on a soil layer based on the Seed and Idriss (1971) equation. Estimates of volumetric change and settlement were determined by the Ishihara and Yoshimine (1990) method. As discussed in the SCEC report, differential movement for level ground, deep soil sites, will be on the order of half the total estimated settlement. The results of our analyses are presented below.

**Table 2. Results of Liquefaction Analyses – CPT Method**

| CPT Number | Depth to Top of Sand/Silt Layer (feet) | Layer Thickness (feet) | $q_c$ (tsf) | $*q_{c1N}$ (tsf) | Factor of Safety | Potential for Liquefaction | Estimated Total Settlement (in.) | Estimated Differential Settlement (in.) |
|---|---|---|---|---|---|---|---|---|
| CPT-1 | 37.1 | 2.1 | 111.4 | 74.3 | 0.52 | Likely | 0.61 | |
| | | | | | | **Total =** | **0.61** | **0.31** |
| CPT-3 | 32.0 | 0.6 | 89.6 | 62.5 | 0.48 | Likely | 0.20 | |
| CPT-3 | 33.3 | 0.6 | 81.4 | 55.9 | 0.41 | Likely | 0.22 | |
| CPT-3 | 35.1 | 0.6 | 91.6 | 62.2 | 0.52 | Likely | 0.19 | |
| CPT-3 | 39.7 | 1.3 | 81.7 | 76.7 | 0.53 | Likely | 0.37 | |
| CPT-3 | 41.5 | 0.5 | 64.1 | 41.9 | 0.40 | Likely | 0.16 | |
| | | | | | | **Total =** | **1.14** | **0.57** |
| CPT-5 | 34.9 | 0.7 | 104.6 | 71.0 | 0.6 | Likely | 0.17 | |
| | | | | | | **Total =** | **0.17** | **0.09** |
| CPT-7 | 34.9 | 1.0 | 101.2 | 68.7 | 0.5 | Likely | 0.29 | |
| CPT-7 | 36.6 | 0.5 | 76.8 | 51.6 | 0.3 | Likely | 0.19 | |
| CPT-7 | 37.4 | 0.5 | 84.4 | 56.4 | 0.5 | Likely | 0.15 | |
| CPT-7 | 43.8 | 1.0 | 73.4 | 53.1 | 0.4 | Likely | 0.32 | |
| | | | | | | **Total =** | **0.95** | **0.48** |

* CPT tip pressure corrected for overburden and fines content

Our analyses indicate that the silt and sand layers theoretically can liquefy, resulting in as much as about an inch of total settlement. Post-liquefaction volumetric strains and settlements were estimated using Ishihara and Yoshimine (1990) using "N" values corrected to clean sand values. For the CPT analysis, we determined equivalent "N" values from normalized tip pressures, corrected to clean sand values and soil behavior type (Robertson, 1985). As discussed in the SCEC (1999) report, anticipated differential settlements for level sites with deep sediments will be on the order of half of the total estimated settlements, resulting in differential settlement estimates of about 1/2-inch over a distance of 30 to 50 feet.

As the methods of analysis used to determine estimated total settlement do not take into account the possibility of surface ground rupture, we considered the effects of a capping layer. In order for liquefaction induced sand boils or fissures to occur, the pore water pressure induced within the liquefied strata must exert a large enough force to break through the surface layer. Based on work by Youd and Garris (1995), a capping layer of non-liquefiable material on the order of 9-feet-thick is adequate to prevent the occurrence of ground surface rupture for a liquefiable layer on the order of 2 to 3 feet in thickness. The stratum overlying the liquefiable silts and sands is about 30 feet thick. It is our opinion that the overlying non-liquefiable material would be sufficiently thick that the probability of the sand strata venting to the surface during an earthquake would be low

### 3.3.4 Summary of Results

To summarize the results of our liquefaction analyses, some sand and silt layers encountered below the design ground water depth of 30 feet are theoretically

liquefiable. There appears to be enough of a cap to contain the silty sand seams from causing ground surface rupture. Theoretical total liquefaction-induced settlements are estimated to be on the order of one inch. Liquefaction-induced differential settlements are estimated to be about ½-inch over a distance of 30 to 50 feet.

### 3.4 Differential Compaction

If soils vary in composition both vertically and laterally, strong earthquake shaking can cause non-uniform settlement, or differential compaction, of soil strata, resulting in movement of the near-surface soils. The subsurface soils encountered on the eastern side of the site, in the vicinity of Borings EB-1 and EB-2, vary from being soft to very stiff clayey soils and from loose to dense sandy soils.

Based on the "Tokimatsu & Seed" method, we estimate that the potential for seismically-induced total settlements to be on the order of 3 inchesThis would result in a differential settlement of 1.5 inches in 30 to 50 feet in the localized area shown on Figure 2. We, therefore, judge that the probability of significant differential compaction at this portion of the site to be high. The approximate area affected by this condition is indicated on Figure 2. A discussion regarding the estimated dry sand settlements are presented in the "Conclusions" section of this report and recommendations are presented in the "Foundations" section of this report.

### 3.5 Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "free" face such as an open body of water, channel, or excavation. In soils this movement is generally due to failure along a weak plane, and may often be associated with liquefaction. As cracks develop within the weakened material, blocks of soil displace laterally towards the open face. Cracking and lateral movement may gradually propagate away from the face as blocks continue to break free. Generally, failure in this mode is analytically unpredictable, since it is difficult to determine where the first tension crack will occur.

There are no free faces adjacent to the site. For this reason, the probability of lateral spreading occurring at the site during a seismic event is considered to be low.

### 3.6 Flooding

Our site reconnaissance, review of previous reports, and our review of published data indicates that a portion of the site may be subjected to seasonal flooding. Our review of Flood Insurance Rate Maps (FEMA, 1988) indicates that nearly all of the site would be subjected to inundation during a 100-year flood (Designation Zone A0 (Depth 2)). The "A0" designation is described as "Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined." A small portion of the site, being approximately the southeastern 150 feet also has a flooding designation (Designation Zone B). The "B" designation is described as "Areas between limits of the 100-year and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood." shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined."

# 4.0 SEISMICITY

## 4.1 Regional Active Faults

The San Francisco Bay Area is one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well-defined, active fault zones of the San Andreas Fault system, which regionally trend in a northwesterly direction. The San Andreas Fault (Peninsula segment), which generated the great San Francisco earthquake of 1906, passes about 15 miles southwest of the site.

Other major active faults in the area are the Southeast Extension of the Hayward Fault, located about 2.5 miles northeast of the site, the Calaveras Fault (South segment), located about 5 miles northeast of the site, the main trace of the Hayward Fault, located about 5 miles northeast of the site, the Calaveras Fault (North segment), located about 5 miles northeast of the site, and the Monte Vista-Shannon Fault located about 11 miles to the southwest of the site.

## 4.2 Maximum Estimated Ground Shaking

Maps published in the DMG seismic hazards report for the Calaveras Reservoir Quadrangle (2001) indicate that pseudo-peak horizontal ground acceleration of about 0.54g has a 10 percent probability of exceedance in 50 years. Pseudo-peak ground accelerations have been normalized to a 7.5 Mw seismic event, weighted to account for regional fault distances and seismic activities.

## 4.3 Future Earthquake Probabilities

Although research on earthquake prediction has greatly increased in recent years, seismologists cannot predict when or where an earthquake will occur. The U.S. Geological Survey's Working Group on California Earthquake Probabilities (2003), referred to as WG02, determined there is a 62 percent chance of at least one magnitude 6.7 or greater earthquake striking the San Francisco Bay region between 2003 and 2032. This result is an important outcome of WG02's work, because any major earthquake can cause damage throughout the region.

This potential was demonstrated when the 1989 Loma Prieta earthquake caused severe damage in Oakland and San Francisco, more than 50 miles from the fault rupture. Although earthquakes can cause damage at a considerable distance, shaking will be very intense near the fault rupture. Therefore, earthquakes located in urbanized areas of the region have the potential to cause much more damage than the 1989 Loma Prieta earthquake.

## 4.4 Preliminary Corrosion Testing

Preliminary corrosion tests are currently being performed, but the results are not available at the time of the preparation of this report. An addendum report will be prepared when the corrosion test results are available , presenting the test results and our comments regarding potential corrosion hazards.

## 4.5 CBC Site Coefficient

The California Division of Mines and Geology (CDMG) has issued maps locating "Active Fault Near-Source Zones" to be used with the 2001 California Building Code ("Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada," CDMG/ICBO February 1998). Faults are classified as either "A," "B," or "C" as shown below. Only faults classified as "A" or "B" is mapped since faults classified as "C" do not increase the near-source factor.

**Table 5. Seismic Source Definitions**

| Seismic Source Type | Seismic Source Description | Seismic Source Definition* | |
|---|---|---|---|
| | | Maximum Moment Magnitude, M | Slip Rate, SR (mm/yr) |
| A | Faults that are capable of producing large magnitude events and that have a high rate of seismic activity. | $M \geq 7.0$ | $SR \geq 5$ |
| B | All faults other than Types A and C. | $M \geq 7.0$<br>$M < 7.0$<br>$M \geq 6.5$ | $SR < 5$<br>$SR > 2$<br>$SR < 2$ |
| C | Faults that are not capable of producing large magnitude earthquakes and that have a relatively low rate of seismic activity. | $M < 6.5$ | $SR \leq 2$ |

*Note: Both maximum moment magnitude and slip rate conditions must be satisfied concurrently when determining seismic source type.

The following table lists Type A and Type B faults within about 25 kilometers of the site:

**Table 6. Approximate Distance to Seismic Sources**

| Fault | Seismic Source Type | Distance (kilometers) |
|---|---|---|
| **Hayward (Southeast Extension) | B | 4.0 |
| Calaveras (South) | B | 8.6 |
| *Hayward | A | 8.7 |
| Calaveras (North) | B | 8.7 |
| Monte Vista - Shannon | B | 17.2 |
| San Andreas | B | 24.1 |

*Nearest Type A fault
**Nearest Type B fault

The California Building Code (CBC) describes the procedure for determining soil profile types $S_A$ through $S_F$ in accordance with Section 1636.2 and Table 16-J. Based on our boring and review of alluvium thickness maps of Santa Clara County (Rogers and Williams 1974), the site is predominantly underlain by stiff alluvial soils extending to depths of approximately 200 feet. Therefore, the site can be characterized as soil profile type $S_D$ generally described as a stiff soil profile with average Standard

Penetration Test (N) values in the range of 15 to 50 blows per foot. Based on this information, the site may be characterized for design based on Chapter 16 of the 2001 CBC using the information in Table 3 below.

**Table 7. 2001 CBC Site Categorization and Site Coefficients**

| Categorization/Coefficient | Design Value |
|---|---|
| Soil Profile Type (Table 16-J) | $S_D$ |
| Seismic Zone (Figure 16-2) | 4 |
| Seismic Zone Factor (Table 16-I) | 0.4 |
| Seismic Source Name | Hayward (Southeast Extension) |
| Seismic Source Type (Table 16-U) | B |
| Distance to Seismic Source (kilometers) | 4.0 |
| *Near Source Factor $N_a$ (Table 16-S) | 1.10 |
| Near Source Factor $N_v$ (Table 16-T) | 1.33 |
| Seismic Coefficient $C_a$ (Table 16-Q) | 0.48 |
| Seismic Coefficient $C_v$ (Table 16-R) | 0.85 |

*Note: For Seismic Zone 4, the near-source factor Na used to determine Ca need not exceed 1.1 for structures complying with all the conditions within UBC Section 1629.4.2.

## 5.0 CONCLUSIONS AND DEVELOPMENT CONSIDERATIONS

From a geotechnical engineering viewpoint the proposed development may be constructed as planned, provided the conceptual planning and design and construction is performed in accordance with this preliminary report as well as a final geotechnical report. The preliminary recommendations that follow are intended to allow conceptual planning and preliminary design. We recommend that a final geotechnical investigation be performed once conceptual grading plans have been finalized. Results from our final investigation would be used to confirm our preliminary findings and develop detailed recommendations for final design.

The primary geologic and geotechnical concerns at the site area follow:

- The presence of loose surficial soil.
- The potential for flooding
- The potential for seismically-induced settlements

For this report, we have prepared a brief description of the issues and presented typical approaches to manage potential concerns associated with the long-term performance of the development.

### 5.1 Loose Surficial Soils

Due to previous disking at the site, the surface soils across most of the site are loose. The loose/low density soils appear to be located within the upper ½ to 1 foot. Additionally, when the existing structures are removed, disturbance of near surface

soils in those areas is expected. These materials would have potential for settlement and should be adequately compacted in areas where structures and site improvements are planned. We recommend that the surficial fills and loose soil be removed and recompacted. We estimate that overexcavation of about 6 inches may be required in building and pavement areas. Before replacing the overexcavated soil the next 6 inches of soil should be scarified and compacted. Alternatively, the upper 12 inches of soil can be ripped, moisture conditioned and compacted. The actual depth of any overexcavation and compaction should be determined in the field during construction.

### 5.2 Flooding

According to Flood Insurance Rate Maps (FEMA, 1988), portions of the site may be subject to periodic flooding. Flooding hazards are usually mitigated by raising the site grade or providing upstream storm water detention, retention or diversion. Further evaluation of the site specific flood potential should be done by the project civil engineer or other specialist to further evaluate this issue and to develop specific mitigation.

### 5.3 Seismically-Induced Settlements

Based on our explorations, there appears to be soft clayey layers and loose sandy layers at various depths and locations on the eastern side of the site in the vicinity of Borings EB-1 and EB-2. These layers may settle, due to dry sand settlement, as a result of nearby, strong ground shaking caused by an earthquake. The total settlement is estimated to be on the order of 3-inches and differential settlement on the order of 1-1/2 inches. Post-tension slab foundations will need to be designed in these areas to tolerate some total and differential settlement caused by strong ground shaking. Alternatively, this settlement could be mitigated by over-excavating the upper 12 to 17-1/2 feet of soil and replacing that soil as compacted fill. In-situ ground improvement could also be considered.

Total settlement due to liquefaction is estimated to be as much as 1 inch with a differential settlement of 1/2-inch. Based on our investigation, it does not appear as though the area affected by the potential dry sand settlement is in the same area as the significant settlement due to liquefaction.

## 6.0 EARTHWORK

### 6.1 Clearing and Site Preparation

The site should be cleared of all surface and subsurface deleterious materials including any existing building foundations, slabs, irrigation lines, septic tanks, leach fields, undocumented fills, pavements, debris, designated trees, shrubs, and associated roots. Abandonment of existing buried utilities is discussed below. Following removal of trees, tree stumps and root systems (including those from the previous orchard) should be completely removed. Stump grinding or partial removal should not be allowed. Excavations resulting from tree root ball removal (current or previous) should be enlarged to allow for compaction of the bottom of the excavations. Excavations extending below the planned, finished, site grades should be cleaned and backfilled with suitable material compacted as recommended in the "Compaction" section of this report.

After clearing, any vegetated areas should be stripped to sufficient depth to remove all surface vegetation and topsoil containing greater than 3 percent organic matter by volume. At the time of our field investigation, we estimated that a stripping depth of approximately 3 inches would be required in vegetated areas. The stripping depth may be deeper in some areas. The actual stripping depth required depends on site usage prior to construction and should be established in the field by us at the time of construction. The stripped materials should be removed from the site or may be stockpiled for later use in landscaped areas, if desired.

We recommend that backfilling of holes or pits resulting from demolition and removal of existing foundations, buried structures or other improvements be carried out under our observation and that the backfill be observed and tested during placement. Alternatively, the loose backfill locations should be carefully documented during demolition for excavation and re-compaction during site grading.

## 6.2 Removal of Undocumented Fills and Loose Soils

Any undocumented fills and loose soils should be removed down to native soil. The upper 6 inches of loose soil in former agricultural areas should be over-excavated and replaced as engineered fill. Alternatively, the upper 12 inches of soil can be ripped, moisture conditioned and compacted. If the fill material meets the requirements in the "Material for Fill" section below, it may be reused as engineered fill. Side slopes of fill excavations in building and pavement areas should be sloped at inclinations no greater than 3:1 (horizontal:vertical) to reduce abrupt variations in fill thickness. All fill should be compacted in accordance with the recommendations for fill presented in the "Compaction" section of this report.

Where our investigation has indicated a potential for seismically-induced settlement (either dry sand settlement or settlement due to liquefaction) some earthwork, as previously discussed, may provide an alternative to help mitigate dry sand settlement.

## 6.3 Subgrade Preparation

After the site has been properly cleared, stripped and necessary excavations have been made, exposed surface soils in cut areas or in those areas to receive fill, slabs-on-grade foundations, or pavements should be scarified to a depth of 6 inches, moisture conditioned, and compacted in accordance with the recommendations for fill presented in the "Compaction" section. The finished compacted subgrade should be firm and non-yielding under the weight of compaction equipment.

## 6.4 Material for Fill

All on-site soils below the stripped layer having an organic content of less than 3 percent by weight are suitable for use as fill at the site. In general, fill material should not contain rocks or lumps larger than 6 inches in greatest dimension, with no more than 15 percent larger than 2½ inches. Imported fill material should be inorganic and should have a Plasticity Index (PI) of 15 or less. Import fill should have sufficient binder to prevent caving of the foundation and utility trenches. Proposed import material should be approved by a member of our staff at least four days prior to delivery to the site. Compliance testing for aggregate base may take up to ten days to complete.

Consideration should also be given to the environmental characteristics as well as the corrosion potential of import soils. Laboratory testing, including pH, soluble sulfates, chlorides, and resistivity will provide information regarding corrosion potential. Import soils should not be more corrosive than the native materials.

### 6.5 Compaction

All fill, as well as scarified surface soils in those areas to receive fill or slabs-on-grade, should be uniformly compacted to at least 90 percent relative compaction as determined by ASTM Test Designation D1557, latest edition at a uniform moisture content near the laboratory optimum. The native silty soils may become difficult to compact if the moisture content is allowed to increase several percent above the laboratory optimum moisture content. Fill greater than 5 feet in thickness should be compacted to at least 93 percent compaction for the portion below the upper 5 feet. Fill should be placed in lifts no greater than 8 inches in uncompacted thickness. Each successive lift should be firm and relatively non-yielding under the weight of construction equipment.

In pavement areas, the upper 6 inches of subgrade and full depth of aggregate base should be compacted to at least 95 percent relative compaction (ASTM D1557, latest edition). Aggregate base and all import soils should be compacted at a moisture content near the laboratory optimum.

### 6.6 Long-Term Slopes

On a preliminary basis, we recommend that any cut or fill slopes for have a maximum inclination of 2:1 (horizontal:vertical).

### 6.7 Drainage

In general, positive surface gradients should be provided throughout the development to facilitate surface water runoff and reduce the potential for ponding water, especially adjacent to foundations, slabs, and pavements. As a minimum, we recommend the ground surface have at least a 2 percent gradient within 5 feet of building foundations and we suggest a 5 percent gradient, if possible. Roof runoff should be carried away from foundations and slabs in closed conduits and directed to suitable discharge facilities.

## 7.0 PRELIMINARY FOUNDATION RECOMMENDATIONS

### 7.1 Mat Foundations

The proposed single-family buildings may be supported on conventional or post-tensioned mats bearing on prepared natural soil or compacted fill, design to accommodate approximately 1/2-inch of total settlement and 1/4-inch of differential settlement due to static movement, approximately one inch of total settlement and 1/2-inch of differential settlement due to liquefaction and in the area shown on Figure 2, seismically-induced total settlements of on the order of 3 inches and seismically-induced differential settlements of on the order of 1-1/2 inches in 30 to 50 feet. Earthwork or in-situ ground improvement can be considered to reduce the estimated settlements.

Post-tension mats should be designed using an average allowable bearing pressure of 1000 pounds per square foot (psf) for dead plus live loads, with maximum localized bearing pressures of 1500 psf at column or wall loads. Allowable bearing pressures may be increased by one-third for all loads including wind or seismic. The structural engineer should determine slab thickness and reinforcing in accordance with the anticipated use and loading of the slab.

## 7.2 Lateral Loads

Lateral loads may be resisted by friction between the footings and the supporting subgrade. A maximum allowable frictional resistance of 0.25 may be used for design. In addition, lateral resistance may be provided by passive pressure acting against foundations poured neat against competent soil. We recommend that an allowable passive pressure based on an equivalent fluid pressure of 300 pounds per cubic foot be used in design.

## 7.3 Moisture Protection Considerations

Since the long-term performance of concrete mat foundations depends to a large degree on good design, workmanship, and materials, the following general guidelines are presented for consideration by the developer, design team, and contractor. The purpose of these guidelines is to aid in producing a concrete mat of sufficient quality to allow successful installation of floor coverings and reduce the potential for floor covering failures due to moisture-related problems associated with mat foundation construction. These guidelines may be supplemented, as necessary, based on the specific project requirements.

- We recommend a minimum 10-mil-thick vapor barrier with a maximum water vapor transmission rate of 0.03 perms conforming to ASTM E1745-97(2004), Class C, be placed directly below the mat foundation (no sand). A higher quality vapor barrier (Class A or B) may be used at the owner's option. The vapor barrier should extend to the edge of the mat and should be sealed at all seams and penetrations in accordance with the manufacturer's recommendations and ASTM E1643-98(2005).

- The concrete water/cement ratio should not exceed 0.45. Midrange plasticizers could be used to facilitate concrete placement and workability.

- Water should not be added after initial batching, unless the slump of the concrete is less than specified, and the resulting water/cement ratio will not exceed 0.45.

- Polishing the concrete surface with metal trowels should not be permitted.

- All concrete surfaces to receive any type of floor covering should be moist cured for a minimum of 7 days. Moist curing methods may include frequent sprinkling, or using coverings such as burlap, cotton mats, or carpet. The covering should be placed as soon as the concrete surface is firm enough to resist surface damage. The covering should be kept continuously wet and not allowed to dry out during the required curing period.

- Water vapor emission levels and pH should be determined as required by the manufacturers of the floor covering materials before floor installation. Measurements and calculations should be made according to ASTM F1869-04 and F710-05 protocol.

The guidelines presented above are based on information obtained from various technical sources, including the American Concrete Institute (ACI) and Portland Cement Association (PCA), and are intended to present information that can be used to reduce potential long-term impacts from slab moisture infiltration. The application of these guidelines does not affect the geotechnical aspects of the foundation performance.

## 8.0 PRELIMINARY PAVEMENT RECOMMENDATIONS

Laboratory tests resulted in an R-value of 22 for preliminary design of asphalt concrete pavements. Using estimated traffic indices for various pavement-loading requirements, we developed the following recommended pavement sections based on Procedure 608 of the Caltrans Highway Design Manual, presented in Table 8.

**Table 8. Recommended Asphalt Concrete Pavement Design Alternatives Pavement Components Design R–Value = 22**

| Design Traffic Index | Asphalt Concrete (Inches) | Aggregate Baserock* (Inches) | Total Thickness (Inches) |
|---|---|---|---|
| 4.0 | 2.5 | 7.0 | 9.5 |
| 4.5 | 2.5 | 8.5 | 11.0 |
| 5.0 | 3.0 | 9.0 | 12.0 |
| 5.5 | 3.0 | 10.5 | 13.5 |
| 6.0 | 3.5 | 11.0 | 14.5 |
| 6.5 | 4.0 | 12.0 | 16.0 |

*Caltrans Class 2 aggregate base; minimum R-value equal to 78.

The traffic indices used in our pavement design are considered reasonable values for the proposed development and should provide a pavement life of approximately 20 years with a normal amount of flexible pavement maintenance. Because the native soils at the site are expansive, some increased maintenance and reduction in pavement life can be expected. The traffic parameters used for design were selected based on engineering judgment and not on information furnished to us such as an equivalent wheel load analysis or a traffic study.

## 9.0 AT-GRADE SIDEWALKS AND FLATWORK

Exterior concrete sidewalks should be at least 4 inches thick and underlain by at least 4 inches of Class 2 aggregate base compacted to a minimum of 90 percent relative compaction in accordance with ASTM Test Method D1557, latest edition. The 4 inches of aggregate base may be considered part of the non-expansive fill requirement. If sidewalks are subject to wheel loads, they should be designed in accordance with the "Portland Cement Concrete Pavements" section of this report.

## 10.0 FINAL GEOTECHNICAL INVESTIGATION

Our preliminary geotechnical investigation was based on limited information regarding site development. In addition, because subsurface conditions may vary considerably from those predicted by the preliminary widely-spaced, relatively small diameter borings, and in order to confirm that our report recommendations have been properly implemented, we recommend that we be retained to 1) perform additional subsurface exploration 2) provide final geotechnical recommendations once site development plans are completed, 3) review the final construction plans and specifications, and 4) observe the earthwork and foundation construction.

## 11.0 LIMITATIONS

This report has been prepared for the sole use of Pulte Home Corporation, specifically for evaluation of the approximate 16-acre site at the northeast corner of Berryessa Road and North Jackson Avenue in San Jose, California. The opinions presented in this report have been formulated in accordance with accepted geotechnical engineering practices that exist in the San Francisco Bay Area at the time this report was written. No warranty, expressed or implied, is made or should be inferred.

The opinions, conclusions and recommendations contained in this report are based upon the information obtained from our investigation, which includes data from widely separated discreet locations, visual observations from our site reconnaissance, and review of other geotechnical data provided to us, along with local experience and engineering judgment. The recommendations presented in this report are based on the assumption that soil and geologic conditions at or between borings do not deviate substantially from those encountered or extrapolated from the information collected during our investigation. We are not responsible for the data presented by others.

We should be retained to review the geotechnical aspects of the final plans and specifications for conformance with our recommendations. The recommendations provided in this report are based on the assumption that we will be retained to provide observation and testing services during construction to confirm that conditions are similar to that assumed for design and to form an opinion as to whether the work has been performed in accordance with the project plans and specifications. If we are not retained for these services, TRC Lowney cannot assume any responsibility for any potential claims that may arise during or after construction as a result of misuse or misinterpretation of TRC Lowney's report by others. Furthermore, TRC Lowney will cease to be the Geotechnical-Engineer-of-Record if we are not retained for these services and/or at the time another consultant is retained for follow up service to this report.

The opinions presented in this report are valid as of the present date for the property evaluated. Changes in the condition of the property will likely occur with the passage of time due to natural processes and/or the works of man. In addition, changes in applicable standards of practice can occur as a result of legislation and/or the broadening of knowledge. Furthermore, geotechnical issues may arise that were not apparent at the time of our investigation. Accordingly, the opinions presented in this report may be invalidated, wholly or partially, by changes outside of our control. Therefore, this report is subject to review and should not be relied upon after a period of three years, nor should it be used, or is it applicable, for any other properties.

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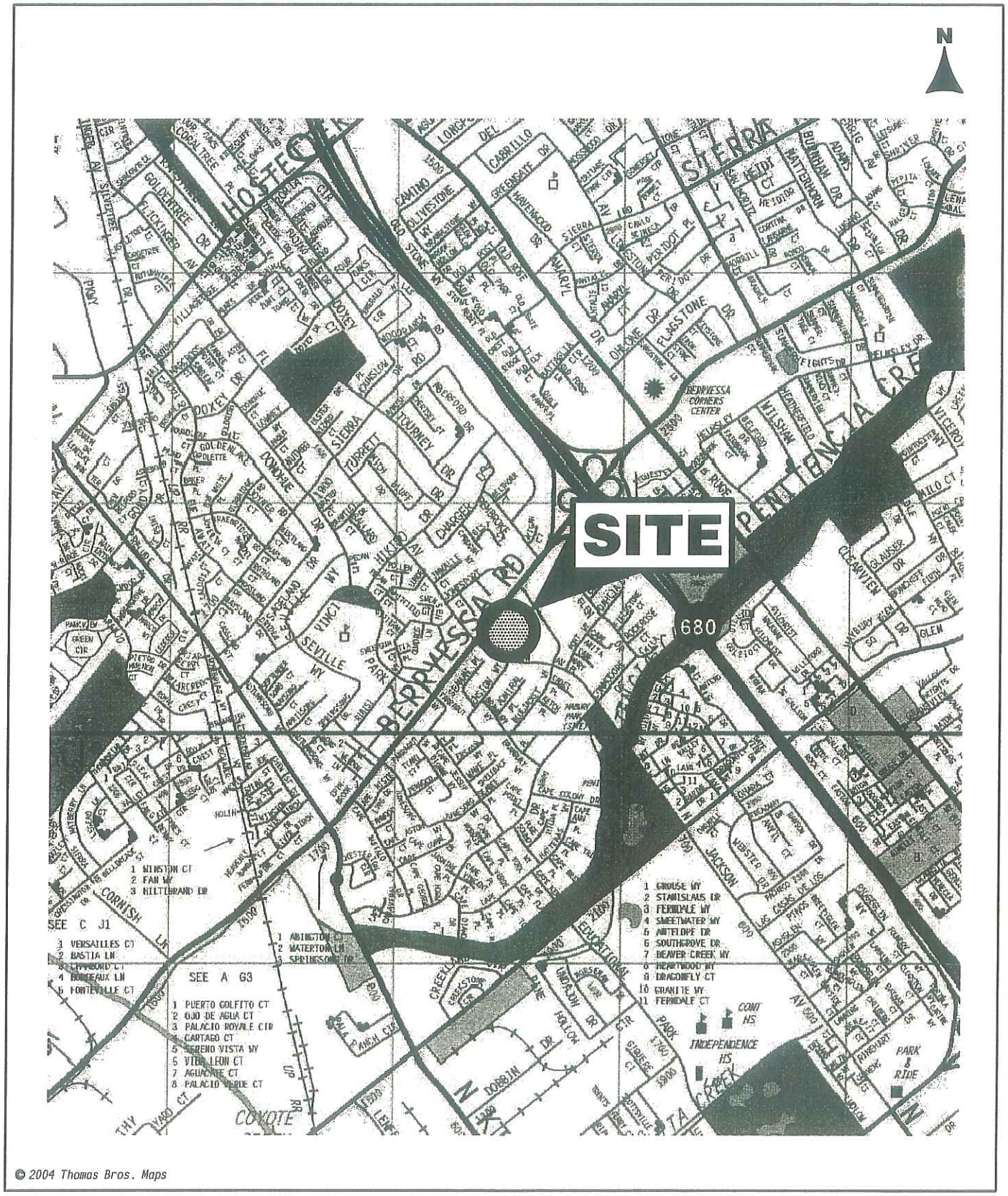


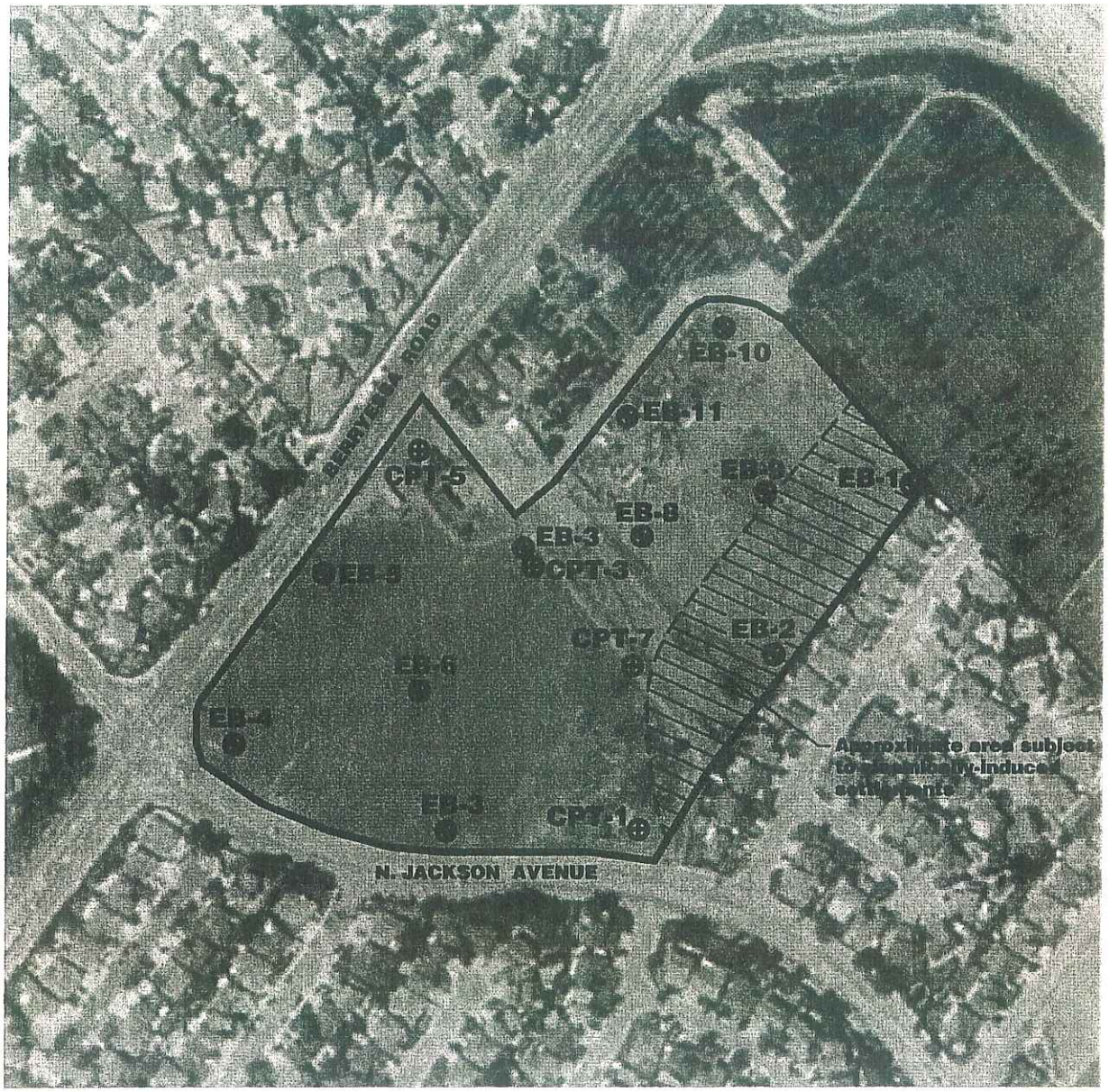

4/06*EB

**VICINITY MAP**

BERREYESSA ROAD AND JACKSON AVENUE
San Jose, California

TRC Lowney

**FIGURE 1**
1424-55




**LEGEND**

- Approximate location of exploratory boring
- Approximate location of cone penetration test
- Approximate area subject to siesmically-induced settlements

0 300 ft.

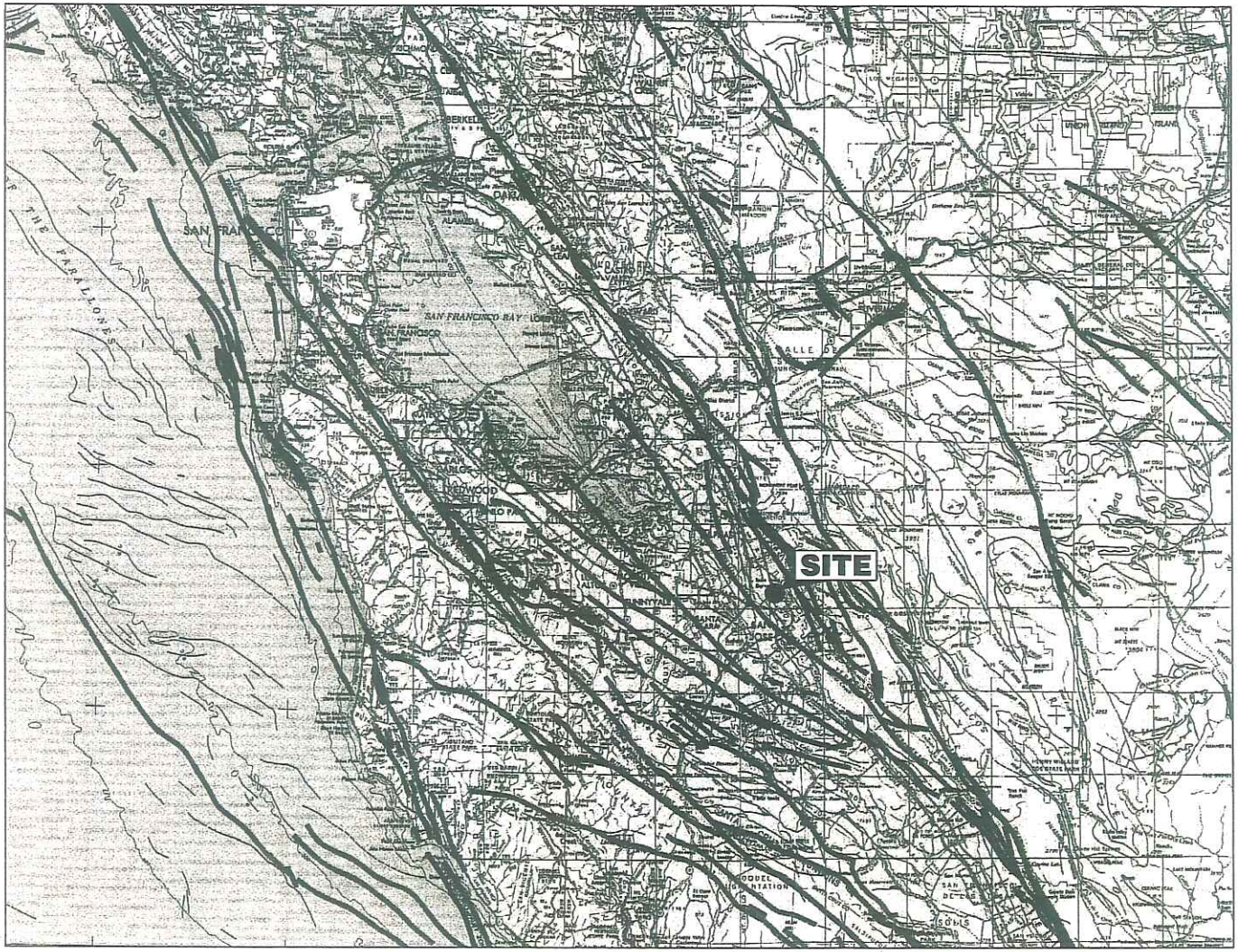
Base from USGS TerraSever, dated 6/93.

**SITE PLAN**

BERRYESSA ROAD AND NORTH JACKSON AVENUE
San Jose, California

TRC Lowney

**FIGURE 2**
1424-55




Note: Some faults highlighted in purple are not considered active (Holocene Movement) by the State of California.

Division of Mines and Geology, James F. Davis, State Geologist

| Geologic Time Scale | | | Years Before Present (Approx.) | Fault Symbol | Recency of Movement on Land Offshore[1] | DESCRIPTION |
|---|---|---|---|---|---|---|
| Quaternary | Late Quaternary | Historic | | | | [1]Displacement during historic time (e.g. San Andreas fault 1906). Includes areas of known fault creep. |
| | | Holocene | 200 | | | Displacement during Holocene time.[2] |
| | | | 10,000 | | | Faults showing evidence of displacement during late Quaternary time.[3,4] |
| | Early Quaternary | Pleistocene | 700,000 | | | Quaternary (undifferentiated) faults — most faults in this category show evidence of displacement during the last 2,000,000 years; possible exceptions are faults which displace rocks of undifferentiated Plio-Pleistocene age. |
| Pre-Quaternary | Pliocene | | 2,000,000 | | | |
| | Miocene | | 5,000,000 | | | Fault showing evidence of no displacement during Quaternary time or faults without recognized Quaternary displacement. |

Base map is a composite of part the San Francisco 1:250,000 scale map (reference code 37 122–A1–TF–250–00, 1980) and the San Jose 1:250,000 scale map (reference code 37 120–A1–TF–250–00, 1969). For cartographic details, refer to these maps. Bathymetric information is not intended for navigational purposes.

Transverse Mercator Projection 10,000–meter Universal Transverse Mercator grid, zone 10.

Minor corrections and additions to culture by California Division of Mines and Geology 1987.

From: Bortugno & others (1991)

0 10 20 Miles

Scale 1:500,000

**REGIONAL FAULT MAP**

BERRYESSA ROAD AND NORTH JACKSONE AVENUE

San Jose, California

TRC Lowney

**FIGURE 3**

1424-55

4/06"EB

# APPENDIX F

# PHASE I ENVIRONMENTAL ASSESSMENT

TRC

**Phase I Environmental**

**Site Assessment Update**

Berryessa Road & Jackson Avenue

San Jose, California

This report has been prepared for:

**Pulte Home Corporation**

6210 Stoneridge Mall Road, 5th Foor, Pleasanton, California 94588

August 17, 2007
Project No. 1424-55B/152407


For Stason I. Foster, P.E.
Senior Project Engineer

Leonardo Alvarez, P.G., C.E.G.
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## TABLE OF CONTENTS


1.0 INTRODUCTION ..... 1
1.1 Purpose ..... 1
1.2 Scope of Work ..... 1
2.0 SITE RECONNAISSANCE ..... 2
2.1 Site Location and Ownership ..... 2
2.2 Topographic Features and Hydrogeology ..... 2
2.3 Site Visit ..... 2
2.3.1 17.5-acre Area ..... 2
2.3.2 3-acre Area ..... 3
2.4 Site Vicinity Drive-By Survey ..... 4
2.5 Environmental Questionnaires and Interviews ..... 4
3.0 USER PROVIDED INFORMATION ..... 5
3.1 Environmental Liens, Specialized Knowledge, Commonly Known Information and Purchase Price ..... 5
3.2 Previous Environmental Reports ..... 5
4.0 HISTORICAL REVIEW ..... 8
4.1 Site ..... 8
4.2 Site Vicinity ..... 9
4.3 City Directories ..... 9
5.0 REGULATORY RECORDS ..... 9
5.1 City and County Agencies File Review ..... 9
5.2 Regulatory Agency Database Report ..... 10
6.0 CONCLUSIONS ..... 10
6.1 Historical Summary ..... 10
6.2 Agricultural Use and Soil Quality ..... 11
6.3 Chemical Storage and Use ..... 11
6.4 Former Underground Storage Tanks ..... 12
6.5 Water Supply Well ..... 12
6.6 Septic Systems ..... 12
6.7 Asbestos ..... 12
6.8 Lead-Based Paint and Soil Quality Near Structures ..... 12
6.9 Urban Runoff Pollution Prevention Program ..... 13
6.10 Soil Management Plan ..... 13
6.11 Potential Environmental Concerns Within the Site Vicinity ..... 13
6.12 Data Failures and Gaps ..... 14
7.0 LIMITATIONS ..... 14
8.0 REFERENCES ..... 15

FIGURE 1 — VICINITY MAP
FIGURE 2 — SITE PLAN
FIGURE 3 — DETAIL OF 3-ACRES SITE AREA

APPENDIX A — TERMS AND CONDITIONS
APPENDIX B — QUESTIONNAIRES
APPENDIX C — AERIAL PHOTOGRAPHS AND MAPS
APPENDIX D — CITY DIRECTORY REPORT
APPENDIX E — REGULATORY AGENCY DATABASE REPORT

# PHASE I ENVIRONMENTAL SITE ASSESSMENT UPDATE
# BERRYESSA ROAD & JACKSON AVENUE
# SAN JOSE, CALIFORNIA

## 1.0 INTRODUCTION

### 1.1 Purpose

This Phase I environmental site assessment update was performed for Pulte Home Corporation, who we understand is considering the purchase and redevelopment of the site shown on Figures 1 and 2. The planned development will include residences and retail space, likely including 3-story townhomes with individual garages and one-story retail space with surface parking.

The purpose of this study was to strive to document recognized environmental conditions at the site related to current and historic use of hazardous substances and petroleum products. The term "recognized environmental conditions" means the presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate a significant release or significant threat of a release into the ground, ground water, or surface water.

This report is an update of our prior October 4, 2006 report titled *Revised Phase I Environmental Site Assessment and Limited Soil Quality Evaluation, Berryessa Road & Jackson Avenue, San Jose, California* (TRC Lowney 2006a). The 2006 report evaluated an approximately 17.5 acre parcel. The current report also includes an evaluation of an additional 3-acre parcel located adjacent to the northwest of the prior study area (see Figure 2).

### 1.2 Scope of Work

As requested, the scope of work for this study was performed in general accordance with the American Society for Testing and Materials (ASTM) Designation E 1527-05 as outlined in our agreement dated July 11, 2007. The scope of work included the following tasks.

- Reconnaissance of the site and limited drive-by survey of adjacent properties for readily observable indications of current or historic activities that have or could significantly impact the site.
- Review of readily available topographic maps and reports to evaluate local hydrogeologic conditions including anticipated ground water depth and flow direction.
- Review of readily available documents, maps, and aerial photographs, and interviews with knowledgeable persons to evaluate past land uses.
- Acquisition and review of a regulatory agency database report to evaluate potential impacts to the site from reported contamination incidents at nearby facilities.
- Review of available regulatory agency files to obtain information about the use and storage of hazardous materials at the site.

The limitations of this Phase I environmental site assessment are presented in Section 7; the terms and conditions of our agreement are presented in Appendix A. This work was performed under the oversight of Leonardo Alvarez, P.G., C.E.G., who meets the ASTM E 1527-05 qualifications.

## 2.0 SITE RECONNAISSANCE

### 2.1 Site Location and Ownership

The approximately 20.5-acre site consists of nine parcels located at the northeast corner of Berryessa Road and North Jackson Avenue in San Jose, California, in a residential area. The site is bordered on the west by Berryessa Road, on the south by North Jackson Avenue, and on the north and east by residential developments. The site location and ownership information is shown in Table 1.

**Table 1. Site Information**

| Site Address | APN | Approximate Acreage | Site Owner |
|---|---|---|---|
| 12960 Berryessa Road* | 254-15-066, 067, 072, 073 and 074 | 17.5 | Pepper Lane-Berryessa, LLC |
| 13060 Berryessa Road | 254-15-031 | 3.0 | Genco, Vicent M. |
| 13100 Berryessa Road | 254-15-032 | | Territo, Charles and Joseph |
| 13120 Berryessa Road | 254-15-063 | | Nola, Richard, et al. |
| NA | 254-15-064 | | Nola, Richard, et al. |

*12960 Berryessa Road was observed posted on flower shop building on parcel 254-15-072.

### 2.2 Topographic Features and Hydrogeology

Based on U.S. Geological Survey (USGS) topographic maps, the site's elevation is approximately 140 feet above mean sea level. Topography in the vicinity of the site slopes gently to the southwest. Based on our recent geotechnical investigation, the shallow water-bearing zone was encountered at depths of approximately 30 to 40 feet; ground water beneath the site likely flows to the southwest.

### 2.3 Site Visit

To observe current site conditions, our representative visited the site on August 14, 2007. Mr. Joe Territo was present during our walk-through of the 3-acre portion of the site (*i.e.*, the Nola, Territo and Genco properties).

#### 2.3.1 17.5-acre Area

At the time of our visit, the 17.5-acre portion of the site consisted mostly of undeveloped land. A small flower shop building, formerly occupied by Jeanett's Flowers & Gifts, was observed on-site with a posted address of 12960 Berryessa Road. This building appeared to be used for the retail sale of cut flowers and consisted of a small flower arrangement/office area, cold storage refrigerators, and retail display area. Access to the interior of the shop was not available. No flower growing operation was observed.

Adjacent to the flower shop was a garage type structure. Access to the interior of the garage was not available. A sign on the garage indicated that it was seasonally occupied by Territo's Christmas Trees and Pumpkins. An adjacent area with outdoor lighting posts appeared to be used for display and sales purposes.

To the north of the flower shop were two structures, constructed of wood framing and plywood, supported on concrete blocks. Access to these structures was not available, but during our prior study (TRC Lowney 2006a), the easternmost structure was observed to be mostly vacant except for various building materials including several 5-gallon buckets of paint. The westernmost structure was locked and a Proposition 65 sign was posted on the door indicating that the structure contained chemicals known to the state of California to cause cancer.

The miscellaneous farming related equipment, tractors, trailers and vehicles (along with other items) that were note during our prior study (TRC Lowney 2006a) within an outdoor storage area on the northern portion of the site, were observed to have been removed. Mr. Territo indicated that the stored items were moved to off-site properties, disposed of, or moved onto the 3-acre portion of the site.

### 2.3.2 3-acre Area

At the time of our visit, the 3-acre portion of the site was developed with three residences. As shown on Figure 3, other structures included detached garages, an enclosed patio area, a former packing shed, a fruit stand, a covered shop structure, a barn, a former water tank tower, and other storage sheds and storage containers. The interiors of the residences were not observed during our visit. In addition, the detached garages were not accessible. Mr. Territo indicated that the garages were used to store vehicles and other miscellaneous household items.

The structure formerly used as a fruit packing shed was observed to be a wood-frame building on an concrete pad. It was used to store a vehicle, furniture, wood boxes, and other miscellaneous items. Restrooms were present within the eastern portion of the structure.

The shop area consisted of an open-sided structure with a corrugated metal roof. A concrete floor slab was present beneath half of the shop; dirt and gravel covered the other half. The shop appeared to be used mainly for equipment maintenance and storage purposes. The barn was observed to be used mainly for storage purposes and had a dirt and gravel floor. A large number and large variety of items were observed to be stored within the barn and shop structures, as well as on the dirt and gravel ground surfaces surrounding these structures. In general, stored items consisted of old cars, trucks, boats, trailers, farm machinery, tools, vehicle parts, wood, piping, furniture, household goods and various other miscellaneous items.

Significant quantities of hazardous materials were not observed on-site; however, various maintenance materials such as lubricants, paints, cleaning compounds, etc., were observed to be present mainly within (and near) the shop and barn. These were stored on shelving or on the ground and were typically present in plastic or metal containers with capacities of 5-gallons or less. Several unlabeled 55-gallon drums, most appearing to be empty, and several automotive batteries also were observed. Gasoline and diesel fuel also were present in various machinery including a generator, pressure washer and vehicles, among others.

No significant spills of hazardous materials were readily observable; however, the dirt and gravel ground surface near the shop and barn area appeared to be oil stained. Due to the quantity of stored items, our ability to observe these areas of the site was limited.

A well used for agricultural water supply was observed adjacent to a wooden tower that formerly supported a water tank (see Figure 3). Based on our observations and discussions with Mr. Territo during our site visit, five septic systems are present at the site. These include three systems connected to the residences, one connected to restrooms within the enclosed patio structure and one connected to the restrooms within the packing shed; approximate locations are shown on Figure 3.

An orchard was present on the northern portion of the area; orchard trees also were located near the residences.

## 2.4 Site Vicinity Drive-By Survey

To evaluate adjacent land use, we performed a limited drive-by survey. Our observations are presented in Table 2.

**Table 2. Adjacent Properties**

| Property Use | Direction from Site |
|---|---|
| Residential | North |
| Residential | South |
| Residential | East |
| Residential | West |

## 2.5 Environmental Questionnaires and Interviews

During our study, environmental questionnaires were provided to the owners of the 3-acre portion of the site. The information presented on the questionnaires is used to obtain general information regarding past and current site usage. Copies of the completed questionnaires received from Mr. Joseph Territo and Mr. Vincent Genco are presented in Appendix B. The questionnaire from Mr. Richard Nola was not received as of the date of this report. We also discussed the site history with Mr. Joseph Territo during our visit.

Based on our conversation and the completed questionnaires, the Nola family owned the 3-acre site area and nearby property since 1911. Carmela Territo (the granddaughter of Isabela Nola) was noted as an owner (of the 13100 Berryessa Road parcel) from 1960 to 1990, when ownership was transferred to Charles and Joseph Territo. Mr. Vincent Genco reportedly has owned the 13060 Berryessa Road parcel since 1950.

Most of the 3-acre site area was previously used as an orchard (cherries, prunes and apricots) as well as for the existing residences. Orchard trees are still present on portions of the site, but not actively maintained. According to Mr. Territo, no pesticides were applied to the orchards or stored on-site, except for roundup which was sprayed to control weeds along roadways. He also stated that the packing shed was formerly located on the southern portion of the 3-acre site area and was moved to its current location many years ago.

Mr. Territo indicated that two underground storage tanks (UST) used for gasoline and diesel fuel were previously removed from the 13100 Berryessa Road parcel. He also indicated that a UST was present on the 13060 Berryessa Road parcel that initially was closed in place and filled with sand slurry, but subsequently was removed. On the questionnaire, Mr. Genco noted that this UST was removed with permits in 2005.

Other information presented on the questionnaires was generally consistent with that discussed elsewhere in this report.

During our prior study (TRC Lowney 2006a), we interviewed and received a completed questionnaire from the owner of the 17.5-acre parcel, Mr. Henry Cord of Pepper Lane-Berryessa, LLC.

Based on our conversation and the completed questionnaire, Pepper Lane-Berryessa, LLC has owned the 17.5-acre parcel since 1996. Mr. Cord indicated that the site was historically used for agricultural purposes and that the flower shop leased a small portion of the site. He also indicated that a portion of the site was leased to the Territo family who reportedly used it seasonally for the sale of Christmas trees and pumpkins, as well as for storage purposes. During our prior site visit (TRC Lowney 2006a), Mr. Charles Territo introduced himself and indicated that his family had owned and farmed the site beginning in the early 1900s. The northern half of the site was reportedly an orchard (cherry and apricot) and the southern portion of the site was used for various row crops. He also indicated that the two plywood structures (and fenced lot) located to the north of the flower shop were constructed and used during the 1970s for office and storage purposes by the home builder that developed the adjacent property to the north and east of the site. He recalled that the structures were used to store various building materials and suspected that the posted Proposition 65 sign was related to that use.

## 3.0 USER PROVIDED INFORMATION

### 3.1 Environmental Liens, Specialized Knowledge, Commonly Known Information and Purchase Price

The ASTM standard defines the User as the party seeking to use a Phase I environmental site assessment to evaluate the environmental condition of the site. For the purpose of this Phase I environmental site assessment, the User is Pulte Home Corporation. Per the ASTM standard, it is the User's responsibility to communicate certain information to the environmental professional (TRC). This information consists of the following:

- Specialized knowledge or experience that is material to recognized environmental conditions in connection with the site.
- Commonly known or reasonably ascertainable information within the local community about the property that is material to recognized environmental conditions in connection with the property.
- Knowledge of any environmental liens or activity and use limitations (AULs) filed under federal, tribal, state, or local law.
- In a transaction involving the purchase of real estate, the User must consider the relationship of the purchase price of the property to the fair market value of the property if the property were not affected by hazardous substances. If there is a discrepancy between the purchase price and fair market value, this information should be provided.

It is our understanding that Pulte Home Corporation is not aware of any of the above items.

### 3.2 Previous Environmental Reports

To further evaluate the site history, we reviewed and relied upon the information presented in our prior reports and in the reports listed below that were provided by Pulte Home Corporation. Note that the five reports that were prepared by others focus on the 3-acre site area and the two listed reports by TRC Lowney focus on the 17.5-acre site area.

Terrasearch, Inc. May 27, 2005. *Phase I Environmental Site Assessment, 13060, 13100 and 13120 Berryessa Road, San Jose, California.*

In the above report, the site conditions were reported to be generally similar to those observed during our recent site visit. According to information contained in Santa Clara County Environmental Health Department (SCCEHD) files that were reviewed by Terrasearch, a 550-gallon gasoline UST was closed in place at the 13060 Berryessa Road parcel in 1985 with County oversight. A 500-gallon gasoline UST and 1,000-gallon diesel UST were removed without a permit from the 13100 Berryessa Road parcel in 1984. A 400-gallon gasoline UST also was reported to have been removed without a permit from the 13120 Berryessa Road parcel. No soil testing documentation was available. Stained soil was reported to be present in the barn area.

Terrasearch recommended further assessment of the site including the collection of soil samples from agricultural areas, soil and ground water sampling near the USTs, removal of the in-place UST, and sampling of building materials for asbestos and lead based paint.

Terrasearch, Inc. May 31, 2005. *Surficial Soil Phase II Environmental Site Assessment, 13060, 13100 and 13120 Berryessa Road, San Jose, California.* (Note: Page 2 was missing)

The above report presents the results of soil sampling performed to evaluate potential impacts from the past agricultural use of the site. Eight soil samples were collected and analyzed for organochlorine pesticides, lead, arsenic and mercury. The soil samples were described as "surficial" samples collected at depths from 0.5 to 2 feet.

DDT, DDE, DDT, a-chlordane and g-chlordane were detected at concentrations up to 3.2, 95, 31, 7.2 and 3.5 parts per billion (ppb), respectively. Additionally, arsenic, lead and mercury were reported at concentrations up to 14, 110, and 0.22 parts per million (ppm), respectively. Similar concentrations of arsenic, lead and mercury (up to 10, 130 and 0.14 ppm, respectively) were detected in four additional soil samples that were collected from the corners of the site to aid in evaluating background concentrations.

Terrasearch concluded that the low pesticide concentrations were well below screening levels established by the EPA for residential site use and indicated that the metal concentrations were typical of natural background levels.

Terrasearch, Inc. July 18, 2005. *Additional Phase II Environmental Site Assessment (Draft), 13060, 13100 and 13120 Berryessa Road, San Jose, California.*

The above report presents the results of soil and ground water sampling performed near the reported former and existing UST locations. Four borings were advanced from which soil and ground water samples were collected. It is additionally stated that the existing UST was removed and that two soil samples were collected from underlying soil. Note that the location of the former UST on the 13120 Berryess Road parcel is not explicitly indicated. Terrasearch stated that the borings were drilled near the USTs; thus, we presume that Terrasearch boring B1 was located near the former UST (that location is depicted on Figure 3).

The soil and ground water samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), diesel (TPHd), motor oil (TPHmo) and volatile organic compounds (VOCs). These analytes were not detected in the soil samples.

TPHd and TPHmo were detected in ground water at up to 150 and 1,200 ppb, respectively. VOCs also were detected in ground water including 2-butanone (at 2.5 ppb), chloroform (at 14 ppb), dibromochloromethane (at 1.9 ppb) and bromodichloromethane (at 5.9 ppb). The detected TPHd and TPHmo were noted as being at concentrations above

the environmental screening level (ESL) of 100 ppb, while the VOCs were noted as being at concentrations below their respective ESLs.

Engeo, Inc. May 30, 2006. *Modified Phase One Environmental Site Assessment Update, Berryessa Road, San Jose, California.*

The above report included a review of site conditions by Engeo. Additionally, four borings were advanced to further evaluate the TPHd and TPHmo previously detected in ground water at the site. No petroleum hydrocarbons or VOCs were detected in the soil or ground water samples.

Stained soil was reportedly observed in several areas on the southern portion of the site and sampling of near-surface soil was recommended near the barn and shop.

Environmental Resources Management (ERM). August 8, 2006. *Phase II Environmental Site Assessment Report, 13060, 13100 and 13120 Berryessa Road, San Jose, California.*

The above report presents the results of a limited soil and ground water quality investigation conducted by ERM. Four borings were advanced to further evaluate the TPHd and TPHmo previously detected in ground water at the site. Three shallow soil samples (½-foot depth) were collected near the barn and packing shed to evaluate potential impacts to soil from lead based paint and maintenance activities.

TPHmo was detected in shallow soil at the barn at 440 ppm, which was noted as being above the ESL of 100 ppm. Lead was detected at concentrations of 37 and 44 ppm, which were noted as being below the ESL of 150 ppm.

TPHmo was detected in two of the four ground water samples at 720 and 1,400 ppb, which exceed the ESL of 100 ppb. TPHg, TPHd, BTEX and MTBE were not detected in the ground water samples.

ERM concluded that, to further delineate these impacts, further Phase II investigation is warranted.

TRC Lowney. October 4, 2006. *Revised Phase I Environmental Site Assessment and Limited Soil Quality Evaluation, Berryessa Road & Jackson Avenue, San Jose, California.*

The above report focused on the 17.5-acre portion of the site. In addition to tasks typical of a Phase I site assessment, soil sampling was performed to evaluate the potential impacts to soil quality from the past agricultural use of the site.

The study indicates that the southern half of the 17.5-acre site area historically was occupied by row crops whereas the northern half consisted of orchards.

Soil samples collected from 16 locations across the site (at depths from 0 to 6 inches) were analyzed for organochlorine pesticides, arsenic, lead and mercury.

Laboratory analysis of the surface soil samples revealed elevated concentrations of pesticides, primarily total DDT (the sum of DDE, DDD and DDT) at up to 4.44 ppm and dieldrin at up to 0.409 ppm. The concentrations detected in soil from the southern half of the site, which historically was occupied by row crops, exceeded residential screening levels. Seven of eight samples collected from the southern half of the site also exceeded the total threshold limit concentration (TTLC) for total DDT, which defines a solid waste as

hazardous in California. Detected pesticide concentrations in soil samples collected from the northern half of the site did not exceed residential screening levels or TTLCs.

Except for lead at one sample location, the metal concentrations detected in the on-site soil samples were reported as being within the range of typical background conditions. In sample SS-1, lead was detected at 130 ppm, and additional sampling was recommended at that location.

TRC Lowney. June 12, 2006. *Additional Soil Quality Evaluation, Berryessa Road & Jackson Avenue, San Jose, California.*

The above report presents the results of additional soil sampling that was performed on the 17.5-acres site area to evaluate the distribution of lead in shallow soil near prior sample location SS-1 as well as to evaluate the vertical extent of pesticide impacted soil. Soil samples were collected from seven locations. Based on the results, it was concluded that, in general, the vertical extent and distribution of pesticide-impacted soil was variable but generally appears limited to the upper 3 feet of soil across the southern portion of the site. Additionally, it was indicated that the elevated lead concentration previously detected at SS-1 appears anomalous and does not appear to be laterally or vertically extensive.

It was recommended that the City of San Jose Environmental Services Department (SJESD) be contacted to discuss the current and prior investigations and, prior to site remediation/development, a remedial action work plan be submitted to and approved by the overseeing regulatory agency.

## 4.0 HISTORICAL REVIEW

To evaluate the site history, we reviewed:

- Aerial photographs (dated 1939, 1956, 1965, 1974, 1982, 1993 and 1998) from Environmental Data Resources, Inc. (EDR) in Southport, Connecticut.
- USGS 15-minute and 7.5-minute topographic maps (1961, 1968, 1973 and 1980).
- Historic Sanborn fire insurance maps were requested from EDR in Southport, Connecticut. However, no Sanborn maps were available.

The above maps and photographs commonly provide historical information regarding a site including land uses and changes in development over time. Copies of these maps and photographs are presented in Appendix C. The following is a summary of our observations for the site and site vicinity.

### 4.1 Site

**1939 through 1980:** The aerial photographs and topographic maps dated between 1939 and 1980 show the northern portion of the site to be occupied by orchards and the southern portion of the site to be occupied by row crops. On the 1939 photograph, the residences on the 13100 and 13120 Berryessa Road parcels are shown, along with three other structures that appear to be the barn, packing shed (at its initial location) and another similar building. The residence at 13060 Berryessa is shown on the 1956 aerial photograph. By 1965, the building configuration on the 3-acre site area appears similar to the current configuration, except that the garage on the 13100 Berryessa Road site and the shop structure do not appear to be present.

**1982 through 1998**: On the aerial photographs dated from 1982 to 1998, the orchards on the 17.5-acres site area appear to have been removed and this area of the site appears to be fallow agricultural land. The plywood structures reported to have been used as part of a construction yard also are depicted on these photographs. The flower shop and structures related to the Christmas tree and pumpkin sales operation are shown on the photographs taken during the 1990s. The photographs taken during the 1990s also show miscellaneous items stored on the northern portion of the site, to the east of the 3-acre site area. Due to the scale and quality of photographs, specific site details are difficult to interpret; however, the building configuration on the 3-acre site area appears similar to the current configuration.

### 4.2 Site Vicinity

On the aerial photographs dated from 1939 to 1965, the site vicinity appears to be mainly used for agricultural purposes. Subsequent photographs show large increases in mainly residential development of nearby and adjacent property.

### 4.3 City Directories

To provide additional information pertaining to past site occupants, a city directory search report was obtained from Environmental Data Resources, Inc. Listed past site occupants are presented in Table 3; the city directory report is presented in Appendix D.

**Table 3. Reported Past Site Occupants**

| Year | Address | Occupant |
|---|---|---|
| 1963 | 13060 Berryessa Road | Genco, Vincent M. |
| 1963 | 13100 Berryessa Road | Territo, Sebastian J. |
| 1963 | 13120 Berryessa Road | Nola, Frank S. |
| 1986 | 13060 Berryessa Road | Genco, Vincent M. |
| 1986 | 13120 Berryessa Road | Nola, Frank S. |
| 1991 | 13120 Berryessa Road | Nola, Frank S. |
| 1996 | 12960 Berryessa Road | Jeannette's Flowers & Gifts, Territo's Pumpkin Patch, Territo's Weed Abatement |
| 2000 | 12960 Berryessa Road | Jeannette's Flowers & Gifts, Territo's Trees |

## 5.0 REGULATORY RECORDS

### 5.1 City and County Agencies File Review

To attempt to obtain additional information pertaining to the site history and hazardous materials usage and storage, we reviewed readily available information at the San Jose Building Department (SJBD), San Jose Fire Department (SJFD), and Santa Clara County Environmental Health Department (SCCEHD) pertaining to site location.

A 1995 electrical/temporary power pole permit for a pumpkin patch and Christmas tree lot at 12960 Berryessa, and a 1998 permit for a new electrical meter to 13100 Berryessa Road were contained in SJBD files.

SJFD files contained a 1999 inspection report for 13100 Berryessa Road noting welding/cutting equipment; no violations were noted.

A representative of the SCCEHD indicated that their records show that files exist for some of the addresses on the 3-acre portion of the site, but the files could not be located.

## 5.2 Regulatory Agency Database Report

During this study, a regulatory agency database report was obtained and reviewed to help establish whether contamination incidents have been reported in the site vicinity. A list of the database sources reviewed, a detailed description of the sources, and a radius map indicating the location of the reported facilities relative to the project site are presented in Appendix E.

There were no reported nearby hazardous materials spills or releases with a potential to significantly impact the site. The potential for site impact was evaluated based on information in the database records regarding the type of release, current case status, and distance and direction from the site.

Database listings for on-site addresses, which note the presence of historic USTs, are presented below in Table 4.

**Table 4. On-Site Database Listings**

| Name | Map ID No. | Address | Remarks |
|---|---|---|---|
| Vincent Genco | A1 | 13060 Berryessa Road | HAZNET listing indicating the disposal of empty container from the site. |
| Joseph V. Territo | A2 | 13100 Berryessa Road | Historic UST listing indicating the presence of two USTs installed in 1977. |
| Vincent M. Genco | A3 | 13060 Berryessa Road | Historic UST listing indicating the presence of one USTs installed in 1974. |

# 6.0 CONCLUSIONS

## 6.1 Historical Summary

Based on the information obtained during this study, the site has been used for agricultural purposes since at least the early 1900s. Aerial photographs dating back to 1939 show orchards on the northern portion of the site and row crops on the southern portion of the site. The orchards appear to have been removed by the early 1980s. Three residences are present on the 3-acre site area; the first of which was reportedly constructed in 1914. Several outbuildings also are present including detached garages, an enclosed patio area, a former fruit packing shed, a fruit stand, a covered shop structure, a barn, a former water tank tower, and other storage sheds and storage containers.

By the late 1970s or early 1980s, two structures were constructed on the 17.5-acre site area that appear to have been used as office and storage space during the residential development of adjacent off-site property. A small flower shop and facilities used for the seasonal sale of Christmas trees and pumpkins appear to have been constructed on-site by the early 1990s. The northern portion of the 17.5-acre site area also was used since the early 1990s for outdoor storage of farm equipment and other miscellaneous items. Most of the site, however, is currently fallow agricultural land.

## 6.2 Agricultural Use and Soil Quality

The site was used for agricultural purposes for several decades. During the course of agricultural use, pesticides, such as DDT, likely were applied to crops in the normal course of farming operations. There is no indication of any uncontrolled release of pesticides to the site.

Soil sampling previously was performed to evaluate the potential impacts to soil quality from the past agricultural use of the site (TRC Lowney 2006a, TRC Lowney 2006b and Terrasearch 2005b). Organochlorine pesticides, primarily total DDT (the sum of DDE, DDD and DDT) at up to 4.44 ppm and dieldrin at up to 0.409 ppm, were detected in soil at the site. The concentrations detected in soil from the southern half of the site, which historically was occupied by row crops, exceed residential screening levels. The total DDT concentrations in several samples from the southern half of the site also exceed the total threshold limit concentration (TTLC), which defines a solid waste as hazardous in California.

Detected pesticide concentrations in soil samples collected from the northern half of the site (former orchard areas) do not exceed residential screening levels or TTLCs.

Based on the detected pesticide concentrations in soil on the southern portion of the site, we anticipate that remediation will be required prior to residential development. We recommend that a remedial action work plan be developed and that site remediation work be coordinated with an appropriate overseeing regulatory agency.

## 6.3 Chemical Storage and Use

No significant quantities of hazardous materials were observed; however, various maintenance materials such as lubricants, paints, cleaning compounds, etc., were observed to be present mainly within (and near) the shop and barn. These were stored on shelving or on the ground and were typically present in plastic or metal containers with capacities of 5-gallons or less. Several unlabeled 55-gallon drums, most appearing to be empty and several automotive batteries, also were observed. Gasoline and diesel fuel also were present in various machinery including a generator, pressure washer and vehicles, among others.

No significant spills of hazardous materials were readily observable; however, the dirt and gravel ground surface near the shop and barn area appeared to be oil stained. Similar staining also was noted during prior site assessments. During a prior assessment (ERM 2006), TPHmo was detected in shallow soil at the barn at 440 ppm, which is above the residential ESL of 100 ppm. We recommend that additional sampling of shallow soil on the southern portion of the 3-acre site area (near the shop and barn) be performed to better evaluate shallow soil quality. We anticipate that the removal of some shallow soil from stained areas will be warranted prior to residential development of the site.

Building materials were reportedly stored during the residential development of adjacent off-site property in two plywood structures located on the 17.5 acre site area. Several 5-gallon buckets of paint were previously observed in one of the structures. The second structure was not accessible, but a Proposition 65 sign indicating the presence (or former presence) of chemicals was posted on the door. The potential for the site to have been significantly impacted by the past storage of construction related materials in these structures appears low. However, any remaining hazardous materials that may be stored within these structures (as well as on the 3-acre site area) should be removed and properly disposed prior to purchasing the property.

## 6.4 Former Underground Storage Tanks

Based on information contained in prior reports, a 550-gallon gasoline UST was closed in place at the 13060 Berryessa Road parcel in 1985 with County oversight. A 500-gallon gasoline UST and 1,000-gallon diesel UST were removed without a permit from the 13100 Berryessa Road parcel in 1984. A 400-gallon gasoline UST also was reported to have been removed without a permit from the 13120 Berryessa Road parcel. The UST that was closed in place at 13060 Berryessa Road, subsequently was removed in 2005.

Several borings have been drilled at the site to evaluate potential impacts to soil and ground water quality from the former USTs. Petroleum hydrocarbons were not detected in soil samples. In ground water, mainly TPHmo was detected at concentrations up to 1,400 ppb, which is above the ESL of 100 ppb.

We recommend that the results of the prior studies be summarized and presented to the SCCEHD Local Oversight Program. Based on our experience at similar sites and because BTEX compounds and MTBE were not detected in the ground water samples, we anticipate that no further work associated with the former USTs will be required. However, the SCCEHD should be contacted for confirmation prior to purchasing the site.

## 6.5 Water Supply Well

A water supply well is present on the 13100 Berryessa Road parcel. This well should be properly abandoned in accordance with applicable regulations if continued use is no longer intended. If continued use is desired, we recommend evaluating water quality and well efficiency.

## 6.6 Septic Systems

Based on our observations and discussions with Mr. Territo during our site visit, five septic systems are present at the site. These include three systems connected to the residences, one connected to restrooms within the enclosed patio structure and one connected to the restrooms within the packing shed; approximate locations are shown on Figure 3. The septic systems should be properly abandoned in accordance with applicable regulations prior to site development. Due to the residential nature of these systems, disposal of significant quantities of hazardous materials to the septic systems appears unlikely. If a higher level of comfort is desired, samples can be collected from these systems to evaluate if hazardous compounds may have been improperly disposed.

## 6.7 Asbestos

During this study, asbestos survey reports prepared by Macs Lab Incorporated were provided to us by Pulte Home Corporation. A detailed review of the prior asbestos survey work was beyond the scope of this study; however, a cursory review indicates that asbestos containing building materials were identified at the site. National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines require that all potentially friable ACM be removed prior to building demolition or renovation that may disturb the ACM.

## 6.8 Lead-Based Paint and Soil Quality Near Structures

In 1978, the Consumer Product Safety Commission banned the use of lead as an additive in paint. Currently, the U.S. EPA and U.S. Department of Housing and Urban Development are proposing additional lead-based paint regulations. Based on the age of the buildings, lead-based paint may be present. If lead-based paint is still bonded to the building materials, its removal is not required prior to demolition. It will be necessary, however, to follow the requirements outlined by Cal/OSHA

Lead in Construction Standard, Title 8, California Code of Regulations (CCR) 1532.1 during demolition activities; these requirements include employee training, employee air monitoring, and dust control. If lead based paint is peeling, flaking or blistered, it should be removed prior to demolition. It is assumed that such paint will become separated from the building components during demolition activities; thus, it must be managed and disposed as a separate waste steam. Any debris or soil containing lead paint or coating must be disposed at landfills that are permitted to accept the waste being disposed.

Peeling paint was observed on some of the on-site structures during our site visit. Based on our observations and the age of the buildings, we recommend that testing for lead based paint be conducted.

Additionally, soil adjacent to structures that are painted with lead-containing paint can become impacted with lead as a result of the weathering and/or peeling of painted surfaces. Soil near wood framed structures also can be impacted by pesticides historically used to control termites.

During a prior study (ERM 2006), two soil samples were collected near structures on the 3-acre portion of the site to evaluate potential lead impacts. Lead was detected at concentrations of 37 and 44 ppm, which were noted as being below the ESL of 150 ppm. Based on our observations and the number of painted and wood-framed structures, we recommend that a greater number of samples be collected adjacent to the structures and that the samples be analyzed for lead, as well as for pesticides.

### 6.9 Urban Runoff Pollution Prevention Program

The Urban Runoff Pollution Prevention Program, also called the Non-Point Source Program, was developed in accordance with the requirements of the 1986 San Francisco Bay Basin Water Quality Control Plan to reduce water pollution associated with urban storm water runoff. This program was also designed to fulfill the requirements of the Federal Clean Water Act, which mandated that the EPA develop National Pollution Discharge Elimination system (NPDES) Permit application requirements for various storm water discharges, including those from municipal storm drain systems and construction sites.

Construction activity resulting in a land disturbance of 1 acre or more, or less than 1 acre but part of a larger common plan of development or sale, must obtain a Construction Activities Storm Water General Permit. A Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction.

### 6.10 Soil Management Plan

Based on the long agricultural history of the site, items such as buried debris, impacted soil and/or burn pits may be encountered during earthwork associated with development activities. To limit construction delays, we recommend that a Soil Management Plan be developed to establish management practices for handling these materials, if encountered.

### 6.11 Potential Environmental Concerns Within the Site Vicinity

Based on the information obtained during this study, no hazardous material incidents have been reported in the site vicinity that would be likely to significantly impact the site. As is typical to most developed areas, several facilities in the vicinity, however, were reported as hazardous materials users. If leaks or spills occur at these facilities, contamination could impact the site, depending upon the effectiveness of cleanup efforts.

## 6.12 Data Failures and Gaps

Data failure occurs when the readily available standard historical sources that are likely to be useful have been reviewed and yet the objectives have not been met. For example, data failure is not uncommon in trying to identify the use of a property back to the first developed use or 1940 (whichever is earlier). Based on the information presented in this assessment, no significant data failures were identified:

A data gap is the lack of or inability to obtain information regarding the site that adversely impacts the ability of an environmental professional to identify recognized environmental conditions. The following data gaps were identified:

- The interiors of the residences were not observed during our visit. In addition, the detached garages were not accessible. Mr. Territo indicated that the garages were used to store vehicles and other miscellaneous household items.

- The SCCEHD could not locate their files that pertain to the 3-acre site area. These files were previously reviewed and summarized by Terrasearch (2005a). Thus, it appears unlikely that the files would contain significant new information.

- The environmental questionnaire provided to the owner of the 13120 Berryessa Road property (Mr. Richard Nola) was not returned to us as of the date of this report. Based on the reasonably ascertainable information reviewed during this assessment, the lack of a completed questionnaire does not appear significant.

# 7.0 LIMITATIONS

As with all site assessments, the extent of information obtained is a function of client demands, time limitations, and budgetary constraints. Our conclusions and recommendations regarding the site are based on readily observable site conditions, review of readily available documents, maps, aerial photographs, and data collected and/or reported by others. Due to poor or inadequate address information, the regulatory agency database report listed several sites that may be inaccurately mapped or could not be mapped; leaks or spills from these or other facilities, if nearby, could impact the site. As directed by you, we are relying on information presented in reports provided to us by you or your representative. We are not responsible for the accuracy of information or data presented by others.

Because publicly available information often cannot affirm the presence of recognized environmental conditions, there is the possibility that such conditions exist. Our conclusions and recommendations in this site assessment are qualified in that no soil, ground water, air, or building material analyses were performed. Sampling and analysis lead to a more reliable assessment of environmental conditions, conditions that often cannot be noted from typical Phase I activities. Should you desire a greater degree of confidence, these samples should be obtained and analyzed to further evaluate environmental conditions. If additional information becomes available that might impact our conclusions and recommendations, we request the opportunity to review the information, reassess the potential concerns, and modify our opinions, if warranted.

This report was prepared for the sole use of Pulte Home Corporation. We make no warranty, expressed or implied, except that our services have been performed in accordance with environmental principles generally accepted at this time and location.

## 8.0 REFERENCES

Terrasearch, Inc. May 27, 2005a. *Phase I Environmental Site Assessment, 13060, 13100 and 13120 Berryessa Road, San Jose, California.*

Terrasearch, Inc. May 31, 2005b. *Surficial Soil Phase II Environmental Site Assessment, 13060, 13100 and 13120 Berryessa Road, San Jose, California.* (Note: Page 2 was missing)

Terrasearch, Inc. July 18, 2005c. *Additional Phase II Environmental Site Assessment (Draft), 13060, 13100 and 13120 Berryessa Road, San Jose, California.*

Engeo, Inc. May 30, 2006. *Modified Phase One Environmental Site Assessment Update, Berryessa Road, San Jose, California.*

Environmental Resources Management (ERM). August 8, 2006. *Phase II Environmental Site Assessment Report, 13060, 13100 and 13120 Berryessa Road, San Jose, California.*

TRC Lowney. October 4, 2006a. *Revised Phase I Environmental Site Assessment and Limited Soil Quality Evaluation, Berryessa Road & Jackson Avenue, San Jose, California.*

TRC Lowney. June 12, 2006b. *Additional Soil Quality Evaluation, Berryessa Road & Jackson Avenue, San Jose, California.*

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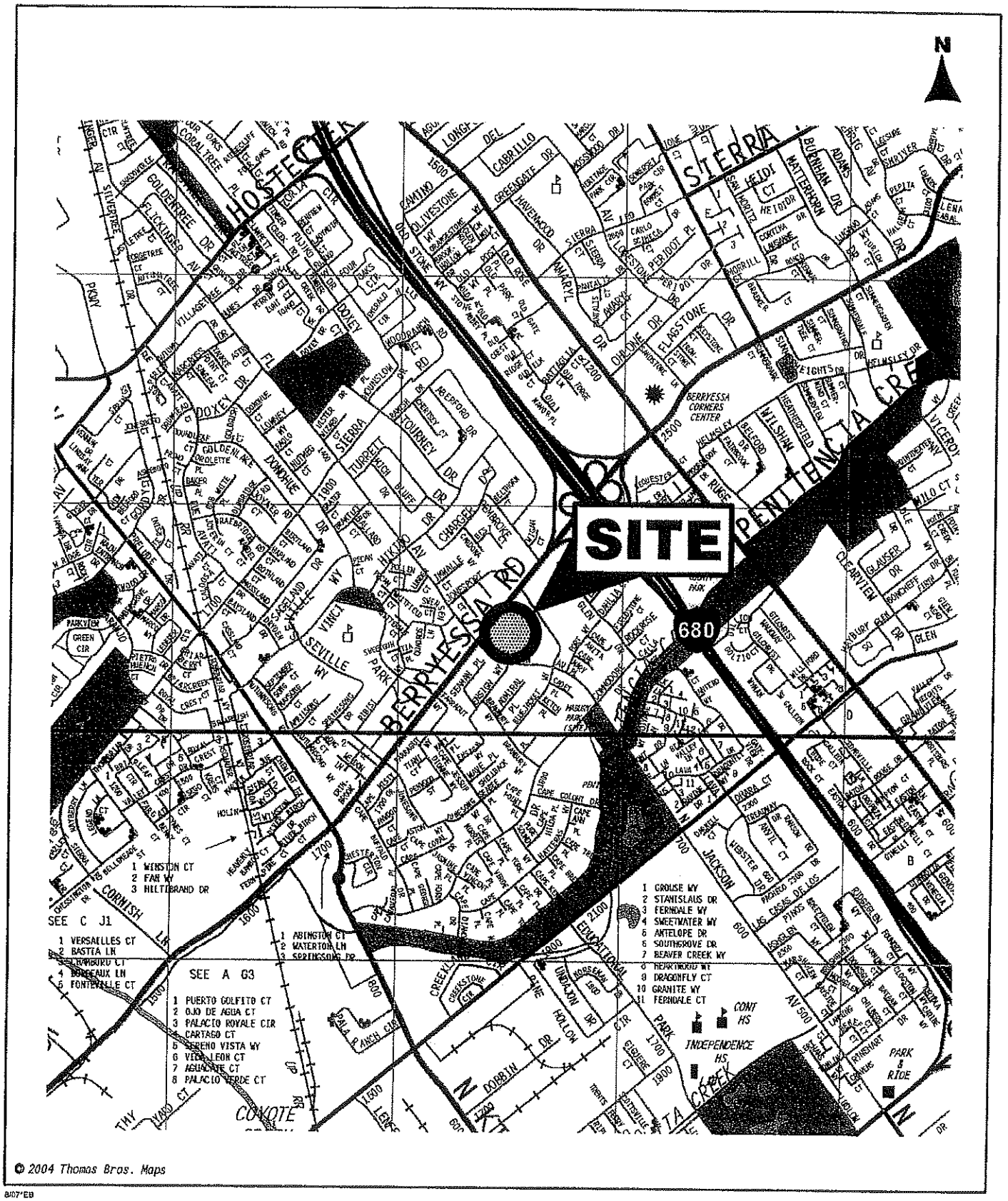



8/07*EB

**VICINITY MAP**

BERRYESSA ROAD AND JACKSON AVENUE

San Jose, California

TRC

**FIGURE 1**

1424-55B/152407

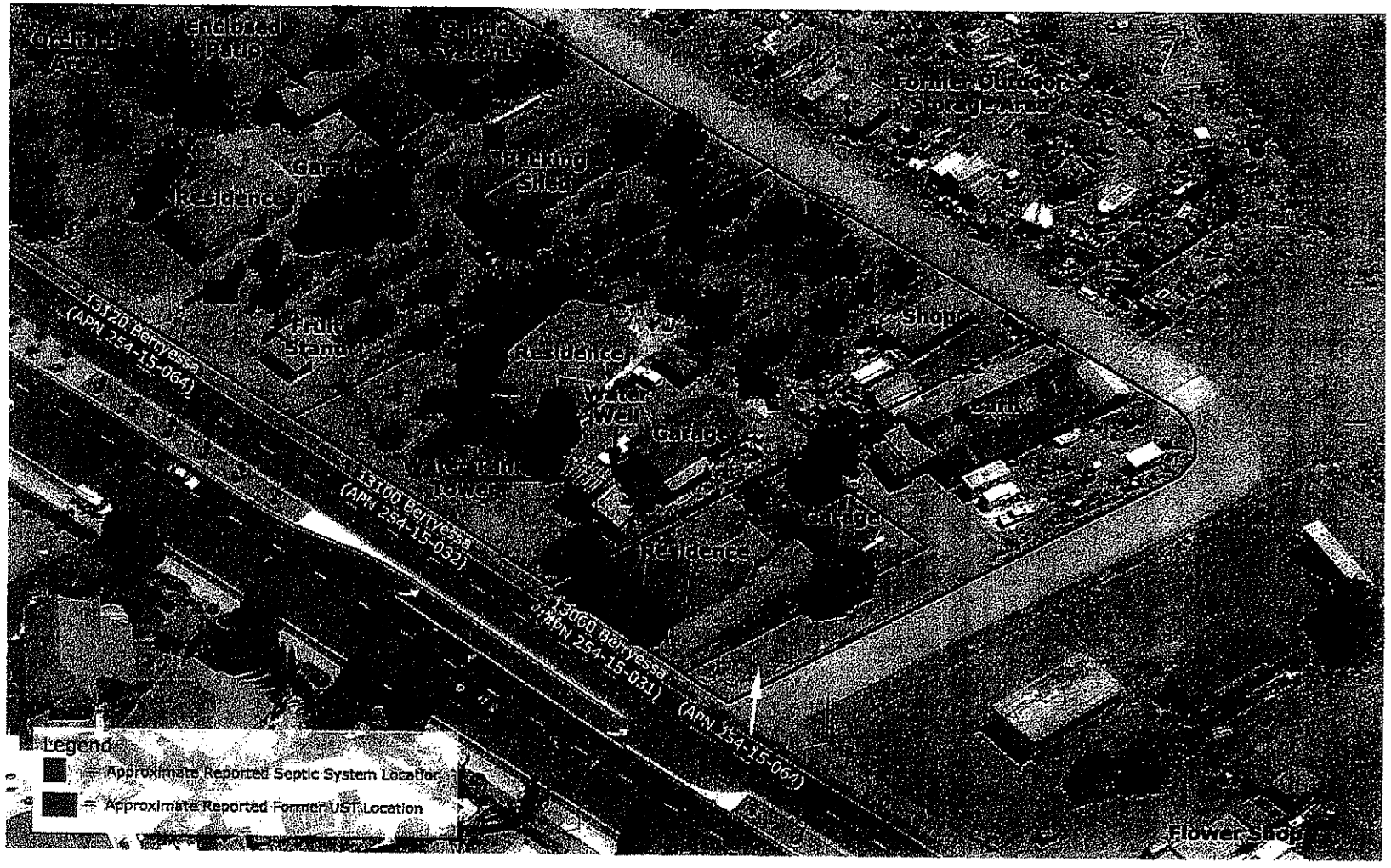
Base from Google Maps.

**SITE PLAN**

BERRYESSA ROAD AND JACKSON AVENUE
San Jose, California

TRC

**FIGURE 2**
1424-55B/152407

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**DETAIL OF 3-ACRE SITE AREA**

BERRYESSA ROAD AND JACKSON AVENUE
San Jose, California

TRC

**FIGURE 3**
1424-55B/152407

# APPENDIX G

# NOISE ANALYSIS

# Charles M Salter Associates Inc

Consultants in
Acoustics
Audio/Visual
System Design
and Telecommunications

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Cristina L Miyar
Joey G D'Angelo
Eric A Yee
Joshua M Roper
Troy Gimbel
Christopher A Peltier
Randy D Waldeck
Andrew L Stanley
Peter K Holst
Timothy G Brown
Jeff Clukey
Ethan Salter
Elaine Y Hsieh
Alexander K Salter
Jeremy L Decker
Ryan McClain
Claudia Kraehe
Brian Good
Candice Huey
Josselyn Salter
Heather Migut
Marva D Noordzee
Debbie Garcia
Jasmine Recidoro
Alison Whitson

24 January 2008

Erika Salum
**Pulte Homes Corporation**
6210 Stoneridge Mall Road, 5th Floor
Pleasanton, CA 95126
E-mail: erika.salum@pulte.com

Subject: **Pepper Lane Reinhard and Nola Parcels – San Jose, CA**
Outdoor Use Area Noise Assessment
CSA Project No.: 07-0359

Dear Erika:

We have completed our analysis for the subject project. We understand that the City of San Jose will allow for a noise level up to 65 dB $L_{dn}$ at the proposed common "Open Space" areas. Our calculations indicate that acoustical shielding provided by project buildings will reduce noise levels at the proposed Open Space #1 to 63 dB $L_{dn}$, thereby meeting the City's general plan exterior noise goal. Noise levels at Open Spaces #2 through #4 will be reduced to 60 dB $L_{dn}$, or less, depending on exposure to vehicular traffic. Noise barriers will therefore not be required.

* * *

This completes our current comments for the Pepper Lane - Reinhard and Nola Parcels project in San Jose, California. If you have any questions, please do not hesitate to call us.

Sincerely,

**Charles M. Salter Associates, Inc.**

Timothy G. Brown
Principal Consultant

Robert P. Alvarado
Vice President

TGB\tb
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C h a r l e s  M  S a l t e r  A s s o c i a t e s  I n c

Consultants in Acoustics & Audio/Visual System Design

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**Memorandum**

*19 September 2007* *Pages (including cover):* 10

| *To:* | *Company:* | *Email:* |
|---|---|---|
| **Erika Salum** | **Pulte Homes Corporation** | **erika.salum@pulte.com** |

*From:* Timothy G. Brown & Robert P. Alvarado

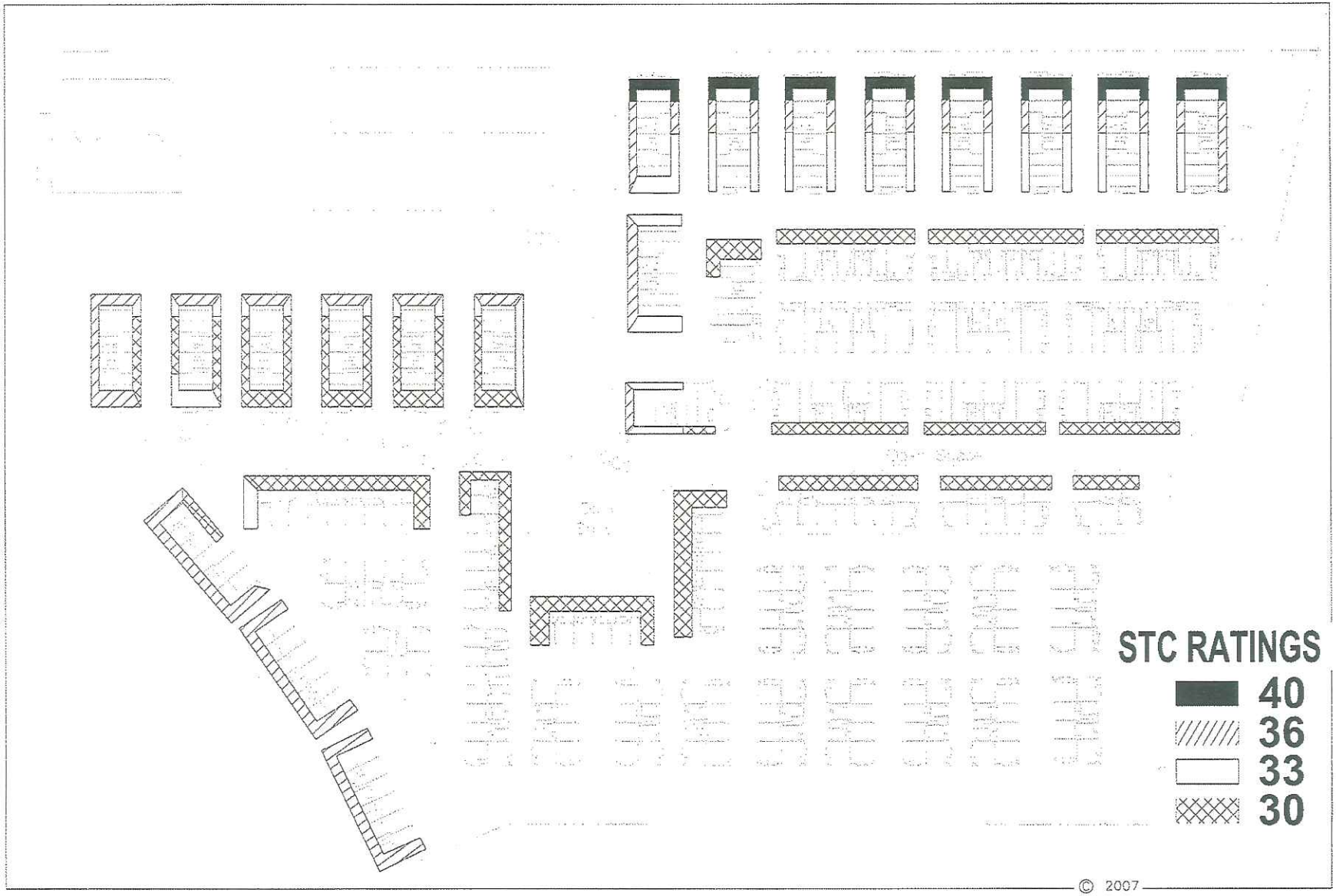
*Subject:* **Pepper Lane - Reinhard and Nola Parcels**
Environmental Noise Assessment (Revised)
CSA Project No.: 07-0359

---

The enclosed report provides "minimum" acoustical requirements for exterior window/wall assemblies to achieve the indoor noise requirements of the State Building Code. To meet the expectations of "market-rate" homeowners, we recommend reducing the interior DNL 5 points less than the minimum State Standard. In addition, single-event noise levels should be reduced to a maximum noise level of 55 dBA in living rooms and 50 dBA in bedrooms.

To achieve the "market rate" goals, STC ratings for window/wall assemblies would need to be increased higher than the minimum required ratings as shown in Figure M1. In addition, we recommend bedrooms with direct line-of-sight to Berryessa Road and Jackson Avenue incorporate laminated glass.

We look forward to working with you during the design phase to refine our initial recommendations and provide input on mechanical equipment and sound-rated interior assemblies. Should you have any questions, please call.

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# PEPPER LANE: RECOMMENDED STC RATINGS TO MEET "MARKET-RATE" ACOUSTICAL GOALS

FIGURE M1

CSA # 07-0359

RPA 07.23.07

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19 September 2007

Erika Salum
**Pulte Homes Corporation**
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E-mail: erika.salum@pulte.com

Subject: **Pepper Lane Reinhard and Nola Parcels – San Jose, CA**
Environmental Noise Assessment (Revised)
CSA Project No.: 07-0359

Dear Erika:

We have completed our analysis for the subject multi-family residential development project. Since our previous 27 April 2006 *Environmental Noise Feasibility Assessment* which provided preliminary environmental noise mitigation, we have received updated 3 July 2007 and 7 August 2007 unit plans, and a 30 August 2007 conceptual site plan for the project. This has allowed us to refine the required mitigation for the project.

The purpose of this letter is to discuss the applicable acoustical criteria, required interior noise mitigation to meet City and State standards, exterior noise levels at outdoor-use areas as they relate to City noise goals, land-use compatibility concerns between commercial and residential development, and construction noise guidelines that could be implemented for the project. In summary, interior noise level can be reduced to meet the City and State standards by incorporating sound rated assemblies. Exterior noise levels at common outdoor use areas can be reduced to meet the City's DNL 60 dB goal with the incorporation of a 6-foot tall noise barrier. Some balconies nearest or fronting Berryessa Road or Jackson Avenue may need to be fully enclosed. Specific locations for this mitigation will be determined as site layout and unit plan design is refined. Preliminary mitigation measures for commercial and construction activities have been provided. Specific mitigation measures for commercial and construction activities can be prepared as the project progresses.

## Acoustical Criteria

*State of California – California Building Code (CBC)*

The California Building Code (Appendix Chapter 12) contains acoustical requirements for interior sound levels in habitable rooms. In summary, the CBC requires an interior noise

level no higher than DNL[1] 45 dB. Projects exposed to an exterior DNL of 60 dB, or greater, require an acoustical analysis showing that the proposed design will limit interior levels to the prescribed allowable interior level. Additionally, if windows must be in the closed position to meet the interior standard, the design must include a ventilation or air-conditioning system to provide a habitable interior environment.

*City of San Jose, California – Noise Element of the General Plan*

The City of San Jose Noise Element of the General Plan is consistent with State Standards. The Noise Element states, "The City's acceptable noise level objectives are 55 DNL as the long-range exterior noise quality level, 60 DNL as the short-range exterior noise quality level, 45 DNL as the interior noise quality level, and 76 DNL as the maximum exterior noise level necessary to avoid significant adverse health effects. These objectives are established for the City, recognizing that the attainment of exterior noise quality levels in the environs of the San José International Airport the Downtown Core Area, and along major roadways may not be achieved in the time frame of this Plan."

The City of San Jose does not have construction noise standards. However, the Noise section of the General Plan states:

> *"Construction operations should use available noise suppression devices and techniques."*

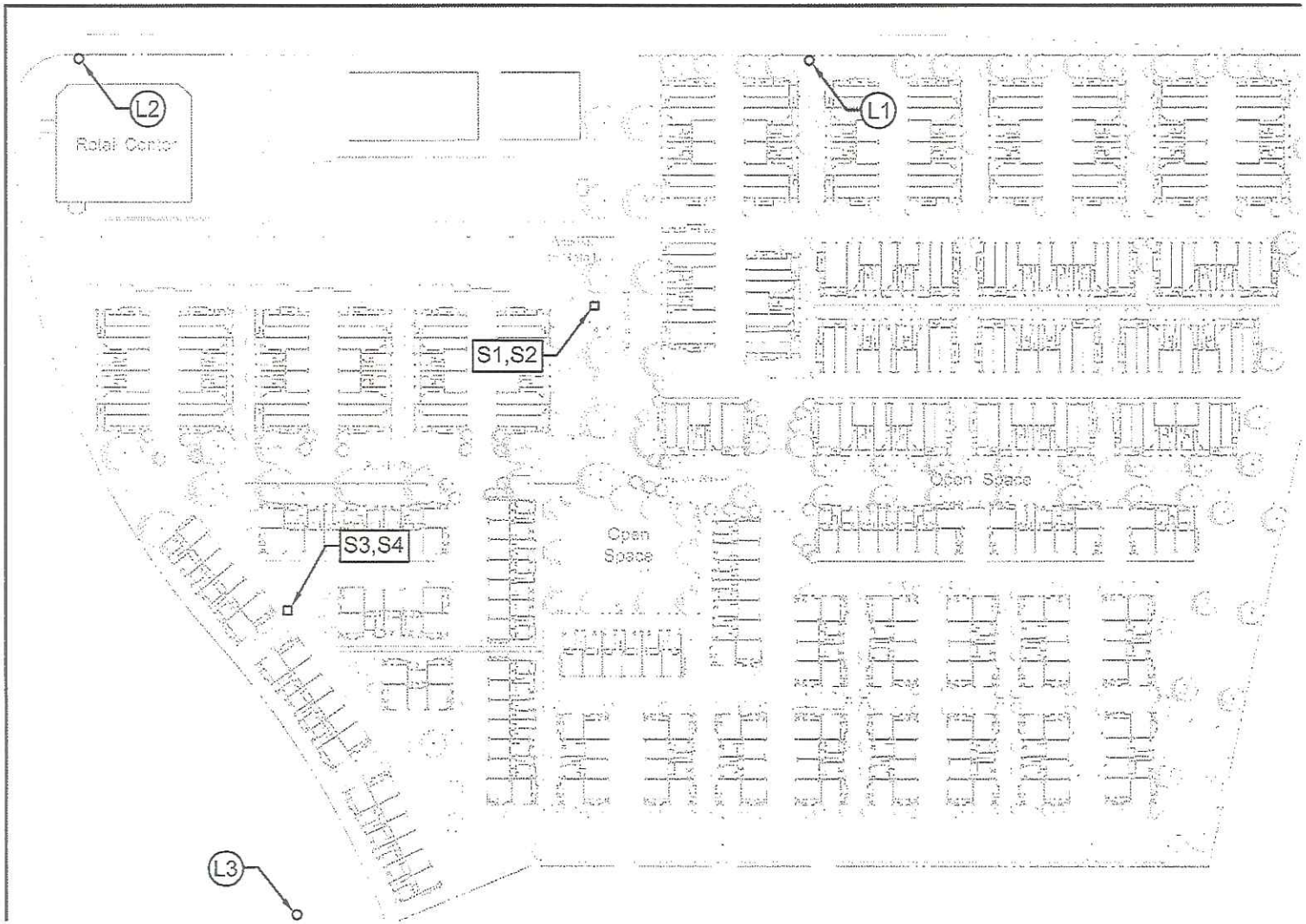
The City's Municipal Code Section 20.40.600 "Performance Standards" states the following noise level limit for commercial zoning districts impinging on other land uses:

| | **Maximum Noise Level in Decibels at Property Line** |
|---|---|
| Commercial use adjacent to a property used or zoned for residential purposes | 55 dBA |
| Commercial use adjacent to a property used or zoned for commercial or other non-residential purposes | 60 dBA |

**Existing and Future Noise Environment**

To quantify the existing noise environment at the project site, we conducted three continuous long-term 48-hour (L1 through L3) noise measurements and four 15-minute short-term measurements (S1 through S4) between 17 and 19 April 2006. Table 2 and attached Figure 1 show a summary of the acoustical measurements. The purpose of the short-term measurements is to quantify the noise levels at the setback of the proposed buildings.

[1] Day-Night Average Sound Level (DNL) — A descriptor established by the U.S. Environmental Protection Agency to represent a 24-hour average sound level with a 10 dB penalty applied to noise occurring during the nighttime hours (10 p.m. – 7 a.m.) to account for the increased sensitivity of people during sleeping hours.




◯ = 48-HOUR LONG-TERM NOISE MEASUREMENT

□ = 15-MINUTE SHORT-TERM NOISE MEASUREMENT

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# SAN JOSE TOWNHOMES – SAN JOSE, CA
# DNL MEASUREMENT LOCATIONS

## FIGURE 1

CSA # 06-0215

AKS/RPA 04.26.06

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**TABLE 2: MEASURED DATA**

| Monitor | Location (On-Site) | Measured DNL |
|---|---|---|
| L1 | Approximately 50-feet southeast from the Berryessa Road centerline, 30-feet southwest of the project's northern property line that intersects Berryessa Road, 12-feet above grade. | 76 dB |
| L2 | Approximately 42-feet southeast of the Berryessa Road centerline, 125-feet northeast of the Jackson Avenue centerline, 12-feet above grade. | 77 dB |
| L3 | Approximately 42-feet south of the Jackson Avenue centerline, 108-feet east of the eastern property line, 12-feet above grade. | 71 dB |
| S1 | Approximately 320-feet southeast of the Berryessa Road centerline, 300-feet southwest of the northern property line intersecting Beryessa Road, 5-feet above grade. | 62 dB* |
| S2 | Approximately 320-feet southeast of the Berryessa Road centerline, 300-feet southwest of the northern property line intersecting Beryessa Road, 30-feet above grade. | 64 dB* |
| S3 | Approximately 100-feet north of the Jackson Avenue centerline, 130-feet west of the eastern property line, 5-feet above grade. | 63 dB** |
| S4 | Approximately 100-feet north of the Jackson Avenue centerline, 130-feet west of the eastern property line, 30-feet above grade. | 66 dB** |

** Calculated from a 15-minute Leq offset from monitor L1*
*** Calculated from a 15-minute Leq offset from monitor L3*

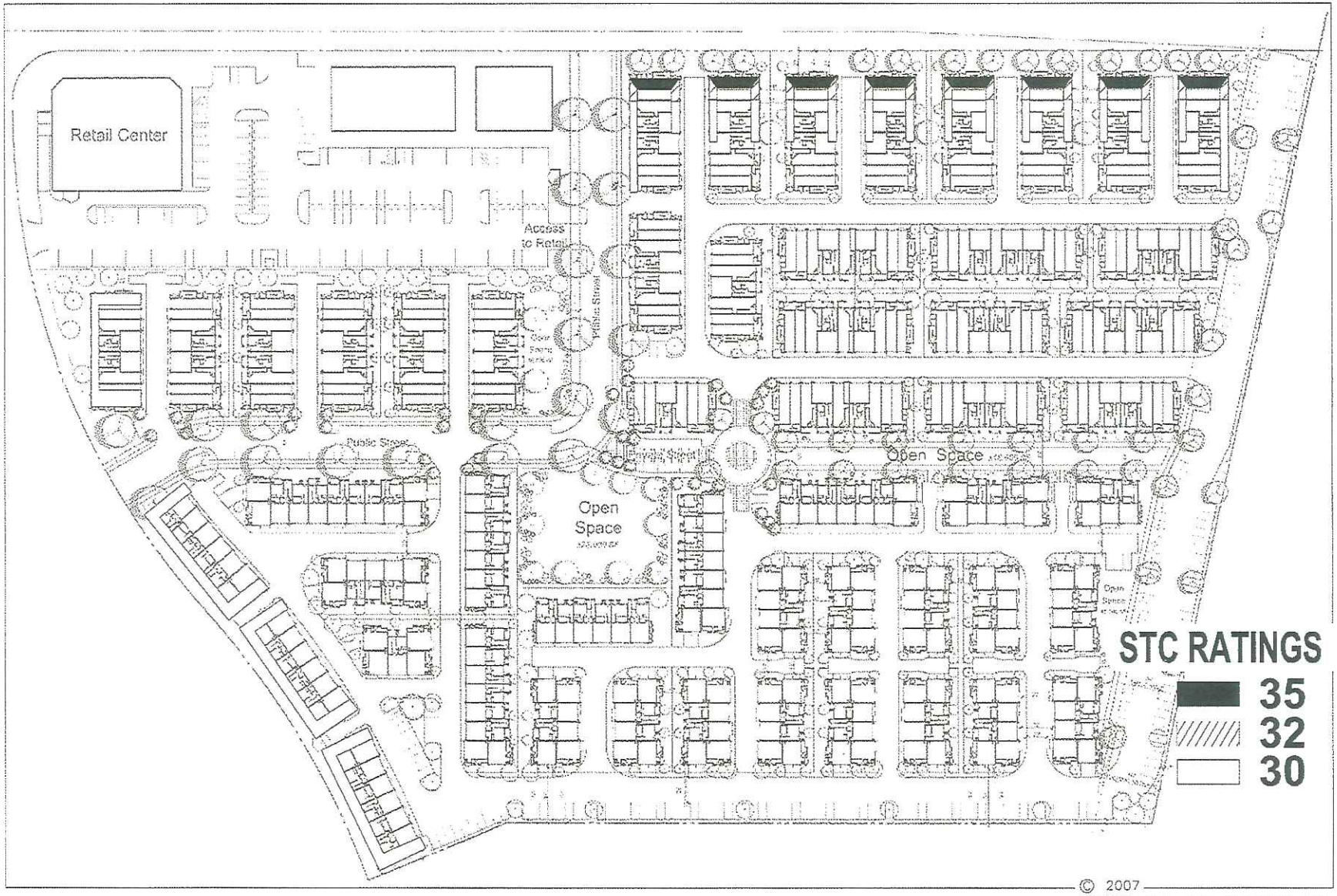
We have reviewed the turning movement data from the traffic study. Figures 7 and 10 dated 12 December 2006 summarize peak hour volumes for "Background" and "Project" conditions, respectively. Based on our calculations for the twenty intersections shown in the study, the DNL would not increase by more than 1 dB at any roadway segment.

**Assessment of Noise**

*Interior Noise Levels*

To achieve the City and State interior noise requirement not exceeding a DNL of 45 dB, sound rated windows and exterior door assemblies will be required at some building facades. Figure 2, below, specifies the minimum required mitigation in terms of Sound Transmission Class (STC[2]) ratings for these locations. In addition, State ventilation requirements will apply to buildings as detailed in the Figure 3.

[2] Sound Transmission Class (STC) — A single-figure rating standardized by ASTM and used to rate the sound insulation properties of building partitions. The STC rating is derived from laboratory measurements of a particular building element and as such is representative of the maximum sound insulation. Increasing STC ratings correspond to improved noise isolation.

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PEPPER LANE – SAN JOSE, CA: MINIMUM CODE REQUIRED STC RATINGS FOR WINDOWS & EXTERIOR DOORS

FIGURE 2

CSA # 07-0359

RPA 07.23.07

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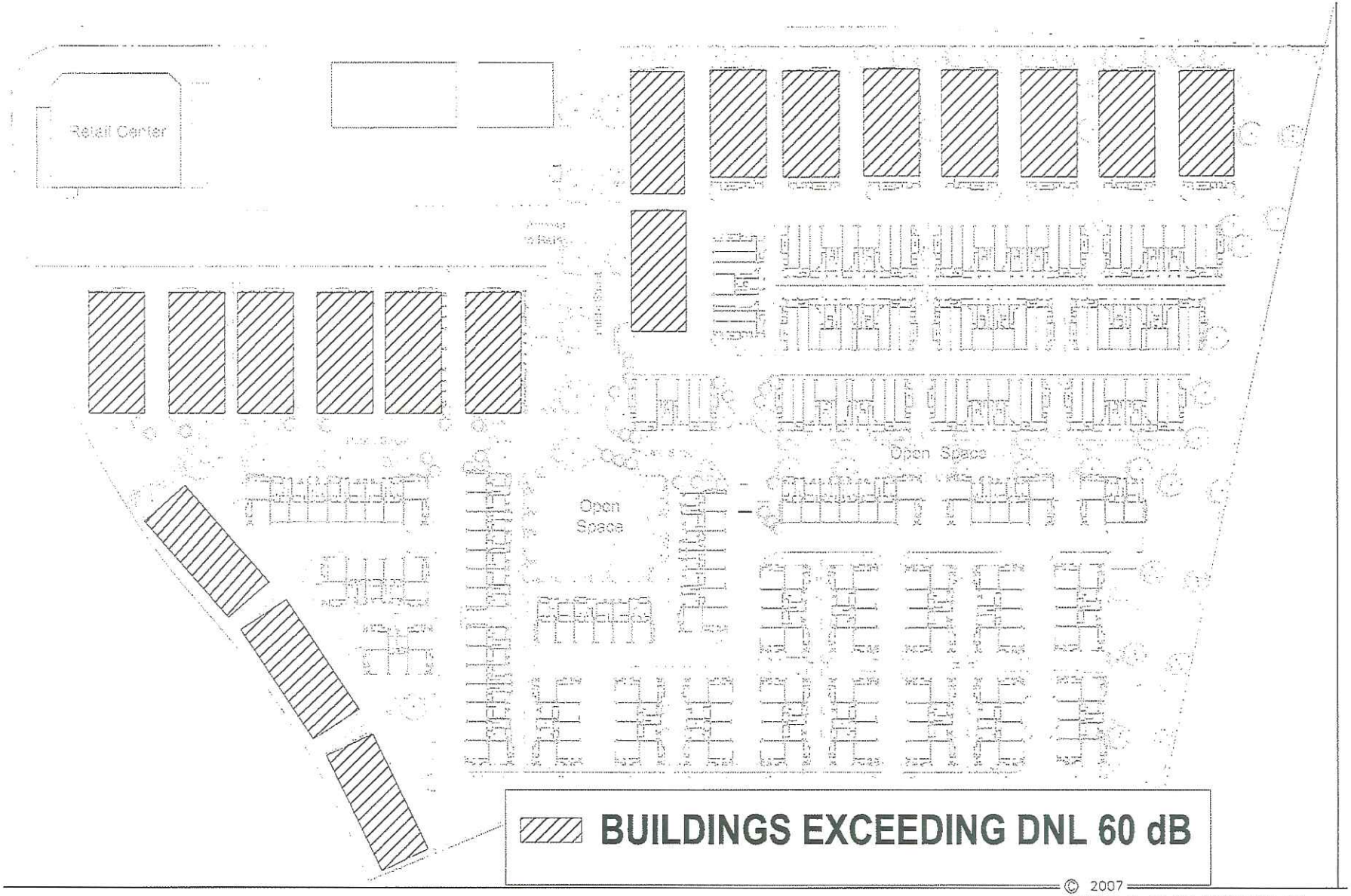


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PEPPER LANE – SAN JOSE, CA:
RESIDENTIAL UNITS REQUIRING VENTILATION

FIGURE 3

CSA # 07-0359

RPA 07.23.07

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*Outdoor-Use Areas*

Based on our calculations, shielding provided by project buildings and setback distances will reduce noise levels at the proposed 21,000 and 6,000 square-foot "Open Space" areas to a DNL less than 60 dB. This meets the City's exterior noise goal for outdoor-use areas. However, the proposed 6,500 square-foot Open Space area has a higher exposure to Berryessa Road resulting in a DNL of 63 dB, which slightly exceeds the City's goal. Incorporating a 6-foot tall noise barrier along the northwestern and northeastern boundaries of this Open Space area that would break line-of-sight to Berryessa Road would reduce exterior noise level below a DNL of 60 dB, thereby meeting the City's exterior noise goal at all proposed Open Space locations. Noise barriers, if incorporated, would need to be constructed with a surface weight no less than three pounds per square foot and be free of gaps, cracks, or opening, including along the base.

Mitigation shall be provided for outdoor use areas for individual residences (i.e., balconies and patios) exposed to a DNL of 60 dB or greater as shown in Figure 3. This could include partial height or full "greenhouse-type" noise barriers. The specific treatments shall be determined on a unit-by-unit basis. Results of the unit-by-unit analysis, including the description of the necessary noise control treatments, shall be submitted to the City with the building plans and approved prior to issuance of a building permit.

*Vehicular Noise Affecting Adjacent Land Uses*

As stated above, the project would not cause an increase in the DNL by more than 1 dB at any roadway segment contained in the traffic study. Significant impacts are commonly indicated as an increase in the DNL of 3 dB, or greater. Therefore, this project would not generate a significant impact on existing land uses. In addition, a change in the DNL of 1 dB would not be considered noticeable for human hearing.

*Construction Noise*

At this time, we do not know the particular types of construction equipment that will be used for the project. In general, to meet the City's statement of implementing noise suppression devices and techniques may include the following:

- Incorporating the quietest construction equipment and techniques feasible for the construction task;
- Specifying all noisy motorized equipment to include mufflers;
- Locating staging areas as far from existing noise-sensitive receivers as feasible;
- Incorporating local noise barriers for louder construction activities conducted adjacent to existing noise-sensitive receivers;
- Whenever feasible, the incorporation of external jackets on noisy equipment should be incorporated; these jackets could achieve a reduction of 5 dBA.

In addition to the mitigation measures listed previously, we recommend that you establish a noise complaint liaison for the project with available contact information and hours of construction posted at the project site. The neighbors should be notified of the construction schedule to minimize annoyance. A qualified acoustical consultant could be retained to review any complaints or to perform on-site measurements to determine if additional mitigation measures can be provided during the construction phase.

*Commercial Land-Use Noise*

Commercial mechanical noise including rooftop HVAC equipment must not exceed the noise level limits shown in the *Acoustical Criteria* section above. At this time, we do not have information for the commercial development to provide specific mitigation recommendations. However, in general this would typically include incorporating noise barriers, building parapets, intake and exhaust silencers, and proper location and orientation of commercial land-use activities. A qualified acoustical consultant is to be retained as the adjacent commercial project progresses to determine if noise levels generated by commercial uses impinging on the proposed Pepper Lane - Reinhard and Nola Parcels project exceed City standards, and provide mitigation recommendations as necessary.

* * *

This completes our current comments for the Pepper Lane - Reinhard and Nola Parcels project in San Jose, California. If you have any questions, please do not hesitate to call us.

Sincerely,

**Charles M. Salter Associates, Inc.**

Timothy G. Brown
Principal Consultant

Robert P. Alvarado
Vice President

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# APPENDIX H

# TRAFFIC ANALYSIS

# Pepper Lane Mixed Use Development Traffic Impact Analysis

## *Revised Final Report*

Prepared for

**City of San Jose**

*By*

***DKS Associates***
1000 Broadway, Suite 450
Oakland, California 94607
(510) 763-2061

February 8, 2008

# TABLE OF CONTENTS

**EXECUTIVE SUMMARY** ..... **1**

**1.0 INTRODUCTION** ..... **4**

**2.0 CITY OF SAN JOSE – TRAFFIC IMPACT ANALYSIS** ..... **9**

**2.1 EXISTING TRANSPORTATION SYSTEM CONDITIONS** ..... **9**

2.1.1 Roadway Network ..... 9
2.1.2 Transit Service ..... 10
2.1.3 Bicycle and Pedestrian Facilities ..... 13

**2.2 INTERSECTION LEVEL OF SERVICE** ..... **15**

2.2.1 Intersection Level of Service Methodology ..... 15
2.2.2 Level of Service Definition ..... 15
2.2.3 Standards of Significance ..... 16

**2.3 EXISTING CONDITIONS** ..... **16**

2.3.1 Intersection Operations ..... 20
2.3.2 Pedestrian Operations ..... 20

**2.4 BACKGROUND CONDITIONS** ..... **20**

2.4.1 Intersection Operation ..... 21

**2.5 PROJECT CONDITIONS** ..... **23**

2.5.1 Significance Criteria and Project Impacts ..... 24
2.5.2 Trip Generation ..... 24
2.5.3 Trip Distribution ..... 26
2.5.4 Trip Assignment ..... 26
2.5.5 Intersection Operation ..... 26
2.5.6 Left-Turn Queue Analysis ..... 31
2.5.7 Access and Internal Circulation ..... 34
2.5.8 Transit Analysis ..... 35
2.5.9 Bicycles and Pedestrian Facilities ..... 35
2.5.10 Freeway Segment Analysis ..... 36
2.5.12 Freeway Ramp Queuing Analysis ..... 41
2.5.12 Parking Analysis ..... 42

**2.6 CUMULATIVE CONDITION** ..... **43**

2.6.1 Cumulative Traffic Volumes ..... 43
2.6.2 Planned Roadway Improvements ..... 43
2.6.3 Intersection Operation ..... 43
2.6.4 Cumulative Freeway Segment Analysis ..... 47

**2.7 RECOMMENDED IMPROVEMENT MEASURES** ..... **52**

**3.0 SANTA CLARA COUNTY CONGESTION MANAGEMENT PROGRAM (CMP)** ..... **55**

**3.1 EXISTING TRANSPORTATION SYSTEM** ..... **57**

3.1.1 Intersection Level of Service ..... 57
3.1.2 Intersection Level of Service Methodology ..... 57
3.1.3 Level of Service Definition ..... 57
3.1.4 Standards of Significance ..... 58

**3.2 EXISTING CONDITIONS ..... 58**
3.2.1 Intersection Operation ..... 61
**3.3 BACKGROUND CONDITIONS ..... 61**
3.3.1 Intersection Operation ..... 61
**3.4 PROJECT CONDITIONS ..... 63**
3.4.1 Significance Criteria and Project Impacts ..... 63
3.4.2 Trip Generation ..... 64
3.4.3 Trip Distribution ..... 64
3.4.4 Trip Assignment ..... 64
3.4.5 Intersection Operation ..... 69
3.4.6 Transit Analysis ..... 70
3.4.7 Bicycles and Pedestrians ..... 70
**3.5 FREEWAY LEVEL OF SERVICE ..... 70**
3.5.1 Freeway Level of Service Methodology ..... 70
3.5.2 Freeway Segment Operation ..... 71
**3.6 FUTURE GROWTH CONDITION ..... 77**
3.6.1 Cumulative Traffic Volumes ..... 77
3.6.2 Planned Roadway Improvements ..... 77
3.6.3 Intersection Operations ..... 77
**3.7 RECOMMENDED IMPROVEMENT MEASURES ..... 80**
**4.0 CONCLUSION ..... 82**
**4.1 CITY OF SAN JOSE TRAFFIC IMPACT ANALYSIS ..... 82**
4.1.1 Project Impacts ..... 82
4.1.2 Future Growth Impacts ..... 82
**4.2 CMP TRAFFIC IMPACT ANALYSIS ..... 82**
4.2.1 CMP Project Impacts ..... 82
4.2.2 Future CMP Growth Impacts ..... 82

## APPENDICES

**Appendix A** City of San Jose Level of Service Analysis
**Appendix B** Existing Intersection Movement Counts
**Appendix C** ATI Sheets and Approved Project Trips
**Appendix D** Pending Project Trips
**Appendix E** Traffic Control Signal Warrant Analysis
**Appendix F** CLW oI San Jose US 101/Oakland/MaEury TDP – DraIWReSorW

# LIST OF FIGURES

Figure 1 Project Site Location and Roadway Network ..... 5
Figure 2 Site Plan ..... 6
Figure 3 Transit Service ..... 12
Figure 4 Bicycle Network ..... 14
Figure 5 Existing Intersection Lane Geometry and Traffic Control ..... 18
Figure 6 Existing Peak Hour Traffic Volumes ..... 19
Figure 7 Background Conditions Peak Hour Traffic Volumes ..... 22
Figure 8 Project Trip Distribution Patterns ..... 27
Figure 9 Peak Hour Project Trips ..... 28
Figure 10 Project Conditions Peak Hour Volumes ..... 29
Figure 11 Cumulative plus Project Conditions Peak Hour Volumes ..... 44
Figure 12 CMP Study Intersections Locations and Roadway Network ..... 56
Figure 13 Existing CMP Intersection Lane Geometry ..... 59
Figure 14 Existing CMP Conditions Peak Hour Volumes ..... 60
Figure 15 Background CMP Conditions Peak Hour Volumes ..... 62
Figure 16 Trip Distribution Patterns ..... 66
Figure 17 Peak Hour Project Trips at CMP Intersections ..... 67
Figure 18 Project CMP Conditions Peak Hour Volumes ..... 68
Figure 19 Future Growth Peak Hour Volumes ..... 78

# LIST OF TABLES

Table ES-1 Level of Service Summary ..... 2
Table 1 Signalized Intersection LOS Thresholds ..... 16
Table 2 Existing Conditions Level of Service ..... 17
Table 3 Background Conditions Level of Service ..... 23
7DEQ 4 7rlS GHnHrDtlRn – Proposed Project and Nola Development ..... 25
Table 5 Project Conditions Level of Service ..... 30
Table 6 Left Turn n ueue Analysis ..... 32
Table 7 Freeway Segment Analysis - AM Peak Hour ..... 37
Table 8 Freeway Segment Analysis - PM Peak Hour ..... 39
Table 9 Parking Analysis Summary ..... 42
Table 10 Cumulative Conditions Level of Service ..... 45
Table 11 Cumulative Freeway Segment Analysis - AM Peak Hour ..... 48
Table 12 Cumulative Freeway Segment Analysis - PM Peak Hour ..... 50
Table 13 Existing CMP Conditions Level of Service ..... 58
Table 14 Background CMP Conditions Level of Service ..... 61
7DEQ 15 7rlS GHnHrDtlRn – 3roposed Project and Nola Development ..... 65
Table 16 Project CMP Conditions Level of Service ..... 69
Table 17 CMP Freeway Level of Service Definitions ..... 71
Table 18 CMP Freeway Segment Analysis - AM Peak Hour ..... 73
Table 19 Freeway Segment Analysis - PM Peak Hour ..... 75
Table 20 Future Growth Conditions ..... 79

# EXECUTIVE SUMMARY

This report provides an evaluation of traffic and transportation issues related to the proposed mixed-use development site located at the southeast corner of Berryessa Road and Jackson Avenue in the City of San Jose, California. The project site is currently vacant. In addition to the proposed project, this analysis accounts for additional development of residential units that are anticipated at the adjacent Nola Properties.

The proposed project site is bounded by Berryessa Road to the north, Jackson Avenue to the west, existing single family residential units the south, and the Nola Properties (existing agricultural use) and residential uses to the east. The project study area is generally bounded by Hostetter Road to the north, Alum Rock Road to the south, U.S. 101 to the west, and Capitol Expressway to the east.

This report provides a general description of the transportation facilities in the project vicinity and summarizes existing and future condition within the study area. Particular attention is given to impacts on vehicular, transit bicycle and pedestrian facilities.

For the purpose of this study, the following was considered:

- ***Project Description:*** The project proposes to construct a commercial center consisting of approximately 25,000 square feet (sf) of retail space and 5,000 sf of restaurant space. The commercial area would be located adjacent to the 310 proposed residential units (attached condominiums and apartments). This analysis also includes an additional 80 units located at the adjacent Nola Properties Site.

Combined, the proposed project and the Nola Properties development would generate approximately 4,880 daily trips, including 387 AM peak hour trips (155 inbound, 232 outbound) and 457 PM peak hour trips (301 inbound, 156 outbound). **Table ES-1** summarizes the level of service (LOS) and delay conditions at each of the study intersections.

Under the City of San Jose and the Santa Clara County Congestion Management Program (CMP) traffic impact analysis guidelines, the proposed project would result in three potentially significant transportation impacts at the study intersections during the AM peak hour, and at two study intersections during the PM peak hour.

Based on the City of San Jose's Parking and Loading Standards, the proposed land uses would require a total of 1,197 parking spaces (1,023 residential, 174 commercial). The currently proposed project includes 1,202 parking spaces (1,015 residential, 187 commercial), which would satisfy the City's parking requirements.

## Table ES-1 Intersection Level of Service Summary

| | Intersection | AM Peak Hour | | | | | | PM Peak Hour | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Existing | | Background | | Project | | Existing | | Background | | Project | |
| | | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay | LOS |
| 1 | US 101 Northbound Ramp & Old Oakland Road[a] | **61.8** | **E** | **142.5** | **F** | **149.9** | **F** | 22.9 | C+ | 46.0 | D | 45.9 | D |
| 2 | US 101 Southbound Ramp & Old Oakland Road[a] | 22.4 | C | 24.1 | C | 24.4 | C | 33.6 | C- | **77.2** | **E-** | **76.8** | **E-** |
| 3 | Interstate 880 Northbound Ramp & Brokaw Road[a] | 30.5 | C | 53.1 | D- | 50.5 | D | 19.3 | B- | 22.1 | C+ | 22.1 | C+ |
| 4 | Interstate 880 Southbound Ramp & Brokaw Road[a] | 45.6 | D | **89.3** | **F** | **89.6** | **F** | 36.6 | D+ | **96.0** | **F** | **100.0** | **F** |
| 5 | Berryessa Road & Lundy Avenue[a] | 44.1 | D | 45.1 | D | 45.3 | D | 48.2 | D | 51.2 | D- | 51.4 | D- |
| 6 | Brokaw Road & Old Oakland Road[a] | 39.8 | D | 50.7 | D | 51.1 | D- | 40.7 | D | 51.1 | D- | 51.5 | D- |
| 7 | Murphy Avenue & Lundy Avenue[a] | 39.4 | D | 45.4 | D | 45.6 | D | 36.7 | D+ | 39.9 | D | 40.1 | D |
| 8 | US 101 Northbound Ramp & McKee Road | 19.8 | B- | 20.2 | C+ | 20.2 | C+ | 20.1 | C+ | 20.3 | C+ | 20.5 | C+ |
| 9 | US 101 Southbound Ramp & Julian Street | 20.3 | C+ | 20.7 | C+ | 20.6 | C+ | 23.5 | C | 22.4 | C+ | 22.3 | C+ |
| 10 | Berryessa Road & Capitol Avenue | 50.3 | D | 53.5 | D- | 54.5 | D- | 41.9 | D | 44.2 | D | 44.5 | D |
| 11 | Berryessa Road & Commercial Street | 24.0 | C | 32.6 | C- | 39.0 | D | 23.4 | C | 24.1 | C | 24.4 | C |
| 12 | Berryessa Road & Flickinger Road | 36.9 | D+ | 38.5 | D+ | 45.4 | D | 37.8 | D+ | 39.7 | D | 43.0 | D |
| 13 | Commercial Street & Old Oakland Road | 38.1 | D+ | **65.5** | **E** | **72.9** | **E** | 45.1 | D | 51.7 | D- | 52.7 | D- |
| 14 | Jackson Avenue & Mabury Road | 37.6 | D+ | 37.5 | D+ | 37.9 | D+ | 32.0 | C | 32.6 | C- | 32.8 | C- |
| 15 | Jackson Avenue & McKee Road | 38.2 | D+ | 38.8 | D+ | 39.0 | D+ | 39.9 | D | 42.1 | D | 42.3 | D |
| 16 | King Road & McKee Road | 44.1 | D | 40.6 | D | 40.6 | D | 45.9 | D | 44.1 | D | 44.2 | D |
| 17 | Interstate 680 Northbound Ramp & Berryessa Road | 12.5 | B | 13.1 | B | 13.0 | B | 14.6 | B | 14.8 | B | 14.7 | B |

a - CMP intersection. Values in **BOLD** represent LOS E or F.

A left-turn storage analysis was conducted at eight signalized intersections and one unsignalized intersection that would potentially be impacted by the proposed development. The majority of these intersections currently have left-turn bays with inadequate storage space for the vehicle queues. The analysis indicated that the proposed development would increase the design queue lengths of deficient left-turn pockets at three intersections during the AM peak hour and at two intersections during the PM peak hour.

The proposed project would not result in any significant impacts on nearby freeway segments. The addition of project-generated traffic would result in an increase of less than one percent of capacity for each the respective freeway segments that currently operate at a deficient LOS E or F.

A queuing analysis of the freeway on- and off-ramps was conducted for the movements that may be impacted by the addition of project related trips. Based on observations of existing operations, the freeway ramps at the interchange of I-680 and Berryessa Road operate without ramp meters or stop control. The movements which would the project would add traffic to typically operate without delay or queue build up. The proposed project is not anticipated to result in any significant impacts to the ramp queuing or operations.

A long term cumulative scenario investigated the operating conditions of the study intersections and roadway segments. Based on the operating conditions, several intersections and roadway segments may be impacted by cumulative growth, however based on the projected number of project trips, the project would be considered cumulatively insignificant at all but one intersection (the intersection of Berryessa Road and Capitol Avenue during the AM peak period). Recommended improvement measures for this intersection would improve cumulative operating conditions to acceptable levels of service and reduce the cumulative impact to a less than significant level.

# 1.0 INTRODUCTION

This report provides an evaluation of traffic and transportation issues related to the proposed commercial and residential mixed-use development located on the southeast corner of Berryessa Road and Jackson Avenue in the City of San Jose, California. The project site is currently vacant. In addition to the proposed project, residential development on the adjacent Nola property is anticipated, and was assumed for the Project Conditions Analysis.

The proposed project site is bounded by Berryessa Road to the north, Jackson Avenue to the west, existing single family residential units the south, and the Nola Properties (existing agricultural use) to the east west. The project study area is generally bounded by Hostetter Road to the north, Alum Rock Road to the south, U.S. 101 to the west, and Capitol Avenue to the east.

The site location and the surrounding roadway network are illustrated in **Figure 1**. The proposed development consists of approximately 25,000 square feet of retail space, 5,000 square feet of restaurant space, and approximately 310 attached residential town home units. In addition, approximately 80 attached residential units are anticipated at the Nola Property adjacent to the project site. Vehicular access to residential uses would be provided via two driveways on each of Berryessa Road and Jackson Avenue. One driveway on each of Berryessa Road and Jackson Avenue would provide access to the Commercial and uses, and two secondary access points would connect the commercial uses to the internal residential streets. The project site plan is illustrated in **Figure 2**.

Data provided in this report are based on recent correspondence and conversations with staff of the City of San Jose and site visits conducted in August and October 1906. In addition, new turning movement counts of unsignalized intersections were collected in November 2006.

The report analyzes the traffic conditions during the weekday AM and PM peak hours for the study area intersections. The impacts of the proposed development were estimated using the level of service methodologies set forth by both the City of San Jose and the Santa Clara County Congestion Management Program (CMP).

Based on consultation with City of San Jose staff, the following 17 signalized intersections were analyzed as part of the City of San Jose traffic impact analysis, which includes seven (7) intersections that are part of the Santa Clara County Congestion Management Program.

1. US 101 Northbound Ramp & Old Oakland Road*
2. US 101 Southbound Ramp & Old Oakland Road*
3. Interstate 880 Northbound Ramp & Brokaw Road*
4. Interstate 880 Southbound Ramp & Brokaw Road*
5. Berryessa Road & Lundy Avenue*
6. Brokaw Road & Old Oakland Road*
7. Murphy Avenue & Lundy Avenue*

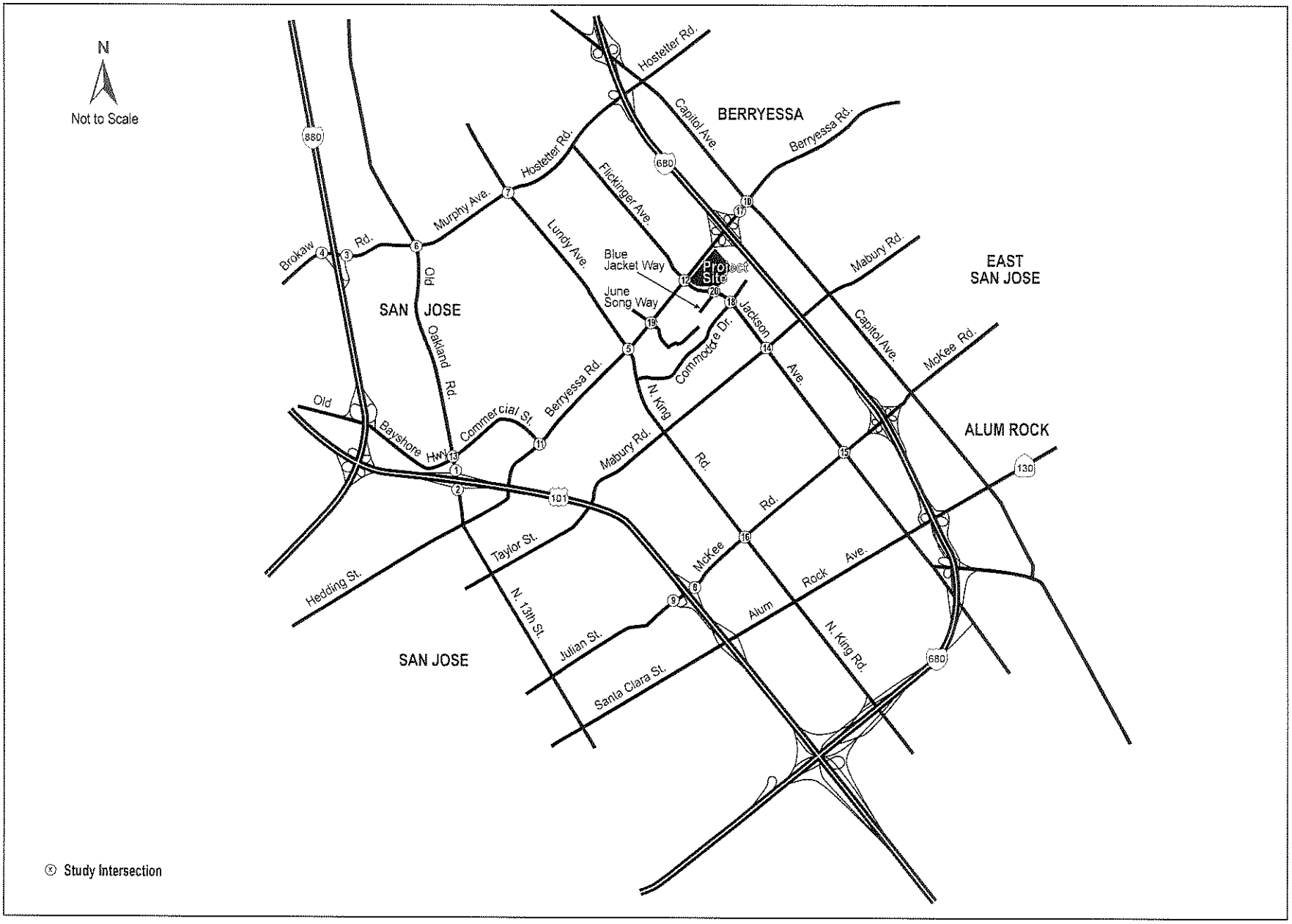


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**Figure 1**
**Project Site Location and Roadway Network**

## SITE SUMMARY

Acres: ± 17.4 Ac.
Units: ± 384 Units
*± 173 Units - Product A*
*± 211 Units - Product B*
Density: ± 22.1 DU/Ac. Gross

**Parking Required:**
Tandem Garage
2bed: 48 x 2.7=129.6 Spaces
3bed: 111 x 2.8=310.8 Spaces
Side/Side Garage
2bed: 134 x 2.5=335 Spaces
3bed: 41 x 2.6=106.6 Spaces
4bed: 51 x 2.75=141 Spaces
Total Spaces: 1,023 Spaces

**Parking Provided:**
Garage: ±768 Spaces
Open: ±247 Spaces
Total: ±1,015 Spaces

**Open Space**
Usable Common: ±58,000 SF
*(±150 SF/unit)*
Total Common: *TBD*

CONCEPT A - OPTION 2

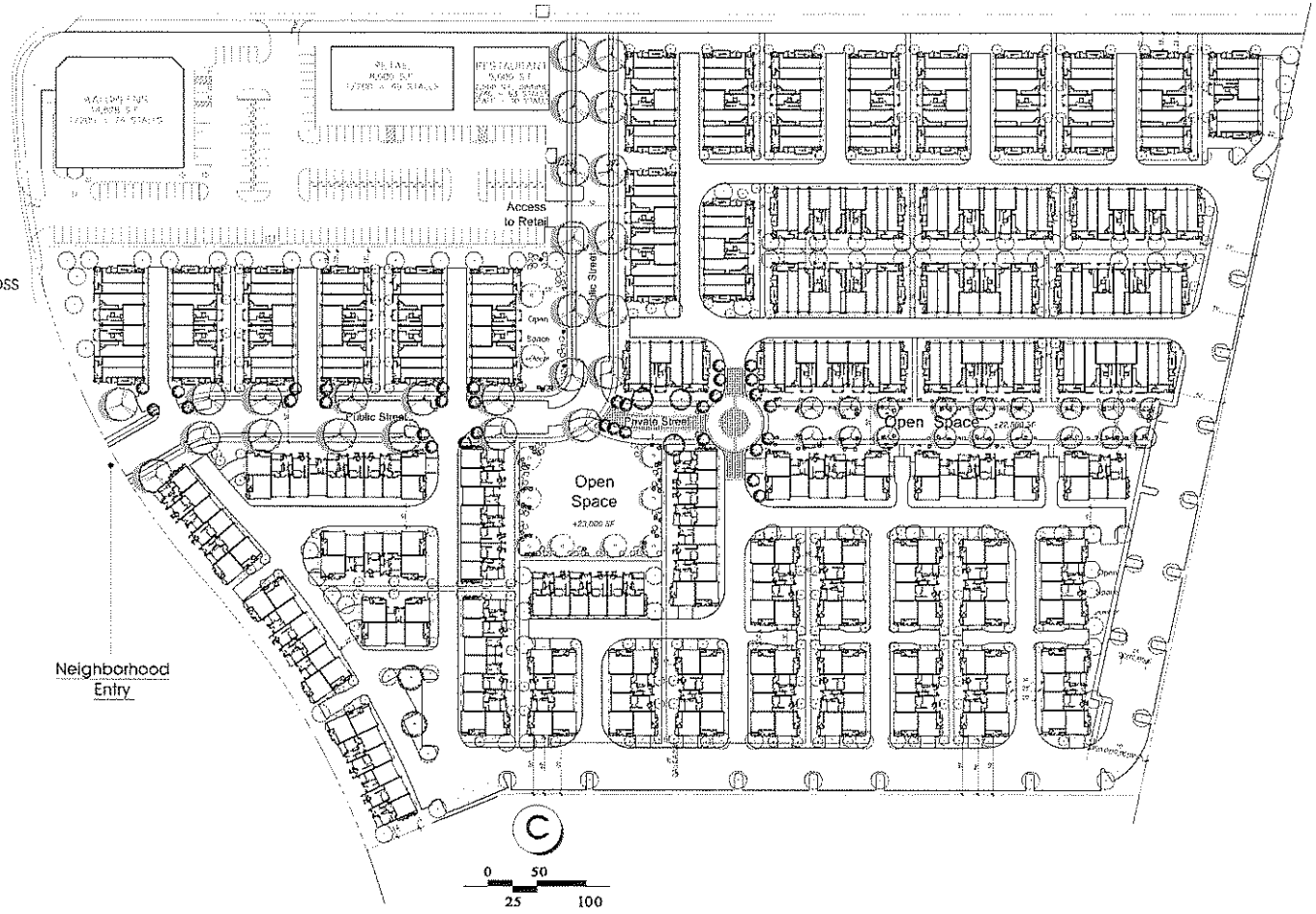


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**Figure 2**
**Project Site Plan**

8. US 101 Northbound Ramp & McKee Road
9. US 101 Southbound Ramp & Julian Street
10. Berryessa Road & Capitol Avenue
11. Berryessa Road & Commercial Street
12. Berryessa Road & Flickinger Road
13. Commercial Street & Old Oakland Road
14. Jackson Avenue & Mabury Road
15. Jackson Avenue & McKee Road
16. King Road & McKee Road
17. Interstate 680 Northbound Ramp & Berryessa Road

*CMP Intersection

In addition to the seventeen signalized intersections two unsignalized intersections were also analyzed based on signal warrant studies previously conducted by the City of San Jose. These intersections include:

18. Jackson Avenue & Commodore Drive
19. Berryessa Road & June Song Road

The operation of these intersections was evaluated for the following scenarios:

**Scenario 1:** Existin] &Rnditi Rn – Level of service based on existing peak-hour volumes.

**Scenario 2:** BDFNJ URund &Rnditi Rn – Existin] SeDN-KRuU vR@P es S@s JURwtK IURP approved, but not yet constructed, developments in the vicinity of the proposed project that would occur prior to the completed construction of the proposed mixed-used development project.

**Scenario 3:** 3URMeFt &Rnditi Rn – BDFNJ URund SeDN-KRuU vR@P es S@s SURMeFt-generated traffic estimated for the mixed-use development project.

**Scenario 4:** &up u@tive &Rnditi Rn – 3URMeFt Condition peak-hour volumes plus traffic generated by approved and pending developments.

Traffic-related impacts along the nearby freeways were also analyzed as part of the Congestion Management Program analysis. Freeway segments analyzed include:

- US 101 between Verba Buena Road and Capitol Expressway
- US 101 between Capitol Expressway and Tully Road
- US 101 between Tully Road and Story Road
- US 101 between Old Oakland Road and I-880
- US 101 between I-880 and Old Bayshore
- I-680 between N. Capitol Expressway and eostetter Road
- I-680 between eostetter Road and Berryessa Road

- I-680 between Berryessa Road and McKee Road
- I-680 between McKee Road and Alum Rock Avenue
- I-880 between Great Mall Parkway and Montague Expressway
- I-880 between Montague Expressway and Brokaw Road
- I-880 between US 101 and 1st Street
- I-880 between 1st Street and State Route 87

In addition to intersection and freeway operation analysis, a left-turn queue and storage analysis has been conducted at left-turn pockets where stacking from the project would potentially be significant. Left-turn lanes were analyzed at eight signalized intersections.

An evaluation of the site plan, on-site circulation, locations of public schools, access and egress points, surrounding parking supply and the City's Municipal Code requirements are also contained in this report.

# 2.0 CITY OF SAN JOSE – TRAFFIC IMPACT ANALYSIS

## 2.1 EXISTING TRANSPORTATION SYSTEM CONDITIONS

The following section presents existing conditions on various transportation system components. The components include roadways, intersections, transit service, bicycle facilities, pedestrian circulation and parking.

### 2.1.1 Roadway Network

Regional access to the project area is provided by US Highway 101 (US 101), Interstate 680 (I-680), Berryessa Road and Jackson Avenue. Descriptions of regional and local roadways are provided below.

**U.S. Highway 101 (US-101)** extends from Los Angeles, in the south, through Oregon State, and into Washington State in the north. In the vicinity of the project, US-101 runs in the north-south direction, and includes three mixed-flow lanes and one high occupancy vehicle lane in each direction of travel. US-101 provides access to the project study area with its interchanges at Julian/McKee Roads or at 13th Street/Old Oakland Road.

**Interstate 680 (I-680)** extends from the US 101 interchange to the south, to Interstate 80, to the north in Solano County. West of US 101, I-680 becomes I-280 which travels in the north-south direction between San Jose and San Francisco. In the vicinity of the project, I-680 runs in the north-south direction, and includes four mixed-flow lanes in each direction of travel. I-680 provides access to the project study area with its interchanges with Berryessa Road or at McKee Road.

**Interstate 880 (I-880)** extends from the US 101 interchange to the south, to Interstate 80, to the north in Alameda County. West of US 101, I-880 becomes State Route (SR) 17 which travels in the north-south direction between San Jose and Highway 1 in the city of Santa Cruz. In the vicinity of the project, I-880 runs in the north-south direction, and includes three mixed-flow lanes in each direction of travel. I-880 provides access to the project study area with its interchange at Brokaw Road or via US 101.

**Berryessa Road** is a two- to six-lane arterial that travels in the east-west direction. In the vicinity of the project site, there are two lanes in each direction with a 40 mph posted speed limit, bike lanes on both sides of the road, and a pedestrian sidewalk on the north side of the road. Berryessa Road provides access to I-680, east of the project site, and to US 101 via Commercial Street and Old Oakland Road.

**McKee Road** is a six-lane arterial that travels in the east-west direction south of the project site. In the vicinity of Jackson Avenue, there are sidewalks on both sides of the road and a 40 mph posted speed limit. Bike lanes are not striped on either side of the road. McKee Road provides access to I-680, east of the project site, and to US 101 to the west.

**LOCAL ACCESS**

Local access is provided by Jackson Avenue, and the project site is located within close proximity to Ensign Way and Blue Jacket Way. These roadways are described below:

**Jackson Avenue/Flickinger Road** is a four lane major collector street that travels in the north-south direction. North of Berryessa Road, Jackson Avenue becomes Flickinger Road. South of Berryessa Road, Jackson Avenue extends south of I-680 and ends at Story Road. In the vicinity of the project site, there are sidewalks on both sides (with the exception of along the project frontage, which is currently vacant) and a posted speed limit of 40 mph. Bike lanes are striped on both sides of Jackson Avenue; however, they are temporarily disrupted south of the project site between Commodore Drive and Mabury Road. North and South of the project site, there is a raised median with limited left turn locations to or from Jackson Avenue. AlRnJ Wle SrRMeFVs IrRnWJe, Were Is D sWLsed, WR-wDy FenWr leIWWrn lDne.

**Ensign Way** is a local residential road with houses and sidewalks on both sides of the street. Ensign Way ends at Jackson Avenue, opposite of the project site. Currently left turns are allowed into and out of Ensign Way from Jackson Avenue. eowever a raised median is anticipated along Jackson Avenue that would restrict left-turn movements to and from Ensign Way

## 2.1.2 Transit Service

The Santa Clara County salley Transportation Authority (STA) has jurisdiction over public transit in Santa Clara County. Santa Clara County STA currently operates five local bus routes within the vicinity of the proposed project. The STA bus routes that would mostly be used as a direct route or to connecting routes are Routes 36, 62, 64, 70, and 901 (Light Rail). **Figure 3** illustrates the transit routes within the project area.

**Route 36.** This route provides service from salco Shopping Center and the salley Fair Transit Center to the Penitencia Creek Transit Center/Light Rail Transit (LRT) Station in east San Jose. Weekday service is provided between 6:00 AM and 7:00 PM in both the eastbound and westbound directions, at 30-minute headways durlnJ Wle SeDN serlRds (7:00 A0 – 9:00 AM and 4:00 PM - 6:00 PM) and at 45-minute headways during the off peak periods. Weekend service is provided at 30- minute headways between 8:30 AM and 8:00 PM. In the vicinity of the project site, Route 36 travels along Mabury Road, just south of the project site.

**Route 62.** This route provides service between the dood Samaritan eospital in the Camden area of San Jose, and the Penitencia Creek Transit Center/LRT Station in east San Jose. Weekday service is provided in each direction between 5:00 AM and 11:00 PM at 20-minute headways. Weekend service is provided between 6:00 AM and 10:00 PM at 30-minute headways. Route 66 travels along Berryessa Road adjacent to the project site.

**Route 64.** This route provides service between the Almaden LRT Station and the Penitencia Creek Transit Center/LRT Station, via the San Jose Diridon Train Station. It operates on weekdays between the hours of 5:15 AM to 12:00 AM at 30-minutes headways in each direction. I n weekends, Route 64 operates at 30-minute headways between 5:45 AM and

12:00 AM. In the vicinity of the project site, Route 64 travels along Berryessa Road east of I-680, and in the vicinity of the Penitencia Creek Transit Center.

**Route 70.** This route provides service between the Great Mall/Main Street LRT Station and the Capitol LRT Station in South San Jose. Weekday service is provided in each direction between 4:40 AM and 12:00 AM at 15- to 20-minute headways throughout the day. Weekend service is provided between 6:15 AM and 11:20 PM at 20-minute headways between 9:00 AM and 7:00 PM, and with 30- to 45-minute headways during the early morning and late evening periods. Route 66 travels along Jackson Avenue, adjacent to the project site.

**Route 901 – Light Rail Service.** The Capitol Light Rail Line provides service between the terminus at the Alum Rock LRT Station and the rest of the LRT system throughout Santa Clara County. Weekday and weekend service is provided in each direction between 4:20 AM and 2:00 AM at 15-minute headways before 8:00 PM and with 30-minute headways after 8:00 PM. The LRT service travels along Capitol Avenue, east of I-680. The closest station to the project site is the Berryessa Station, which is located approximate 0.6 miles or 3000 feet east of the project site.

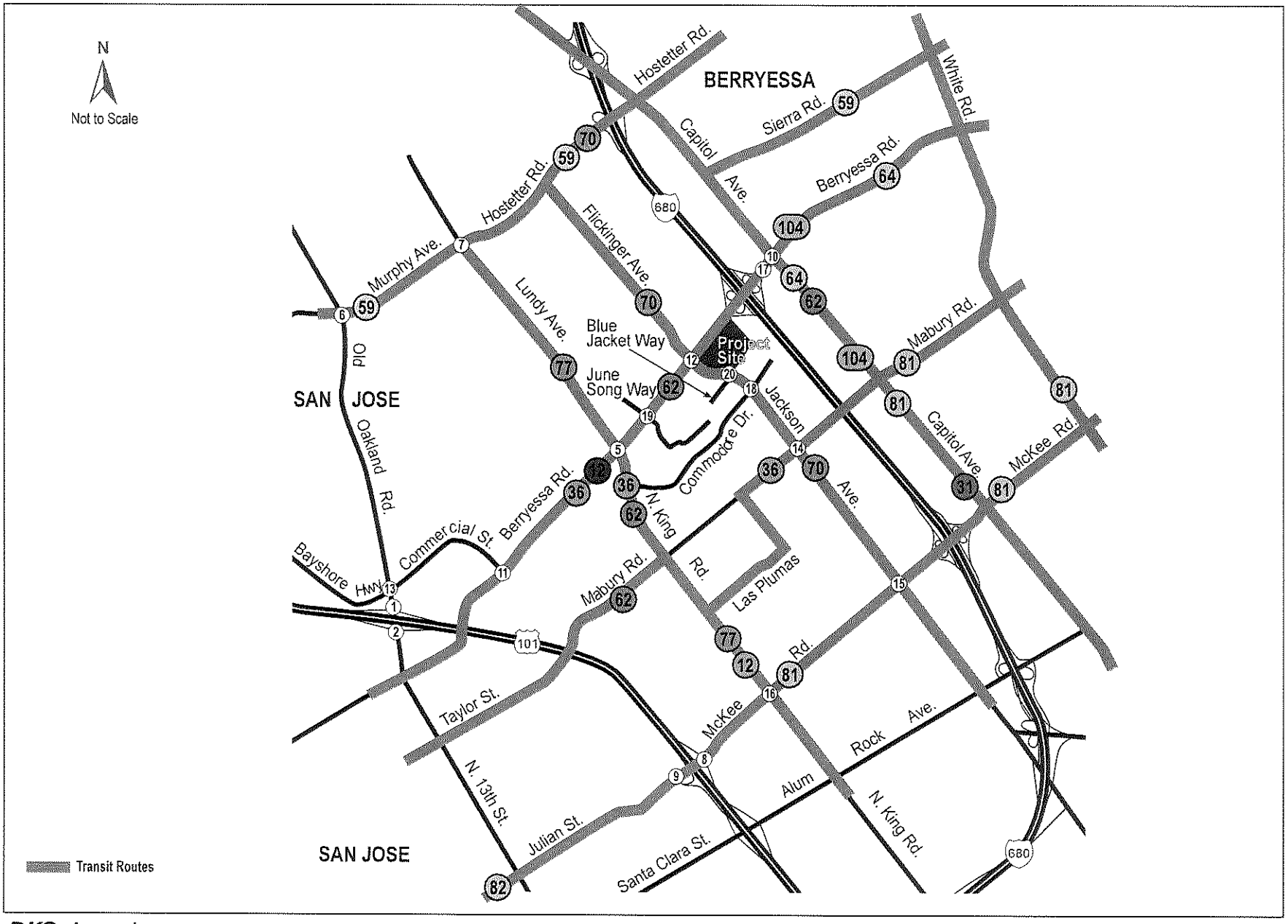


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**Figure 3**
**Transit Service**

### 2.1.3 Bicycle and Pedestrian Facilities

The 2005 Santa Clara County Bikeways Map (Santa Clara Valley Transportation Authority, October 2005) indicates bicycle facilities in the vicinity of the project. The existing system consists of three classifications of bicycle facilities:

- Caw' faciqtiev (bike sath) – are comsqtely separated, with paved right of way (shared with pedestrians) which excludes general motor vehicle traffic.

- Caw'' faciqtiev (bike qne) – a vtrised lane for one-way bike travel on a roadway.

- Caw''' faciqtiev (bike route) – tysicaq a street with low traffic volumes and speeds, with measures for preferential bike treatment.

fn the vicinity of the project site, the bicycle facilities map identifies Berryessa oad (west of Capitol Avenue), Jackson Avenue (Mchee to clickinger), clickinger Street, Mabury oad, and Capitol Avenue as major roadways that include Class ff bike lanes. A Class f bicycle path also exist along the menitencia Creek Trail, located just south of the project site.

**Figure 4** illustrates the location of bicycle facilities in the vicinity of the project.

medestrian facilities within the vicinity of the site include sidewalks, crosswalks and pedestrian signals. Crosswalks and pedestrian push buttons are available at all of the signalized intersections accommodate pedestrian movements within the immediate vicinity of the project. Sidewalks are provided on both sides of Berryessa oad and Jackson Avenue with the excestion of aqnj the srqMct vite'vfrontaje where no videwaqv are currentq avaiqbq.

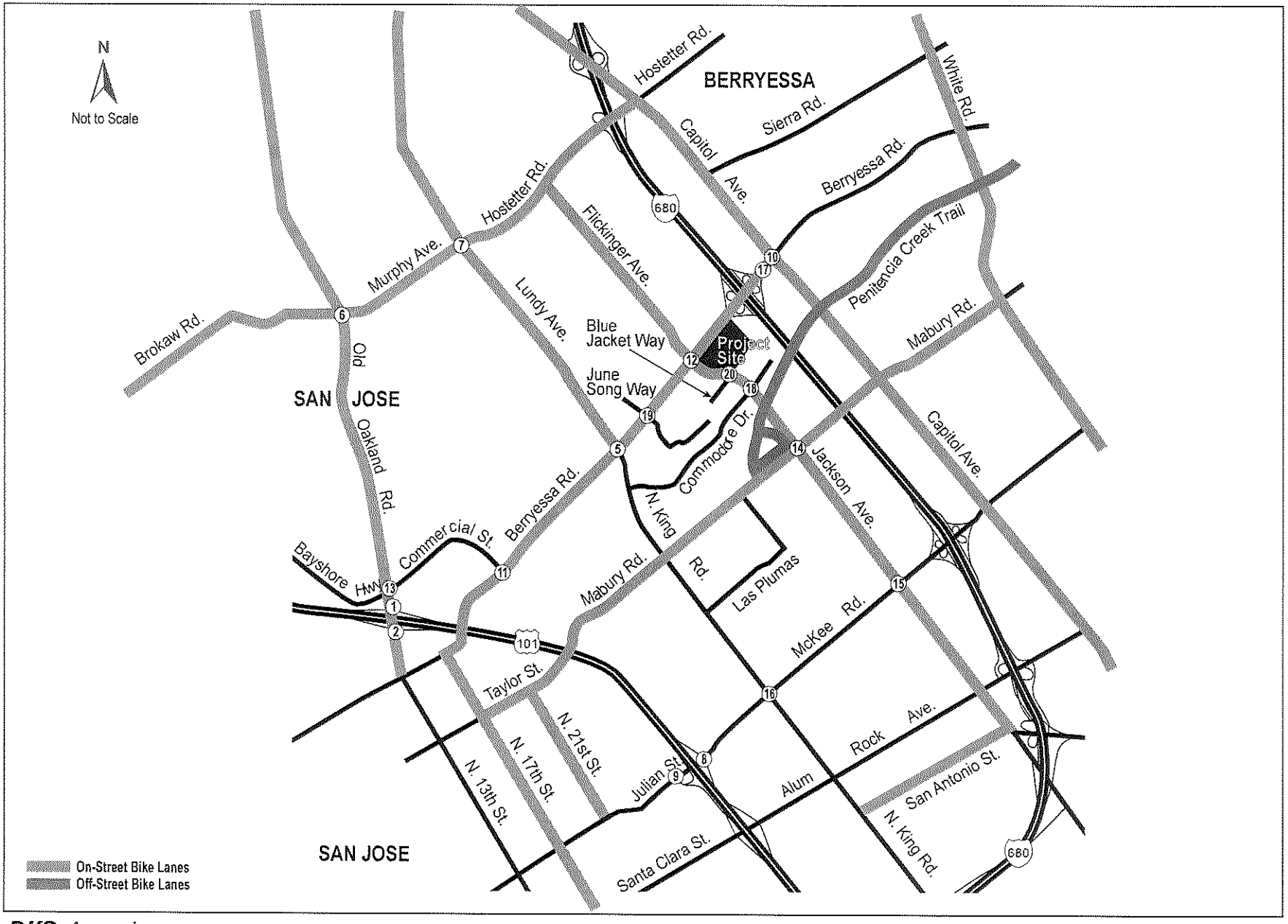


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**Figure 4**
**Bicycle Facilities**

## 2.2 INTERSECTION LEVEL OF SERVICE

To evaluate the existing traffic conditions, as well as provide a basis for comparison of conditions before and after project-generated traffic is analyzed based on existing traffic volumes, and intersection Level of Service (LOS) was evaluated at the identified study intersections.

### 2.2.1 Intersection Level of Service Methodology

The City of San Jose designated intersection level of service software analysis program is *TRAFFIX*. *TRAFFIX* evaluates signalized intersection operations on the basis of average delay for all vehicles at the intersection. The analysis uses procedures from the 2000 *Highway Capacity Manual* (HCM) method for signalized intersections.

### 2.2.2 Level of Service Definition

The LOS evaluation indicates the degree of congestion that occurs during peak travel periods and is the principal measure of roadway performance. Levels of Service can range from "A" representing free flow conditions, to "F" representing extreme delays. LOS A and B signify stable conditions with acceptable delays. LOS C is typically considered acceptable for a peak hour in urban areas, with average delays in the range of 35 to 55 seconds. LOS E is approaching capacity and LOS F represents conditions at or above capacity, with average delays over 80 seconds.

Since TRAFFIX is also the CMP designated intersection Level of Service software analysis program the City of San Jose methodology embodies the CMP default values for the analysis parameters. The correlation between average control delay and level of service is contained in **Table 1**.

**Table 1 Signalized Intersection LOS Thresholds**

| Level of Service | Average Stopped Delay (seconds/vehicle) | Description |
|---|---|---|
| A | Delay ≤ 10.0.0 | Free flow; minimal to no delay |
| B+<br>B<br>B- | 10.0 < Delay ≤ 12.0<br>12.0 < Delay ≤ 18.0<br>18.0 < Delay ≤ 20.0 | Stable flow, but speeds are beginning to be restricted by traffic condition; slight delays. |
| C+<br>C<br>C- | 20.0 < Delay ≤ 23.0<br>23.0 < Delay ≤ 32.0<br>32.0 < Delay ≤ 35.0 | Stable flow, but most drivers cannot select their own speeds and feel somewhat restricted; acceptable delays. |
| D+<br>D<br>D- | 35.0 < Delay ≤ 39.0<br>39.0 < Delay ≤ 51.0<br>51.0 < Delay ≤ 55.0 | Approaching unstable flow, and drivers have difficulty maneuvering; tolerable delays. |
| E+<br>E<br>E- | 55.0 < Delay ≤ 60.0<br>60.0 < Delay ≤ 75.0<br>75.0 < Delay ≤ 80.0 | Unstable flow with stop and go; delays |
| F | Delay > 80.0 | Total breakdown; congested conditions with excessive delays. |

Source: Santa Clara County Congestion Management Program – Traffic Level of Service Guidelines. June 2003

### 2.2.3 Standards of Significance

Based on the City of San Jose level of service standards, an acceptable operating level of service (LOS) is defined as LOS D or better at all signalized intersections and on principal arterials in the CMP during the peak hours.

## 2.3 EXISTING CONDITIONS

The City of San Jose provided AM peak hour and PM peak hour intersection level of service calculations for each of the 17 existing study intersections under the "existing" condition. To supplement data provided by City of San Jose staff, DKS recently conducted new weekday intersection turning movement counts at the following unsignalized intersections:

- Jackson Avenue & Commodore Drive
- Berryessa Road & June Song Road
- Jackson Avenue & Blue Jacket Way

**Figure 5** illustrates the current lane geometry and traffic control at each of the study intersections. **Figure 6** illustrates the existing traffic volumes at each study intersection. The intersections and their corresponding existing levels of service are presented in **Table 2**.

**Appendix A** includes the detailed TRAFFIX calculation level of service analysis sheets, including the weekday AM and PM peak hours. **Appendix B** includes the recent weekday traffic counts at the intersection listed above.

**Table 2 Existing Conditions Level of Service**

| # | INTERSECTION | AM Peak | | PM Peak | |
|---|---|---|---|---|---|
| | | Avg. Delay | LOS | Avg. Delay | LOS |
| 1 | US 101 Northbound Ramp & Old Oakland Road[a] | **61.8** | **E** | 22.9 | C+ |
| 2 | US 101 Southbound Ramp & Old Oakland Road[a] | 22.4 | C | 33.6 | C- |
| 3 | Interstate 880 Northbound Ramp & Brokaw Road[a] | 30.5 | C | 19.3 | B- |
| 4 | Interstate 880 Southbound Ramp & Brokaw Road[a] | 45.6 | D | 36.6 | D+ |
| 5 | Berryessa Road & Lundy Avenue[a] | 44.1 | D | 48.2 | D |
| 6 | Brokaw Road & Old Oakland Road[a] | 39.8 | D | 40.7 | D |
| 7 | Murphy Avenue & Lundy Avenue[a] | 39.4 | D | 36.7 | D+ |
| 8 | US 101 Northbound Ramp & McKee Road | 19.8 | B- | 20.1 | C+ |
| 9 | US 101 Southbound Ramp & Julian Street | 20.3 | C+ | 23.5 | C |
| 10 | Berryessa Road & Capitol Avenue | 50.3 | D | 41.9 | D |
| 11 | Berryessa Road & Commercial Street | 24.0 | C | 23.4 | C |
| 12 | Berryessa Road & Flickinger Road | 36.9 | D+ | 37.8 | D+ |
| 13 | Commercial Street & Old Oakland Road | 38.1 | D+ | 45.1 | D |
| 14 | Jackson Avenue & Mabury Road | 37.6 | D+ | 32.0 | C |
| 15 | Jackson Avenue & McKee Road | 38.2 | D+ | 39.9 | D |
| 16 | King Road & McKee Road | 44.1 | D | 45.9 | D |
| 17 | Interstate 680 Northbound Ramp & Berryessa Road | 12.5 | B | 14.6 | B |

Avg. Delay: in seconds per vehicle, LOS: Level of Service
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E – 8nsIJnDØzed 'nteŲseFtlRn

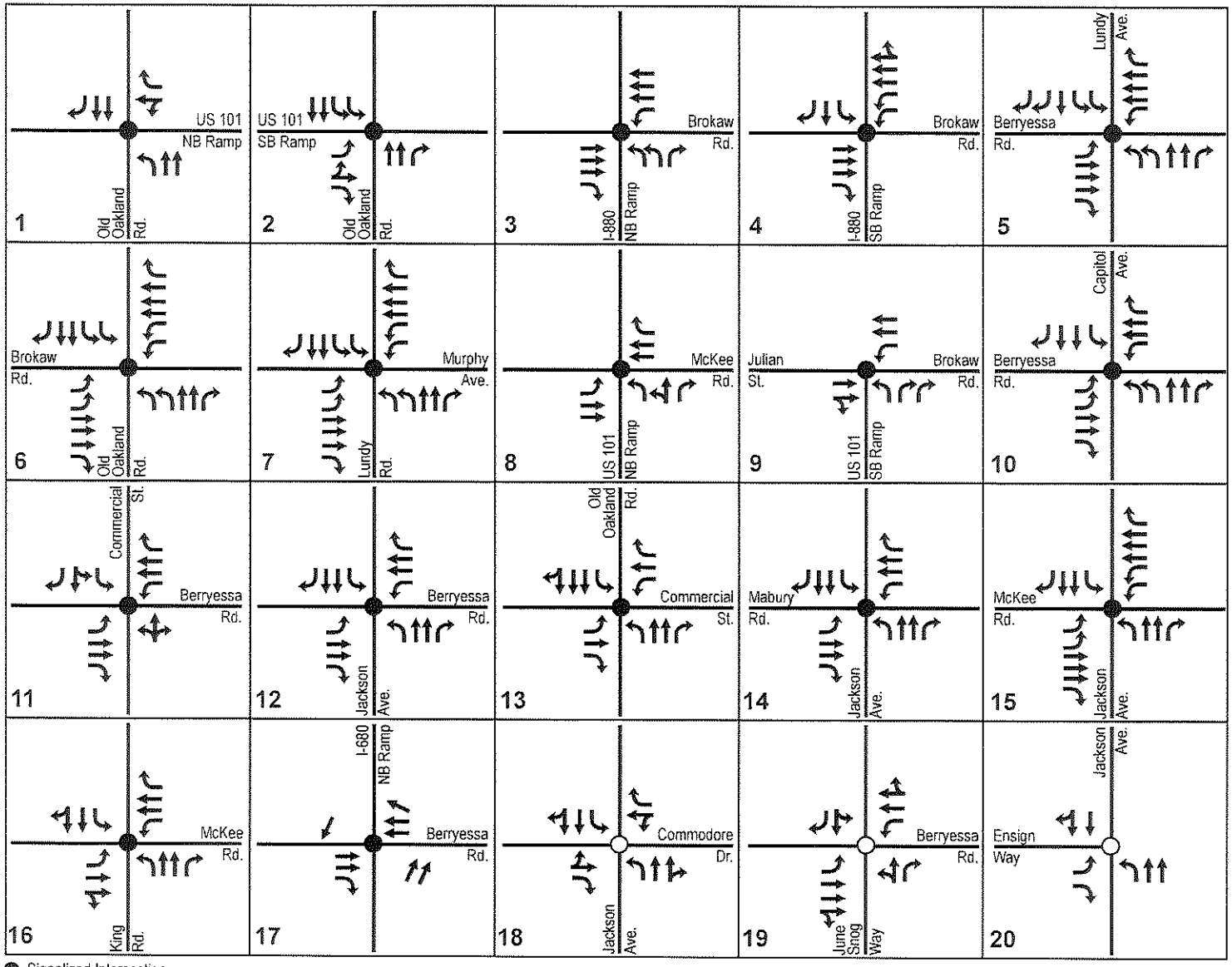


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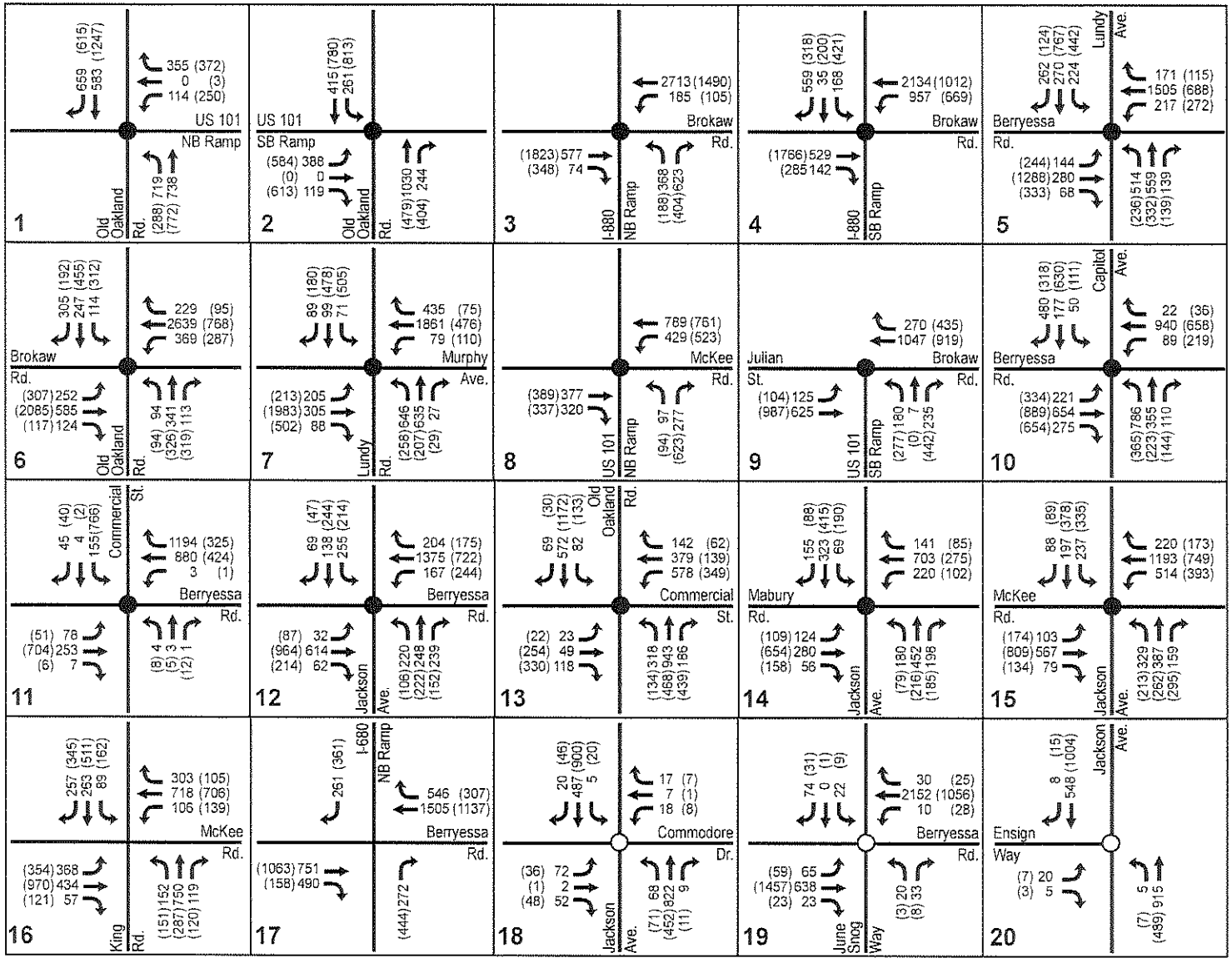
**Figure 5**
**Existing Intersection Lane Geometry and Traffic Control**




xx (xx) AM (PM) Peak Hour Volumes

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**Figure 6**
**Existing Peak Hour Volumes**

### 2.3.1 Intersection Operations

Signalized Intersections

According to the City of San Jose intersection level of service standards, all study intersections currently operate at acceptable levels of service under the existing conditions, with the exception of the US 101 Northbound Ramps and Old Oakland Road intersection. This intersection currently operates at LOS E+ during the AM peak hour with approximately 56.1 seconds of average delay.

Unsignalized Intersections

The City of San Jose recently conducted a traffic control signal warrant analysis for the intersections of Berryessa Road/Junesong Way and Jackson Avenue/Commodore Drive in 2002 and 2004 respectively. The signal warrant analysis was based on the Caltrans Traffic Manual. Based on the findings of the warrant studies, the intersection of Berryessa Road/Junesong Way meets one signal warrant; Warrant #11, Peak Hour Volume Warrant. The intersection of Jackson Avenue/Commodore Drive would meet four warrants; warrant #5, #6, #9 and #11: Progressive Movement Warrant, Accident Experience Warrant, Four Hour Volume Warrant, and Peak hour Volume Warrant. The intersection warrant analyses are included in **Appendix E**.

### 2.3.2 Pedestrian Operations

Pedestrian activity in the vicinity of the project site is generally light, and does not conflict with traffic operations at the intersection of Jackson Avenue and Berryessa Road. Currently, this intersection has crosswalks at each approach, and has pedestrian push buttons and islands at each corner.

There is one school within close proximity (approximately 0.4 miles) from the project site; Vinci Park Elementary School. Per school staff, a majority of the students are dropped off and picked up at the school by parents in vehicles. Independence High School is located south of the project site (approximately one mile away), and pedestrian traffic due to the High School does not substantially affect traffic operations at the intersection of Jackson Avenue and Berryessa Road.

## 2.4 BACKGROUND CONDITIONS

This section discusses the traffic operating conditions at the study intersections under the background condition. The Background Conditions include the traffic expected to be generated by the approved projects (as detailed in the Approved Trip Inventory (ATI) database, provided by the City of San Jose staff in July 2006) prior to the completion of the proposed development. **Appendix C** includes the ATI sheets.

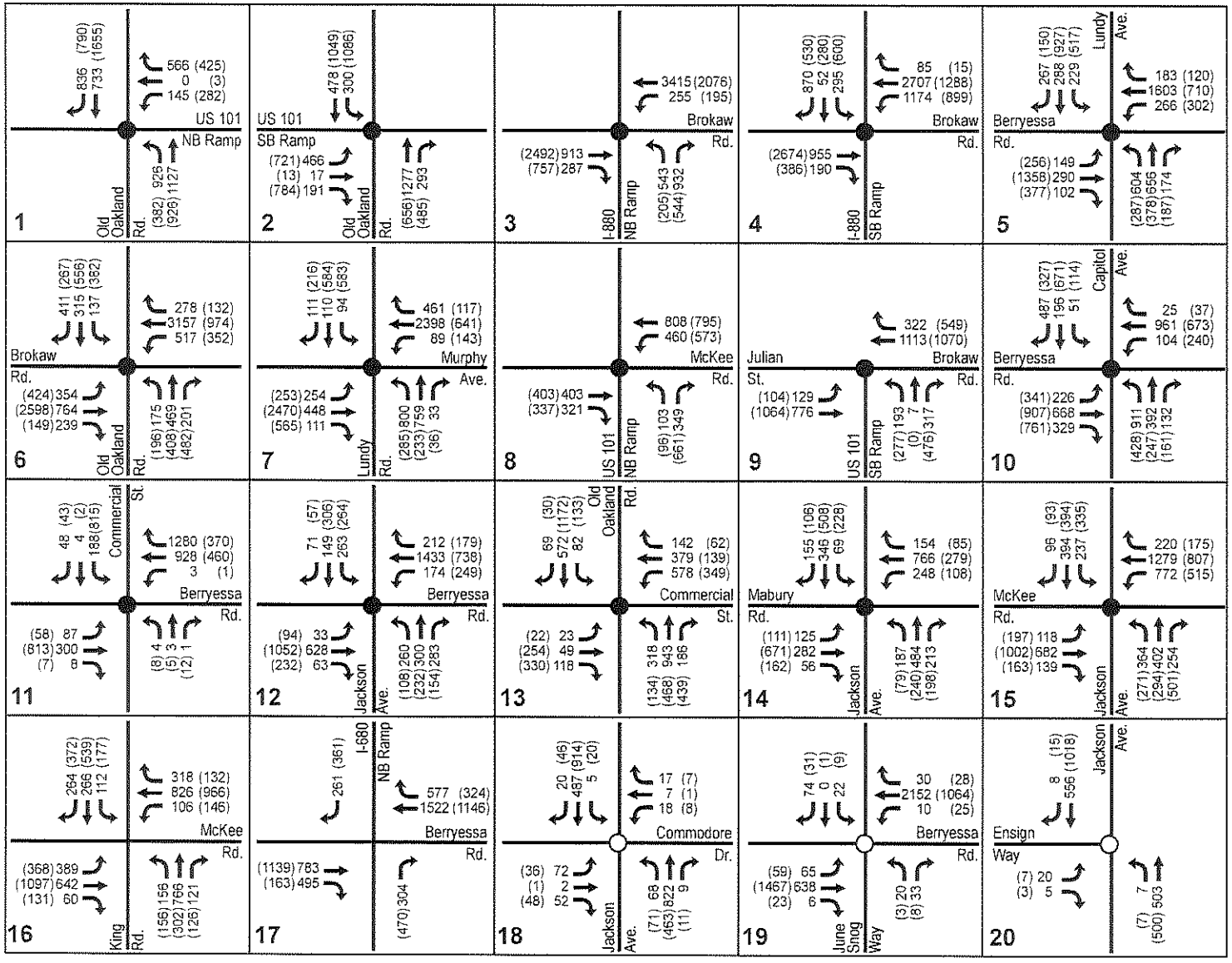
The proportion of these trips that would travel through the study intersections was used for the intersection LOS analysis under the Background Conditions.

**Figure 7** illustrates the background traffic volumes at each study intersection. Intersection operational levels of service along with their associated critical and average delays are summarized in **Table 3**.

**Appendix A** includes the detailed TRAFFIX calculation level of service analysis sheets, including the weekday AM and PM peak hours.

### 2.4.1 Intersection Operation

According to the City of San Jose intersection level of service standards, 15 of the 17 study intersections would operate at acceptable levels of service under the background conditions during the AM peak hour, and 16 of the 17 intersections would operate at acceptable levels during the PM peak hour.




xx (xx) AM (PM) Peak Hour Volumes

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**Figure 7**
**Background Conditions Peak Hour Volumes**

**Table 3 Background Conditions Level of Service**

| # | INTERSECTION | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|
| | | Avg. Delay | Critical V/C | LOS | Avg. Delay | Critical V/C | LOS |
| 1 | US 101 Northbound Ramp & Old Oakland Road[a] | **142.5** | **1.443** | **F** | 46.0 | 1.037 | D |
| 2 | US 101 Southbound Ramp & Old Oakland Road[a] | 24.1 | 0.616 | C | **77.2** | **1.216** | **E-** |
| 3 | Interstate 880 Northbound Ramp & Brokaw Road[a] | 53.1 | 1.038 | D- | 22.1 | 0.802 | C+ |
| 4 | Interstate 880 Southbound Ramp & Brokaw Road[a] | **89.3** | **1.092** | **F** | **96.0** | **1.176** | **F** |
| 5 | Berryessa Road & Lundy Avenue[a] | 45.1 | 0.689 | D | 51.2 | 0.810 | D- |
| 6 | Brokaw Road & Old Oakland Road[a] | 50.7 | 0.904 | D | 51.1 | 0.927 | D- |
| 7 | Murphy Avenue & Lundy Avenue[a] | 45.4 | 0.852 | D | 39.9 | 0.788 | D |
| 8 | US 101 Northbound Ramp & McKee Road | 20.2 | 0.556 | C+ | 20.3 | 0.626 | C+ |
| 9 | US 101 Southbound Ramp & Julian Street | 20.7 | 0.512 | C+ | 22.4 | 0.571 | C+ |
| 10 | Berryessa Road & Capitol Avenue | 53.5 | 0.893 | D- | 44.2 | 0.821 | D |
| 11 | Berryessa Road & Commercial Street | 32.6 | 0.892 | C- | 24.1 | 0.535 | C |
| 12 | Berryessa Road & Flickinger Road | 38.5 | 0.679 | D+ | 39.7 | 0.688 | D |
| 13 | Commercial Street & Old Oakland Road | **65.5** | **1.000** | **E** | 51.7 | 0.860 | D- |
| 14 | Jackson Avenue & Mabury Road | 37.5 | 0.517 | D+ | 32.6 | 0.483 | C- |
| 15 | Jackson Avenue & McKee Road | 38.8 | 0.698 | D+ | 42.1 | 0.72 | D |
| 16 | King Road & McKee Road | 40.6 | 0.668 | D | 44.1 | 0.786 | D |
| 17 | Interstate 680 Northbound Ramp & Berryessa Road | 13.1 | 0.323 | B | 14.8 | 0.479 | B |

Avg. Delay: in seconds per vehicle, LOS: Level of Service
D – &0 3 'nteuvertlRn
E – 8nVJnpØzed 'nteuvertlRn

During the AM peak hour, the intersections of US 101 Northbound Ramps at Old Oakland Road and I-880 Northbound Ramps at Brokaw Road would deteriorate from LOS D to LOS F. The intersection of Commercial Street and Old Oakland Road would operate at an unacceptable LOS E.

During the PM peak hour, the intersection of US 101 Southbound Ramps at Old Oakland Road would operate at LOS E-, and the intersection of I-880 Northbound Ramps at Brokaw Road would operate at an unacceptable LOS F.

## 2.5 PROJECT CONDITIONS

This section evaluates background traffic conditions plus project-generated traffic estimated for the proposed project. The amount of traffic associated with a project is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. Trip generation is the process of predicting the number of peak hour trips a proposed development would contribute to the roadways, and whether these trips would be entering or exiting the site. After the number of trips is determined, the distribution process projects the direction these trips use to approach and depart the site, from a regional perspective. Trip assignment involves determining which specific roadways a vehicle would use to travel between its origin and destination.

### 2.5.1 Significance Criteria and Project Impacts

The City of San Jose[1] defines a traffic impact as significant if:

- The addition of the project traffic causes an intersection operating at LOS D or better under the background condition to operate at LOS E or F, or,

- For intersections already operating at unacceptable LOS E or F under the background condition, the proposed project causes:

  - An increase in critical delay by 4.0 or more seconds; and,
  - An increase in the critical volume-to-capacity ratio (v/c) of 0.010 or more.

If there is a decrease (negative change) in critical delay or v/c with the added traffic, then only one of the two criteria need to apply to determine the impact of the proposed project.

### 2.5.2 Trip Generation

Trip generation for the proposed project was based on the City of San Jose Trip Generation Rates.

In consultation with City of San Jose staff, a capture rate reduction of 25% was applied to the retDLOFRmSRnent Gue tR the SrRjeFt's mIxeG-use (housing-retail) components. In addition, a 13% vehicle trip-reduction was applied to the retail components, in accordance with STA policy for mixed-use development projects, for its residential-retail mixed-use. The 13% retail vehicle trip-reduction was applied to the residential land use, as most of these trips were assumed to be internal trips.

Combined, the proposed project and the Nola mroperties development would generate approximately 4,445 daily trips, including 382 Aj peak hour trips (149 inbound, 233 outbound) and 419 mj peak hour trips (267 inbound, 152 outbound). **Table 4** summarizes the trip generation for the project condition during the Aj and mj peak hours, respectively.

## Table 4 Trip Generation – Proposed Project and Nola Development

| Land Use | Size | Units | Daily | | AM PEAK | | | | | | | PM PEAK | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Peak Hour Rate | Percent (%) | | Rate | | Vehicle Trips | | Peak Hour Rate | Percent (%) | | Rate | | Vehicle Trips | |
| | | | Rate | Trips | | In | Out | In | Out | In | Out | | In | Out | In | Out | In | Out |
| COMMERCIAL | | | | | | | | | | | | | | | | | | |
| Specialty Retail | 25 | ksf[2] | 40 | 1000 | 0.80 | 70 | 30 | 0.56 | 0.24 | 14 | 6 | 3.60 | | | 1.80 | 1.80 | 59 | 32 |
| *Capture Rate Reduction (25%)* | | | | *-250* | | | | | | *-4* | *-2* | | | | | | *-11* | *-11* |
| *Mixed-Use Reduction[1] (13%)* | | | | *-130* | | | | | | *-2* | *-1* | | | | | | *-6* | *-6* |
| Sit Down High T.O. Restaurant | 5 | ksf[2] | 206 | 1030 | 16.48 | 50 | 50 | 8.24 | 8.24 | 41 | 41 | 16.48 | 50 | 50 | 8.24 | 8.24 | 41 | 41 |
| **SUB-TOTAL (Commercial)** | | | | **1650** | | | | | | **49** | **44** | | | | | | **83** | **56** |
| RESIDENTIAL | | | | | | | | | | | | | | | | | | |
| Single Family Attached (Pulte) | 310 | du[3] | 7.5 | 2,325 | 0.75 | 35 | 65 | 0.26 | 0.49 | 81 | 151 | 0.75 | 65 | 35 | 0.49 | 0.26 | 151 | 81 |
| Single Family Attached (Nola) | 80 | du[3] | 7.5 | 600 | 0.75 | 35 | 65 | 0.26 | 0.49 | 21 | 39 | 0.75 | 65 | 35 | 0.49 | 0.26 | 39 | 21 |
| Total Residential Trips | | | | 2,925 | | | | | | 102 | 190 | | | | | | 190 | 102 |
| *Mixed-Use Reduction[1] (13%)* | | | | *-130* | | | | | | *-2* | *-1* | | | | | | *-6* | *-6* |
| **SUB-TOTAL (Residential)** | | | | **2,795** | | | | | | **100** | **189** | | | | | | **184** | **96** |
| **PROJECT TOTAL TRIPS** | | | | **4,955** | | | | | | **157** | **237** | | | | | | **290** | **175** |
| *Total Trip Reduction* | | | | *-510* | | | | | | *-8* | *-4* | | | | | | *-23* | *-23* |
| **PROJECT GRAND TOTAL TRIPS** | | | | **4,445** | | | | | | **149** | **233** | | | | | | **267** | **152** |

Source: City of San Jose, Department of Public Works, Transportation Division, Common Vehicular Trip Generation Rates for the San Jose Area, March 1994.
[1] Santa Clara Valley Transportation Authority, Transportation Impact Analysis Guidelines. February 1998.
[2] ksf: 1,000 square feet
[3] du: dwelling-unit

### 2.5.3 Trip Distribution

The approach and departure for project trips of the proposed mixed-use project were estimated based on existing travel patterns and the locations of complementary land uses. **Figure 8** illustrates the trip distribution for the proposed commercial and residential uses.

### 2.5.4 Trip Assignment

Project-generated trips were assigned to the roadway network based on access points and likely travel patterns. The proportion of these trips that would travel through the study intersections was used for the intersection LOS analysis under this project condition. In addition, traffic volumes were manually adjusted to account for U-turns at the northbound and westbound approaches at the intersection of Jackson Avenue/Flickinger Road/Berryessa Road that would occur due to anticipated median modifications to restrict left turn movements.

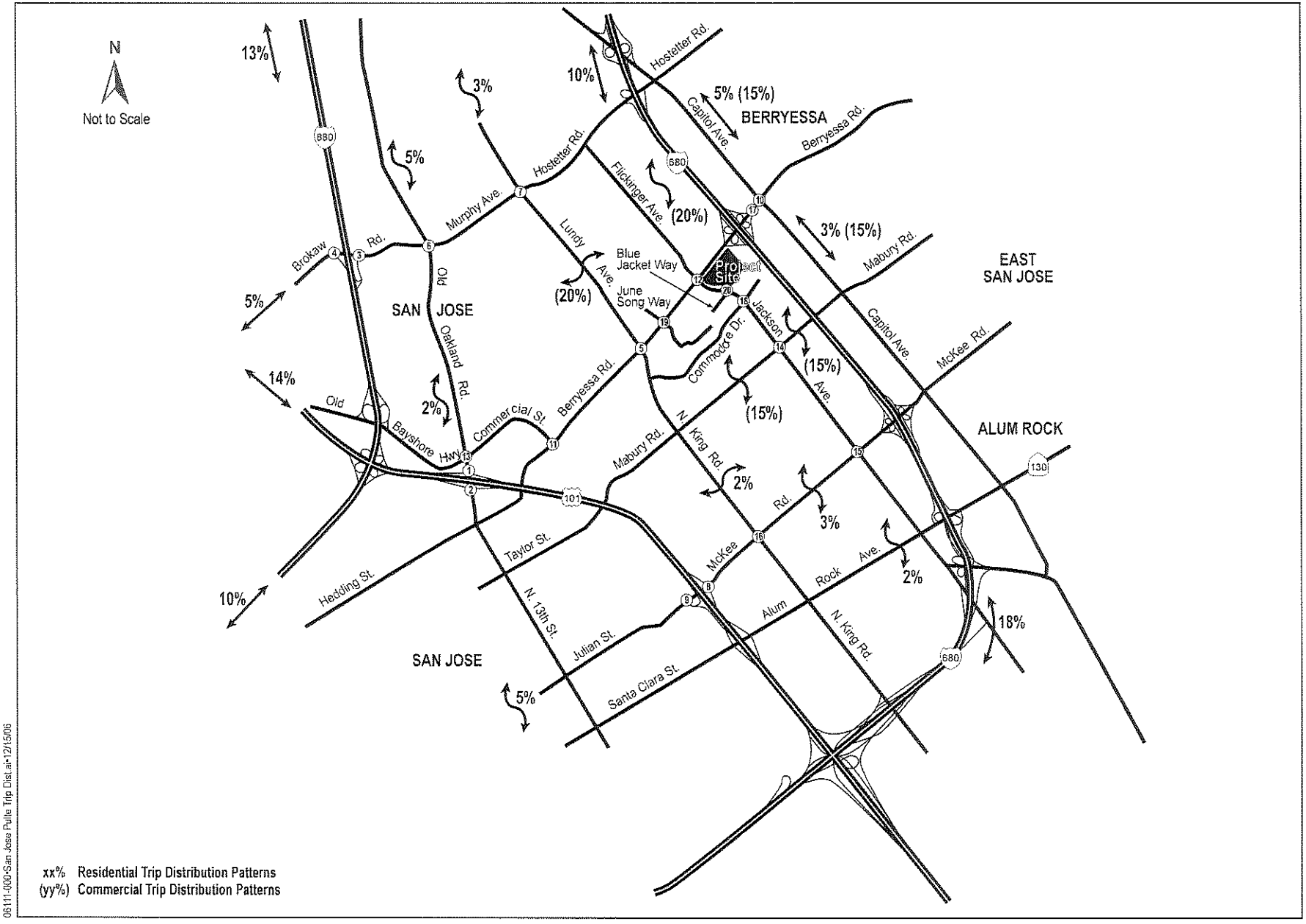
**Figure 9** illustrates the project trips at each of the study intersections for the AM and PM peak hours under the project condition. **Figure 10** illustrates the project scenario traffic volumes at each of the study intersections for the AM and PM peak hours.

### 2.5.5 Intersection Operation

As part of the Project Conditions scenario traffic, signal modification and roadway geometric improvements are anticipated at the intersection of Jackson Avenue/Flickinger Road/Berryessa Road. A second left-turn lane would be added to the northbound left turn movement as part of the proposed project, and a second westbound left-turn lane would be added with the removal of the mid-block westbound left turn lane for traffic currently turning onto the Nola property. Intersection operational levels of service along with their associated critical and average delays are summarized in **Table 5**.

According to the City of San Jose intersection level of service standards, all study intersections would operate at acceptable levels of service under the project condition, with the exceptions of three intersections during the AM peak period, and two intersections during the PM Peak period. The addition traffic generated by the proposed project would result in potentially significant impacts at two intersections during the AM peak hour, and at one intersection during the PM peak hour.

During the AM Peak Hour, the proposed project and residential development at the Nola Property would add traffic resulting in a greater than four second increase in average delay, and a 0.01 or greater increase in the Critical V/C ratio at the intersections of US 101 Northbound Ramps/Old Oakland Road and Commercial Street/Old Oakland Road, resulting in potentially significant impacts. The intersection of I-880 Southbound/Brokaw Road would operate at a deficient LOS F. However, the project would not add a significant amount of traffic to the critical movements and the average delay would not increase by more than four seconds. Each of the remaining study intersections would operate at an acceptable LOS D or better during the AM peak hour.

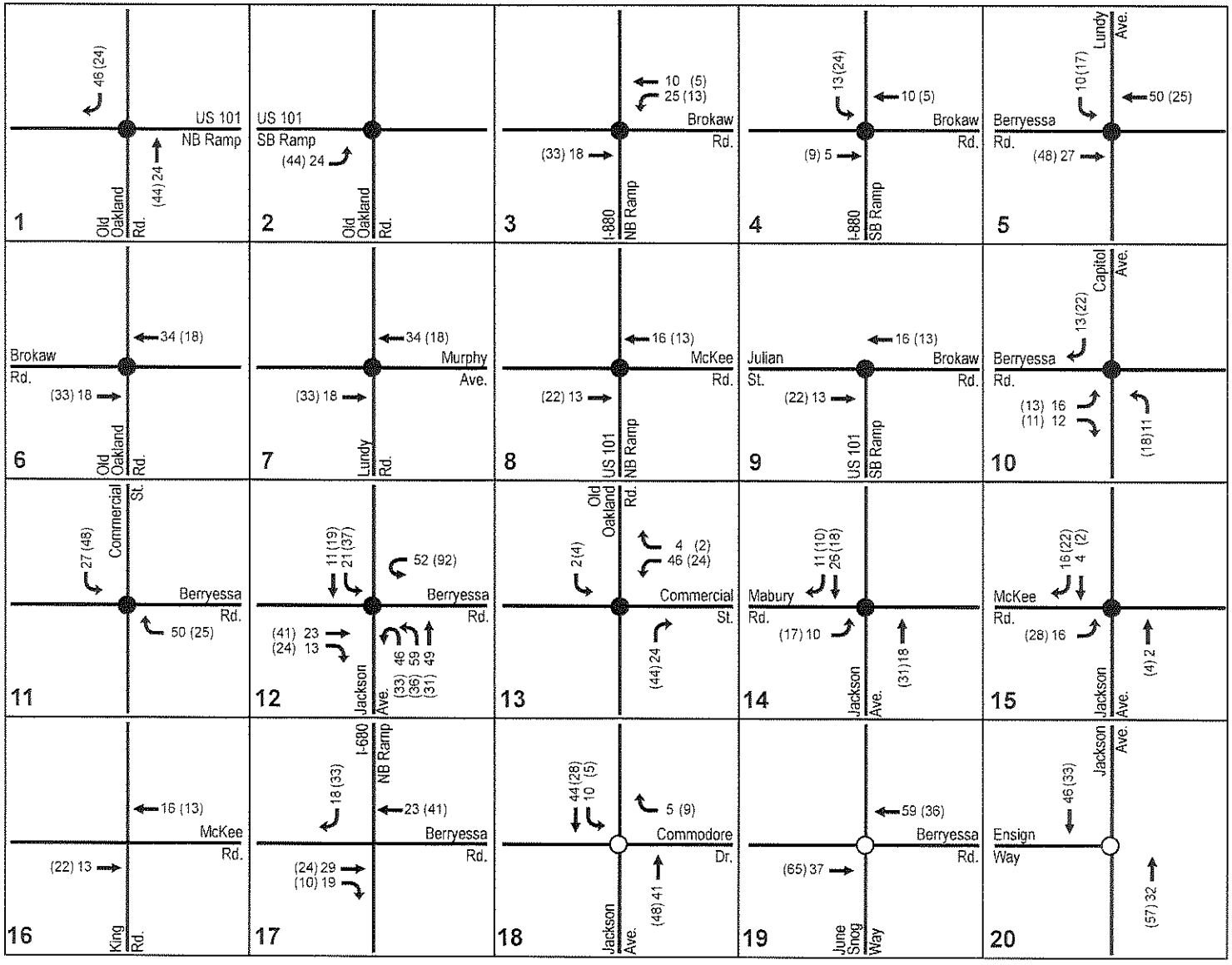



xx% Residential Trip Distribution Patterns
(yy%) Commercial Trip Distribution Patterns

06111-000-San Jose Pulte Trip Dist.ai•12/15/06

DKS Associates
TRANSPORTATION SOLUTIONS

**Figure 8**
**Project Trip Distribution Patterns**

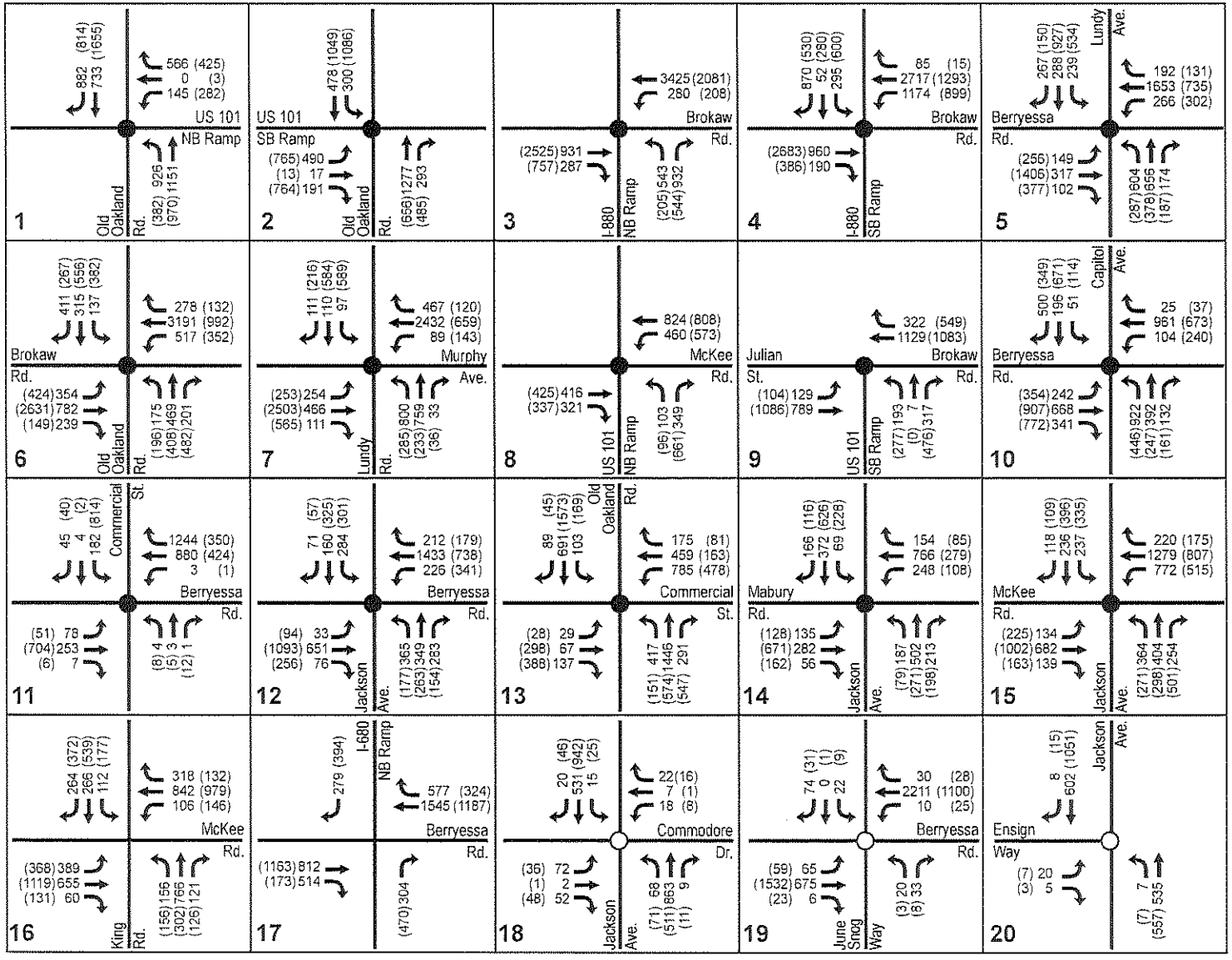



xx (xx) AM (PM) Peak Hour Volumes

06111-000•San Jose Pulte Proj Trips.ai•12/12/06

DKS Associates
TRANSPORTATION SOLUTIONS

**Figure 9**
**Peak Hour Project Trips**




xx (xx) AM (PM) Peak Hour Volumes

06111-000•San Jose Pulte Proj Vols.ai•2/5/08

DKS Associates
TRANSPORTATION SOLUTIONS

**Figure 10**
**Project Conditions Peak Hour Volumes**

**Table 5 Project Conditions Level of Service**

| # | INTERSECTION | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|
| | | Avg. Delay | Critical V/C | LOS | Avg. Delay | Critical V/C | LOS |
| 1 | US 101 Northbound Ramp & Old Oakland Road[a] | **149.9** | **1.472** | **F** | 45.9 | 1.028 | D |
| 2 | US 101 Southbound Ramp & Old Oakland Road[a] | 24.4 | 0.623 | C | **76.8** | **1.216** | **E-** |
| 3 | Interstate 880 Northbound Ramp & Brokaw Road[a] | 50.5 | 1.025 | D | 22.1 | 0.808 | C+ |
| 4 | Interstate 880 Southbound Ramp & Brokaw Road[a] | **89.6** | **1.093** | **F** | **100.0** | **1.192** | **F** |
| 5 | Berryessa Road & Lundy Avenue[a] | 45.3 | 0.698 | D | 51.4 | 0.819 | D- |
| 6 | Brokaw Road & Old Oakland Road[a] | 51.1 | 0.911 | D- | 51.5 | 0.933 | D- |
| 7 | Murphy Avenue & Lundy Avenue[a] | 45.6 | 0.859 | D | 40.1 | 0.797 | D |
| 8 | US 101 Northbound Ramp & McKee Road | 20.2 | 0.56 | C+ | 20.5 | 0.632 | C+ |
| 9 | US 101 Southbound Ramp & Julian Street | 20.6 | 0.517 | C+ | 22.3 | 0.571 | C+ |
| 10 | Berryessa Road & Capitol Avenue | 54.5 | 0.905 | D- | 44.5 | 0.828 | D |
| 11 | Berryessa Road & Commercial Street | 39.0 | 0.925 | D | 24.4 | 0.550 | C |
| 12 | Berryessa Road & Flickinger Road | 45.4 | 0.792 | D | 43.0 | 0.745 | D |
| 13 | Commercial Street & Old Oakland Road | **72.9** | **1.031** | **E** | 52.7 | 0.875 | D- |
| 14 | Jackson Avenue & Mabury Road | 37.9 | 0.531 | D+ | 32.8 | 0.492 | C- |
| 15 | Jackson Avenue & McKee Road | 39.0 | 0.699 | D+ | 42.3 | 0.72 | D |
| 16 | King Road & McKee Road | 40.6 | 0.673 | D | 44.2 | 0.793 | D |
| 17 | Interstate 680 Northbound Ramp & Berryessa Road | 13.0 | 0.331 | B | 14.7 | 0.486 | B |

Avg. Delay: in seconds per vehicle, LOS: Level of Service
D – &0 3 'nteuvftlRn
E – 8nvJ npQzed 'nteuvftlRn

During the PM Peak Hour, the proposed project would add traffic resulting in a greater than four second increase in average delay, and a 0.01 or greater increase in the critical V/C ratio at the intersection of I-880 Southbound/Brokaw Road, resulting in a potentially significant impact. The intersection of US 101 Southbound Ramps/Old Oakland Road would operate at a deficient LOS E. However the project would not add a significant amount of traffic to the critical movements. Each of the remaining study intersections would operate at an acceptable LOS D or better during the PM peak hour.

Unsignalized Intersections

As described previously, the City of San Jose conducted a traffic control signal warrant analysis for the intersections of Berryessa Road/Junesong Way and Jackson Avenue/Commodore Drive in 2002 and 2004 respectively. The signal warrant analysis was based on the Caltrans Traffic Manual. The intersection of Jackson Avenue/Commodore Drive would meet four warrants; warrant #5, #6, #9 and #11: Progressive Movement Warrant, Accident Experience Warrant, Four Hour Volume Warrant, and Peak hour Volume Warrant. The intersection warrant analyses are included in **Appendix E.**

### 2.5.6 Left-Turn Queue Analysis

A left-turn queue analysis was performed for eight (8) signalized intersections to determine the potential vehicle queue for the left-turn movements and the ability of the existing left-turn bays to provide adequate storage space for those queues. **Table 6** summarizes the results of the left-turn queue analysis. Because there are no significance criteria for deficient left-turn queues, the analysis is presented here for informational purposes only.

The analysis was performed only for the left-turn movements where left-turn bays were present with two exceptions. Left-turn storage analysis was not performed for freeway on-ramps or when the left-turn bay was adjacent to a lane with a shared left and through movements. The shaded areas in **Table 6** represent situations in which the left-turn queues, on average, are greater than the storage capacity at each location.

The left-turn storage analysis indicated that the majority of these eight study intersections currently have left-turn bays with inadequate storage space for the left-turn vehicle queues at one or more of the intersection approaches.

During the AM peak period, the addition of project traffic would result in increases in design queue lengths at two intersections that would have insufficient storage lengths during the Background Conditions. At the intersection of Berryessa Road/Flickinger Road/Jackson Road, the northbound and westbound left-turn modifications would adequately serve the estimated design queues for the respective approaches. The southbound left-turn queue would increase by two vehicles, and continue to exceed the current capacity. At the intersection of Commercial Drive/Old Oakland Road, the westbound left-turn queue currently exceeds the storage capacity, and the addition of project related traffic would increase the design queue length by two vehicles.

During the PM peak period, the addition of project traffic would result in vehicle queues that currently have inadequate storage space to increase in length at three intersections: Berryessa Road/Capitol Expressway, Berryessa Road/Flickinger Road/Jackson Avenue, and Commercial Drive/Old Oakland Road. As shown in Table 6, queue lengths would increase by two or less vehicles. All of the storage lanes that would have enough storage capacity under the Background Conditions would continue to do so with the addition of project traffic during both the AM and PM peak hours.

## Table 6 Left Turn Queue Analysis

| Int # | Intersection | Approach | Lanes | Storage Length (lane) | Storage Length (Total) | Existing | | | | Background | | | | Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | AM | | PM | | AM | | PM | | AM | | PM | |
| | | | | | | Design Queue[1] | Design Length[2] | Design Queue[1] | Design Length[2] | Design Queue[1] | Design Length[2] | Design Queue[1] | Design Length[2] | Design Queue[1] | Design Length[2] | Design Queue[1] | Design Length[2] |
| 3106 | Lundy / Murphy | NB | 2 | 400 | 800 | 24 | 600 | 12 | 300 | 31 | 775 | 13 | 325 | 31 | 775 | 13 | 325 |
| | | SB | 2 | 300 | 600 | 3 | 75 | 20 | 500 | 4 | 100 | 24 | 600 | 5 | 125 | 24 | 600 |
| | | EB | 2 | 195 | 390 | 10 | 250 | 8 | 200 | 12 | 300 | 10 | 250 | 12 | 300 | 10 | 250 |
| | | WB | 2 | 230 | 460 | 3 | 75 | 5 | 125 | 4 | 100 | 7 | 175 | 4 | 100 | 7 | 175 |
| 3293 | Berryessa / Capitol | NB | 2 | 150 | 300 | 29 | 725 | 14 | 350 | 33 | 825 | 17 | 425 | 33 | 825 | **18** | **450** |
| | | SB | 1 | 200 | 200 | 3 | 75 | 7 | 175 | 4 | 100 | 8 | 200 | 4 | 100 | 8 | 200 |
| | | EB | 2 | 150 | 300 | 10 | 250 | 13 | 325 | 11 | 275 | 13 | 325 | 11 | 275 | 13 | 325 |
| | | WB | 1 | 225 | 225 | 7 | 175 | 15 | 375 | 9 | 225 | 17 | 425 | 9 | 225 | 17 | 425 |
| 3294 | Berryessa / Commercial | NB | 1 | | 0 | | 0 | 1 | 25 | 0 | 0 | 1 | 25 | 0 | 0 | 1 | 25 |
| | | SB | 2 | 105 | 210 | 4 | 100 | 13 | 325 | 5 | 125 | 14 | 350 | 6 | 150 | **15** | **375** |
| | | EB | 1 | 110 | 110 | 4 | 100 | 2 | 50 | 5 | 125 | 1 | 25 | 5 | 125 | 1 | 25 |
| | | WB | 1 | 80 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3295 | Berryessa / Flickinger | NB | 2* | 200 | 400 | 16 | 400 | 8 | 200 | 19 | 475 | 8 | 200 | 14 | 350 | 7 | 175 |
| | | SB | 1 | 210 | 210 | 19 | 475 | 16 | 400 | 19 | 475 | 19 | 475 | **21** | **525** | **20** | **500** |
| | | EB | 1 | 210 | 210 | 3 | 75 | 7 | 175 | 3 | 75 | 7 | 175 | 3 | 75 | 7 | 175 |
| | | WB | 2* | 290 | 580 | 12 | 300 | 17 | 425 | 13 | 325 | 18 | 450 | 10 | 250 | 14 | 500 |
| 3421 | Commercial / Oakland | NB | 1 | 150 | 150 | 18 | 450 | 11 | 275 | 23 | 575 | 13 | 325 | 23 | 575 | 13 | 325 |
| | | SB | 1 | 135 | 135 | 5 | 125 | 10 | 250 | 7 | 175 | 13 | 325 | 7 | 175 | 13 | 325 |
| | | EB | 1 | 70 | 70 | 1 | 25 | 2 | 50 | 2 | 50 | 2 | 50 | 2 | 50 | 2 | 50 |
| | | WB | 1 | 315 | 315 | 25 | 625 | 22 | 550 | 35 | 875 | 31 | 775 | **37** | **925** | 31 | 775 |

## Table 6 Left Turn Queue Analysis (Continued)

| Int # | Intersection | Approach | Lanes | Storage Length (lane) | Storage Length (Total) | Existing | | | | Background | | | | Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | AM | | PM | | AM | | PM | | AM | | PM | |
| | | | | | | Design Queue[1] | Design Length[2] | Design Queue[1] | Design Length[2] | Design Queue[1] | Design Length[2] | Design Queue[1] | Design Length[2] | Design Queue[1] | Design Length[2] | Design Queue[1] | Design Length[2] |
| 3595 | Jackson / Mabury | NB | 1 | 190 | 190 | 12 | 300 | 5 | 125 | 12 | 300 | 5 | 125 | 12 | 300 | 5 | 125 |
| | | SB | 1 | 185 | 185 | 5 | 125 | 10 | 250 | 5 | 125 | 12 | 300 | 5 | 125 | 12 | 300 |
| | | EB | 1 | 210 | 210 | 9 | 225 | 6 | 150 | 9 | 225 | 6 | 150 | 9 | 225 | 7 | 175 |
| | | WB | 1 | 190 | 190 | 12 | 300 | 6 | 150 | 14 | 350 | 7 | 175 | 14 | 350 | 7 | 175 |
| 3596 | Jackson / McKee | NB | 1 | 250 | 250 | 18 | 450 | 13 | 325 | 21 | 525 | 16 | 400 | 21 | 525 | 16 | 400 |
| | | SB | 1 | 170 | 170 | 15 | 375 | 19 | 475 | 15 | 375 | 20 | 500 | 15 | 375 | 20 | 500 |
| | | EB | 2 | 160 | 320 | 4 | 100 | 7 | 175 | 5 | 125 | 7 | 175 | 5 | 125 | 8 | 200 |
| | | WB | 2 | 215 | 430 | 17 | 425 | 14 | 350 | 23 | 575 | 18 | 450 | 23 | 575 | 18 | 450 |
| 3625 | King / McKee | NB | 1 | 150 | 150 | 11 | 275 | 11 | 275 | 11 | 275 | 11 | 275 | 11 | 275 | 11 | 275 |
| | | SB | 1 | 170 | 170 | 7 | 175 | 10 | 250 | 8 | 200 | 11 | 275 | 8 | 200 | 11 | 275 |
| | | EB | 1 | 165 | 165 | 22 | 550 | 22 | 550 | 14 | 350 | 14 | 350 | 14 | 350 | 14 | 350 |
| | | WB | 1 | 130 | 130 | 7 | 175 | 10 | 250 | 4 | 100 | 6 | 150 | 4 | 100 | 6 | 150 |

Notes:
[1] Design queue based on intersection level of service analysis
[2] Design Length queue x 25 feet per vehicle
Shaded boxes represent design queue lengths that are greater than existing capacity. **Bold** values represent design queue lengths that increase
* - denotes 2nd left turn pocket to added with the proposed project and/or the I-680/Berryessa Road Interchange modification.

**Project Site Left-Turn Queue Analysis**

Under the proposed project condition, the commercial uses would have right-turn in and right-turn out only driveways; therefore, no left-turn queues would be anticipated. Similarly, the residential uses would only be able to exit via a right turn onto either Jackson Avenue or Berryessa Road. Vehicles that want to turn southbound on Jackson Avenue would need to make a U-turn at the intersection of Jackson Avenue and Berryessa Road. Adjustments for these U-turns were taken into account as part of the left turn analysis conducted previously at the intersection of Jackson Avenue/Flickinger Road/Berryessa Road. Because the project access points would only allow for right-turns out of the project site, a left-turn queue analysis was not conducted as part of this analysis.

## 2.5.7 Access and Internal Circulation

**Site Access**

The site plan (Figure 2) shows the primary access points on Jackson Avenue and Berryessa Road. Berryessa Road is a straight roadway, and sight distance is not anticipated to be an issue with vehicles exiting the project site. The final design plans should not include any SRtential VJht line RbVtUJFtiRnV Rn the VRuthweVt FRUneU Rf the Vite'V aFFeW SRint at Berryessa Road.

The access driveway on Jackson Avenue is located within a horizontal reverse-curve. aue to the location of the proposed access point near the tangent of the two curves, adequate sight distance is anticipated; however the final design plans should not include any potential sight RbVtUJFtiRnV alRnJ the SURJeFt'V fURntaJe Rn Jackson Avenue, south of the access driveway

**Internal Circulation**

The two residential entrance driveways would provide secondary access driveways to the commercial uses, as well as to the internal roadways. The internal roadways and residential units would form a grid network of streets with three to 11 units within each block. The perimeter road would be 24 feet wide with perpendicular and parallel parking spaces scattered around the project site. The internal streets within the grid network would be 20 feet wide with no parking provided, and would provide access to the garages for each unit.

All parking stalls are shown to be 90 degrees or parallel to their respective driving aisles. Sight distance is expected to be adequate. There are no roadway configurations, natural hills, or sharp horizontal curves in the roadway that are anticipated to impede with vehicular sight distance.

**Potential Cut Through Traffic**

The current site plan would substantially discourage non-project related cut-through traffic with the numerous turns, driveways, and narrow streets that a vehicle would need to travel through in order to pass through the project site.

### 2.5.8 Transit Analysis

Based on observations of the capacity and occupancy rates of the public transit routes servicing the project area, it was concluded that transit trips to be generated by the proposed project would not significantly impact the public transit service. With an estimated transit mode share of five to 12 percent, the proposed project would generate 15 to 35 peak-hour transit trips each weekday distributed to the various routes and directions, which would not significantly increase load factors on transit vehicles. The estimate of five to 12 percent transit trips is based on the trip reduction values that would be applied to the vehicle trip generation estimates if the project site were within 2,000 feet of a light rail station. However, because the project site is approximately 3,000 feet from the Berryessa Light Rail Station, the five to 12 percent was used as a conservative estimate for transit trips. A transit-related reduction was not applied to the vehicle trip generation estimates previously discussed. The proposed project is not anticipated to negatively affect any of the existing transit routes, service, bus stops, or light rail stations.

### 2.5.9 Bicycles and Pedestrian Facilities

The study intersections in the immediate vicinity of the project site are currently signalized and equipped with pedestrian crossing signals and crosswalks. The expected increase in vehicular traffic volumes at these intersections would not significantly impact the pedestrian movements. The intersection of Jackson Avenue and Berryessa Road would be modified as part of the proposed project, and existing pedestrian facilities would be maintained or improved.

Also, the pedestrian movements along the roadway network adjacent to the project site would be improved by the addition of proposed sidewalks (along the project frontage), and therefore no adverse impacts are anticipated.

### 2.5.10 Freeway Segment Analysis

An analysis of freeway segments in the vicinity of the project site was conducted using the Santa Clara Valley Transportation Authority's TIA Guidelines. As described in the 2000 eighway Capacity Manual, the determination of i l p for freeway segments is based on density, with density calculated as:

$$d = \frac{V}{N \times S}$$

where, d: density (vehicles per mile per lane, vpmpl)
s: peak hour volume (vehicles per hour, vph)
N: number of travel lanes (lanes)
p: average travel speed (miles per hour, mph)

The impact criteria for freeway segments are as follows:

- The addition of the project traffic causes a freeway segment operating at i l p a or better under the existing plus approved projects (background condition) to operate at i l p b or c, a significant impact would occur.

- t hen a freeway segment is already operating at i evel of Pervice b or c under the background condition, and the addition of the project traffic is greater than one percent of a freeway segment's capacity, a significant impact would occur.

r nder the existing conditions, several freeway segments along r p 101, f-S80, and f-880 currently operate at deficient levels. The amount of project related traffic added to the study freeway segments would be less than one percent of the respective capacity at each location. **Tables 7 and 8** summarize the existing freeway segments, and the amount of traffic that would be added to each segment during the AM and m M peak hours respectively. The added traffic accounts for both the proposed project and residential uses at the Nola m roperty.

## Table 7 Freeway Segment Analysis - AM Peak Hour

| Segment | | | | EXISTING CONDITIONS | | | | | PROJECT CONDITIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Freeway | From/To | To/From | Direction | Lanes | Ave. Speed | Volume | Density | LOS | Project Trips | Density | LOS | Increase % of Capacity | Impact ? |
| US 101 | Yerba Buena | Capitol Expwy | NB | 3 | 29 | 5,660 | 65 | **F** | 10 | 65.2 | **F** | 0.14% | **NO** |
| US 101 | Yerba Buena | Capitol Expwy | NB-HOV | 1 | 65 | 2,020 | 31 | D | 3 | 31.1 | D | 0.14% | |
| US 101 | Yerba Buena | Capitol Expwy | SB | 3 | 66 | 4,550 | 23 | A | 15 | 23.1 | C | 0.22% | |
| US 101 | Yerba Buena | Capitol Expwy | SB-HOV | 1 | 67 | 670 | 10 | A | 5 | 10.1 | A | 0.22% | |
| US 101 | Capitol Expwy | Tully Rd | NB | 3 | 21 | 5,100 | 81 | **F** | 10 | 81.1 | **F** | 0.14% | **NO** |
| US 101 | Capitol Expwy | Tully Rd | NB-HOV | 1 | 41 | 2,090 | 51 | **E** | 3 | 51.1 | **E** | 0.14% | **NO** |
| US 101 | Capitol Expwy | Tully Rd | SB | 3 | 65 | 5,850 | 30 | A | 15 | 30.1 | D | 0.22% | |
| US 101 | Capitol Expwy | Tully Rd | SB-HOV | 1 | 67 | 540 | 8 | A | 5 | 8.1 | A | 0.22% | |
| US 101 | Tully Rd | Story | NB | 3 | 51 | 6,580 | 43 | D | 10 | 43.1 | D | 0.14% | |
| US 101 | Tully Rd | Story | NB-HOV | 1 | 66 | 1,850 | 28 | D | 3 | 28.1 | D | 0.14% | |
| US 101 | Tully Rd | Story | SB | 3 | 66 | 4,750 | 24 | A | 15 | 24.1 | C | 0.22% | |
| US 101 | Tully Rd | Story | SB-HOV | 1 | 67 | 400 | 6 | A | 5 | 6.0 | A | 0.22% | |
| US 101 | Old Oakland | I-880 | NB | 3 | 21 | 5,040 | 80 | **F** | 20 | 80.3 | **F** | 0.29% | **NO** |
| US 101 | Old Oakland | I-880 | NB-HOV | 1 | 24 | 1,800 | 75 | **F** | 7 | 75.3 | **F** | 0.29% | **NO** |
| US 101 | Old Oakland | I-880 | SB | 3 | 67 | 3,420 | 17 | A | 11 | 17.1 | B | 0.16% | |
| US 101 | Old Oakland | I-880 | SB-HOV | 1 | 67 | 340 | 5 | A | 4 | 5.1 | A | 0.16% | |
| US 101 | I-880 | Old Bayshore | NB | 3 | 12 | 3,850 | 107 | **F** | 20 | 107.5 | **F** | 0.29% | **NO** |
| US 101 | I-880 | Old Bayshore | NB-HOV | 1 | 21 | 1,680 | 80 | **F** | 7 | 80.3 | **F** | 0.29% | **NO** |
| US 101 | I-880 | Old Bayshore | SB | 3 | 67 | 3,220 | 16 | A | 11 | 16.1 | B | 0.16% | |
| US 101 | I-880 | Old Bayshore | SB-HOV | 1 | 67 | 270 | 4 | A | 4 | 4.1 | A | 0.16% | |

(Table Continued)

## TABLE 7 Freeway Segment Analysis - AM Peak Hour (Continued)

| Segment | | | | EXISTING CONDITIONS | | | | | PROJECT CONDITIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Freeway | From/To | To/From | Direction | Lanes | Ave. Speed | Volume | Density | LOS | Project Trips | Density | LOS | Increase % of Capacity | Impact ? |
| I-680 | N. Capitol | Hostetter | NB | 4 | 64 | 8,450 | 33 | D | 19 | 33.1 | D | 0.21% | |
| I-680 | N. Capitol | Hostetter | SB | 4 | 66 | 7,390 | 28 | D | 10 | 28.0 | D | 0.11% | |
| I-680 | Hostetter | Berryessa | NB | 4 | 63 | 8,570 | 34 | D | 19 | 34.1 | D | 0.21% | |
| I-680 | Hostetter | Berryessa | SB | 4 | 66 | 5,540 | 21 | C | 10 | 21.0 | C | 0.11% | |
| I-680 | Berryessa | McKee | NB | 4 | 50 | 8,800 | 44 | D | 26 | 44.1 | D | 0.28% | |
| I-680 | Berryessa | McKee | SB | 4 | 66 | 6,340 | 24 | C | 41 | 24.2 | C | 0.45% | |
| I-680 | McKee | Alum Rock | NB | 4 | 32 | 7,810 | 61 | **F** | 26 | 61.2 | **F** | 0.28% | **NO** |
| I-680 | McKee | Alum Rock | SB | 4 | 38 | 8,270 | 53 | **E** | 41 | 54.7 | **E** | 0.45% | **NO** |
| I-880 | Great Mall | Montague | NB | 3 | 66 | 5,150 | 26 | C | 25 | 26.1 | D | 0.36% | |
| I-880 | Great Mall | Montague | SB | 3 | 66 | 5,350 | 27 | D | 13 | 27.1 | D | 0.19% | |
| I-880 | Montague | Brokaw | NB | 3 | 65 | 5,850 | 30 | D | 25 | 30.1 | D | 0.36% | |
| I-880 | Montague | Brokaw | SB | 3 | 66 | 4,950 | 25 | C | 13 | 25.1 | C | 0.19% | |
| I-880 | US 101 | 1st | NB | 3 | 54 | 6,640 | 41 | D | 25 | 41.1 | D | 0.36% | |
| I-880 | US 101 | 1st | SB | 3 | 66 | 5,540 | 28 | D | 13 | 28.0 | D | 0.19% | |
| I-880 | 1st | SR 87 | NB | 3 | 63 | 6,430 | 34 | D | 24.8 | 34.2 | D | 0.36% | |
| I-880 | 1st | SR 87 | SB | 3 | 65 | 5,850 | 30 | D | 13.3 | 30.1 | D | 0.19% | |

[1] 2004 Monitoring & Conformance Report. Santa Clara County Congestion Management Program. March 2005

## Table 8 Freeway Segment Analysis - PM Peak Hour

| Segment | | | | EXISTING CONDITIONS | | | | | PROJECT CONDITIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Freeway | From/To | To/From | Direction | Lanes | Ave. Speed | Volume | Density | LOS | Project Trips | Density | LOS | Increase % of Capacity | Impact ? |
| US 101 | Yerba Buena | Capitol Expwy | NB | 3 | 66 | 3,960 | 20 | C | 17 | 20.1 | C | 0.25% | |
| US 101 | Yerba Buena | Capitol Expwy | NB-HOV | 1 | 67 | 800 | 12 | B | 6 | 12.0 | B | 0.25% | |
| US 101 | Yerba Buena | Capitol Expwy | SB | 3 | 66 | 3,760 | 19 | C | 10 | 19.0 | C | 0.14% | |
| US 101 | Yerba Buena | Capitol Expwy | SB-HOV | 1 | 67 | 1,140 | 17 | B | 3 | 17.1 | B | 0.14% | |
| US 101 | Capitol Expwy | Tully Rd | NB | 3 | 65 | 5,660 | 29 | D | 17 | 29.1 | D | 0.25% | |
| US 101 | Capitol Expwy | Tully Rd | NB-HOV | 1 | 67 | 800 | 12 | B | 6 | 12.0 | B | 0.25% | |
| US 101 | Capitol Expwy | Tully Rd | SB | 3 | 43 | 6,320 | 49 | **E** | 10 | 49.1 | **E** | 0.14% | **NO** |
| US 101 | Capitol Expwy | Tully Rd | SB-HOV | 1 | 66 | 1,580 | 24 | C | 3 | 24.0 | C | 0.14% | |
| US 101 | Tully Rd | Story | NB | 3 | 66 | 5,350 | 27 | D | 17 | 27.1 | D | 0.25% | |
| US 101 | Tully Rd | Story | NB-HOV | 1 | 67 | 670 | 10 | A | 6 | 10.1 | A | 0.25% | |
| US 101 | Tully Rd | Story | SB | 3 | 23 | 5,310 | 77 | **F** | 10 | 77.1 | **F** | 0.14% | **NO** |
| US 101 | Tully Rd | Story | SB-HOV | 1 | 51 | 2,190 | 43 | D | 3 | 43.0 | D | 0.14% | |
| US 101 | Old Oakland | I-880 | NB | 3 | 66 | 4,750 | 24 | C | 10 | 24.0 | C | 0.15% | |
| US 101 | Old Oakland | I-880 | NB-HOV | 1 | 67 | 670 | 10 | A | 3 | 10.1 | A | 0.15% | |
| US 101 | Old Oakland | I-880 | SB | 3 | 15 | 4,280 | 95 | F | 19 | 95.5 | F | 0.28% | |
| US 101 | Old Oakland | I-880 | SB-HOV | 1 | 42 | 2,100 | 50 | E | 6 | 50.2 | E | 0.28% | |
| US 101 | I-880 | Old Bayshore | NB | 3 | 66 | 4,360 | 22 | C | 10 | 22.1 | C | 0.15% | |
| US 101 | I-880 | Old Bayshore | NB-HOV | 1 | 67 | 800 | 12 | B | 3 | 12.0 | B | 0.15% | |
| US 101 | I-880 | Old Bayshore | SB | 3 | 10 | 3,420 | 114 | **F** | 19 | 114.6 | **F** | 0.28% | **NO** |
| US 101 | I-880 | Old Bayshore | SB-HOV | 1 | 27 | 1,840 | 68 | **F** | 6 | 68.4 | **F** | 0.28% | **NO** |

(Table Continued)

## Table 8 Freeway Segment Analysis - PM Peak Hour (Continued)

| Segment | | | | EXISTING CONDITIONS | | | | | PROJECT CONDITIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Freeway | From/To | To/From | Direction | Lanes | Ave. Speed | Volume | Density | LOS | Project Trips | Density | LOS | Increase % of Capacity | Impact ? |
| I-680 | N. Capitol | Hostetter | NB | 4 | 66 | 5,810 | 22 | C | 10 | 22.0 | C | 0.11% | |
| I-680 | N. Capitol | Hostetter | SB | 4 | 17 | 6,120 | 90 | **F** | 18 | 90.3 | **F** | 0.20% | **NO** |
| I-680 | Hostetter | Berryessa | NB | 4 | 66 | 7,390 | 28 | D | 10 | 28.0 | D | 0.11% | |
| I-680 | Hostetter | Berryessa | SB | 4 | 27 | 7,340 | 68 | **F** | 18 | 68.1 | **F** | 0.20% | **NO** |
| I-680 | Berryessa | McKee | NB | 4 | 66 | 6,860 | 26 | C | 46 | 26.2 | D | 0.50% | |
| I-680 | Berryessa | McKee | SB | 4 | 37 | 8,140 | 55 | **E** | 26 | 55.2 | **E** | 0.28% | **NO** |
| I-680 | McKee | Alum Rock | NB | 4 | 65 | 7,540 | 29 | D | 46 | 29.2 | D | 0.50% | |
| I-680 | McKee | Alum Rock | SB | 4 | 39 | 8,270 | 53 | E | 26 | 53.2 | E | 0.28% | |
| I-880 | Great Mall | Montague | NB | 3 | 66 | 5,150 | 26 | D | 13 | 26.1 | D | 0.18% | |
| I-880 | Great Mall | Montague | SB | 3 | 39 | 6,200 | 53 | **E** | 24 | 53.2 | **E** | 0.35% | **NO** |
| I-880 | Montague | Brokaw | NB | 3 | 66 | 4,360 | 22 | C | 13 | 22.1 | C | 0.18% | |
| I-880 | Montague | Brokaw | SB | 3 | 21 | 5,100 | 81 | **F** | 24 | 81.3 | **F** | 0.35% | **NO** |
| I-880 | US 101 | 1st | NB | 3 | 59 | 6,550 | 37 | D | 13 | 37.1 | D | 0.18% | |
| I-880 | US 101 | 1st | SB | 3 | 10 | 3,420 | 114 | **F** | 24 | 114.8 | **F** | 0.35% | **NO** |
| I-880 | 1st | SR 87 | NB | 3 | 66 | 4,950 | 25 | C | 13 | 25.1 | C | 0.18% | |
| I-880 | 1st | SR 87 | SB | 3 | 17 | 4,590 | 90 | **F** | 24 | 90.5 | **F** | 0.35% | **NO** |

[1] 2004 Monitoring & Conformance Report. Santa Clara County Congestion Management Program. March 2005

### 2.5.12 Freeway Ramp Queuing Analysis

A queuing analysis of nearby freeway on and off-ramps was conducted. The purpose of the queuing analysis was to identify the existing queue and delay, and to investigate if the added project volumes would significantly increase in delay, if any. Potential queuing impacts were analyzed for both the freeway off-ramps and on-ramps.

Freeway ramps in the vicinity of the project site that would experience additional traffic due to the proposed project were analyzed. For the purposes of this analysis, field observations were conducted to estimate average vehicle queue in July 2007. The standard of significance for significant impact was assumed to be if the addition of project related trips would result in a deficiently operating freeway ramp (delays greater than 35 seconds, i.e. LOS E for unsignalized intersections). For ramps already operating at deficient levels, an impact was defined as an increase in traffic greater than or equal to one percent of the ramps capacity.

Freeway Off-Ramp Queuing Analysis

The proposed project would add traffic to two off-ramps at the I-680/Berryessa Road interchange; the southbound I-680 to westbound Berryessa Road off-ramp, and northbound I-680 to westbound Berryessa Road off-ramp. Currently, there are no stop controls at the merge areas for these off ramps. The queuing observations and surveys at these locations showed that a majority of vehicles that use these two off-ramps experience negligible stop delay (less than five seconds of delay) during both the AM and PM peak periods. The proposed project is anticipated to add approximately ten and 18 trips to the southbound off ramp during the AM and PM peak hours respectively. The addition of project trips is not anticipated to result in a substantial increase in delay or queue lengths for this off-ramp. For the northbound to westbound off-ramp, the proposed project is anticipated to add approximately 26 and 46 trips to the southbound off-ramp during the AM and PM peak hours respectively. The addition of project trips is not anticipated to result in a substantial increase in delay or queue lengths for this off-ramp. Significant impacts are not anticipated at the freeway off-ramps at the interchange of I-680 and Berryessa Road.

Freeway On-Ramp Queuing Analysis

The proposed project would add traffic to two on-ramps at the I-680/Berryessa Road interchange; the eastbound Berryessa Road to southbound I-680 on-ramp, and the eastbound Berryessa Road to northbound I-680 on-ramp. Currently, there are no ramp meters at this location. The queuing observations and surveys at these locations showed that the vehicles that use these two on-ramps experience negligible stop delay (less than five seconds of delay) due to the ramp operations during both the AM and PM peak periods. The proposed project is anticipated to add approximately 41 and 26 trips to the southbound on-ramp during the AM and PM peak hours respectively. The addition of project trips is not anticipated to result in a substantial increase in delay or queue lengths for this on-ramp. For the eastbound to northbound on-ramp, the proposed project is anticipated to add approximately 26 and 10 trips to the northbound on-ramp during the AM and PM peak hours respectively. The addition of project trips is not anticipated to result in a substantial increase in delay or queue lengths for this on-ramp. Significant impacts are not anticipated at the freeway off-ramps at the interchange of I-680 and Berryessa Road.

### 2.5.12 Parking Analysis

The proposed project parking requirements were evaluated based on the City of San Jose Municipal Code requirements. In accordance with the City of San Jose Parking and Loading Requirements, the proposed project is required to provide a total of 1,023 parking spaces for the residential component, and 74 open parking spaces for the commercial component, for a total of 1,197 parking spaces in order to meet the City of San Jose Parking Standards. **Table 10** sup p arizes the City's ɜarkinɟ standard reɟuirep ents and the ɜarkinɟ sɜaces ɜrɒvided Irr the proposed project. Cor the restaurant use, an estimate of a 150 seat capacity was assumed based on typical seating capacities for similarly sized restaurants (5,000 sf).

The proposed development would provide a total of 1,015 parking spaces for the residential uses and 174 spaces for the commercial uses. Of the 1,015 residential and guest parking spaces, 768 spaces would be in the 2-car attached garages, and 247 spaces would be open parking spaces throughout the project site. The currently proposed site layout would result in a shortage of approximately eight residential spaces and a surplus of 13 commercial spaces. Cor developments of this type, additional on-street parking on nearby streets would accommodate excess parking demand during the peak parking periods. Although there is a shortfall of eight parking spaces for the residential use, a significant parking impact is not anticipated.

**Table 9 Parking Analysis Summary**

| Living Unit Size | | No. Units | Parking Required[1] | | Parking Spaces Provided[2] |
|---|---|---|---|---|---|
| | | | Parking Standard | No. of Spaces | |
| Tandem Parking | 2BR | 48 | 2.7[1] (per unit) | 129.6 | 768 (attached garage) 247 (on-street) |
| | 3BR | 111 | 2.8[1] (per unit) | 310.8 | |
| Side/Side Parking | 2BR | 134 | 2.5[1] (per unit) | 335.0 | |
| | 3BR | 41 | 2.6[1] (per unit) | 106.6 | |
| | 4BR | 51 | 2.75[1] (per unit) | 141.0 | |
| **Subtotal: 195 units** | | | | **1,023** | **1,015** |
| Retail | 22,828 square feet | | 1 per 200 sq. ft | 114 | 187 (surface lot) |
| Restaurant | 5,000 square feet (Estimated 150 seats) | | 1 per 2.5 seats or 1 per 40 sq. ft. of dining area | 60 | |
| **Subtotal: 195 units** | | | | **174** | **187** |
| **TOTAL** | | | | **1,197** | **1,202** |

[1] City of San Jose Parking & Loading Standards. Municipal code Section 20.90.060, Table 20-200
[2] Correspondence from Pulte Homes, December 13, 2004.

## 2.6 CUMULATIVE CONDITION

The Cumulative Conditions represent a future scenario with the addition of traffic, growth, and roadway improvements that are from anticipated from both approved and anticipated, but yet to be approved developments in the vicinity of the project site.

### 2.6.1 Cumulative Traffic Volumes

The Cumulative Scenario represents growth in traffic in addition to the approved trip inventory that was analyzed in the Background Conditions. In addition to the trips related to approved projects, trips related to reasonably forecasted projects that have yet to be approved were added to the study intersections. The additional trips added for the cumulative conditions are related to the following projects:

- City oI San Jose Downtown Strategy Plan – Phase 2
- North San Jose Develosment Plan – Phase 2
- San 9ose/Berryessa oad Flea Market aevelopment
- Goodwill/aAi esidential aevelopment
- aobbin arive esidential aevelopment

mroject generated traffic as described in the mroject Conditions analysis was added to the roadway network. **Figure 11** illustrates the Cumulative plus mroject meak eour traffic volumes at each of the study intersections.

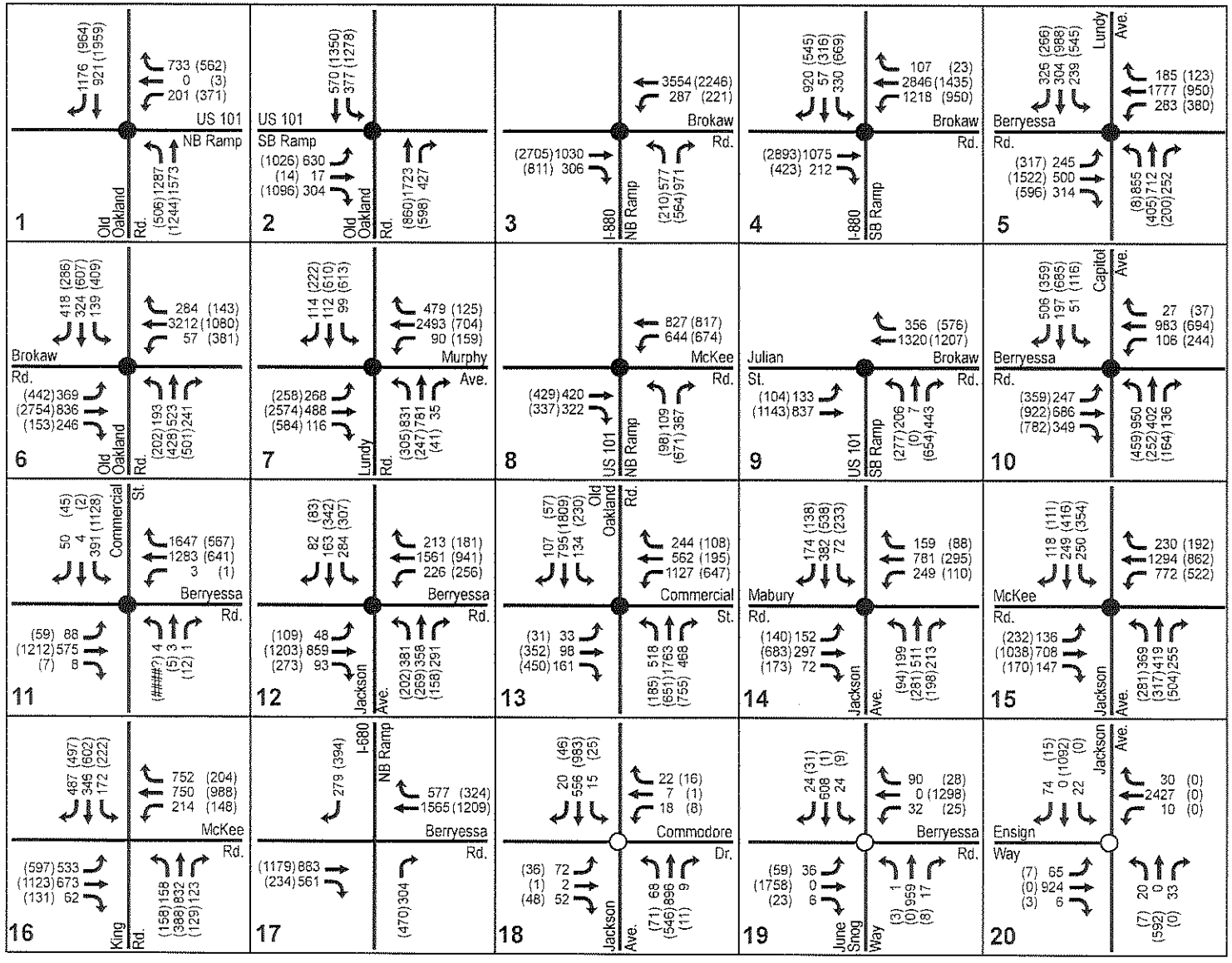
### 2.6.2 Planned Roadway Improvements

In addition to the anticipated growth in traffic, several planned improvement measures would be included in the cumulative conditions. oadway improvements for this analysis were based on the improvement and mitigation measures presented in the respective traffic analyses conducted for the planned projects described above in Section 2.S. The roadway improvements include the following changes:

- US 101 (NB) / 2 lG 2 aklanG RoaG – AGG 2nd SB oight Turn and 2nd k B i eft Turn i ane
- US 101 (SB) / 2 lG 2 aklanG RoaG – AGG 2nd EB oight Turn i ane
- Berryessa RoaG / Casitol Avenue – AGG 2nd t B i eft Turn i anes
- MF' ee RoaG / ' ing RoaG – AGG 2nd EB and t B i eft Turn i anes
- 2 lG 2 aklanG RoaG / CommerFial Street – AGG 2nd t B i eft Turn i anes

### 2.6.3 Intersection Operation

The anticipated growth and the planned roadway improvements were analyzed for the cumulative scenario. Intersection operational levels of service along with their associated critical and average delay are summarized in **Table 10**.




xx (xx) AM (PM) Peak Hour Volumes

06111-000•San Jose Pulte Com+Proj Vols.ai•2/5/08

**DKS** *Associates*
TRANSPORTATION SOLUTIONS

**Figure 11**
**Cumulative Plus Project Conditions Peak Hour Volumes**

## Table 10 Cumulative Conditions Level of Service

| # | INTERSECTION | AM Peak | | | | | | PM Peak | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Background | | Cumulative | | | % of Growth | Background | | Cumulative | | | % of Growth |
| | | Avg. Delay | LOS | Avg. Delay | Critical V/C | LOS | | Avg. Delay | LOS | Avg. Delay | Critical V/C | LOS | |
| 1 | US 101 Northbound Ramp & Old Oakland Road[a] | **132.1** | **F** | 54.2 | 1.06 | D- | 3% | 42.8 | D | 20.5 | 0.78 | C+ | 3% |
| 2 | US 101 Southbound Ramp & Old Oakland Road[a] | 28.0 | C | 27.5 | 0.58 | C | 2% | **57.2** | **E+** | 45.3 | 1.05 | D | 2% |
| 3 | Interstate 880 Northbound Ramp & Brokaw Road[a] | 53.1 | D- | **59.4** | **1.07** | **E+** | **14%** | 22.1 | C+ | 23.2 | 0.85 | C | 10% |
| 4 | Interstate 880 Southbound Ramp & Brokaw Road[a] | **89.3** | **F** | **109.3** | **1.16** | **F** | **6%** | **96.0** | **F** | **122.4** | **1.28** | **F** | **7%** |
| 5 | Berryessa Road & Lundy Avenue[a] | 45.2 | D | 48.1 | 0.84 | D | 6% | 48.0 | D | **65.3** | **.99** | **E** | **6%** |
| 6 | Brokaw Road & Old Oakland Road[a] | 50.7 | D | 53.6 | 0.92 | D- | 18% | 51.1 | D- | **56.4** | **0.98** | **E+** | **11%** |
| 7 | Murphy Avenue & Lundy Avenue[a] | 45.4 | D | 47.7 | 0.89 | D | 26% | 39.9 | D | 41.9 | 0.83 | D | 19% |
| 8 | US 101 Northbound Ramp & McKee Road | 20.2 | C+ | 22.0 | 0.68 | C+ | 12% | 20.3 | C+ | 21.3 | 0.70 | C+ | 22% |
| 9 | US 101 Southbound Ramp & Julian Street | 20.7 | C+ | 21.8 | 0.59 | C+ | 7% | 22.4 | C+ | 24.2 | 0.61 | C | 8% |
| 10 | Berryessa Road & Capitol Avenue | 53.5 | D- | **55.6** | **0.92** | **E+** | **33%** | 44.2 | D | 42.1 | 0.77 | D | 39% |
| 11 | Berryessa Road & Commercial Street | 17.4 | B | **88.1** | **1.13** | **F** | **5%** | 23.4 | C | 36.9 | 0.76 | D+ | 5% |
| 12 | Berryessa Road & Flickinger Road | 38.5 | D+ | 46.4 | 0.84 | D | 26% | 39.7 | D | 42.0 | 0.75 | D | 29% |
| 13 | Commercial Street & Old Oakland Road | **66.9** | **E** | **72.9** | **1.06** | **E** | **3%** | 47.3 | D | 53.7 | 0.90 | D- | 4% |
| 14 | Jackson Avenue & Mabury Road | 37.5 | D+ | 38.5 | 0.56 | D+ | 37% | 32.6 | C- | 32.9 | 0.50 | C- | 39% |
| 15 | Jackson Avenue & McKee Road | 38.8 | D+ | 39.4 | 0.71 | D | 29% | 42.1 | D | 42.8 | 0.74 | D | 20% |
| 16 | King Road & McKee Road | 40.6 | D | 52.2 | 0.96 | D- | 3% | 44.1 | D | 52.0 | 0.92 | D- | 5% |
| 17 | Interstate 680 Northbound Ramp & Berryessa Road | 13.1 | B | 12.6 | 0.35 | B | 39% | 14.8 | B | 14.7 | 0.49 | B | 52% |

Avg. Delay: in seconds per vehicle, LOS: Level of Service. Percent of growth represent the project's growth as a percent of total growth from existing conditions.
a – CMP Intersection

According to the City of San Jose intersection level of service standards, five of the 17 study intersections would experience significant cumulative impacts and would operate at an unacceptable LOS E or F during the AM peak hour of the cumulative scenario. During the PM peak hour, two of the 17 study intersections would experience significant cumulative impacts and would operate at deficient levels under the cumulative scenario.

During the AM Peak hour, the intersections of Brokaw Road at I-880 Northbound and I-880 southbound Ramps would operate at an unacceptable LOS, and would experience significant cumulative impacts. During the PM peak hour, the intersections of Brokaw Road at I-880 Southbound and Brokaw Road at Oakland Road would operate at an unacceptable LOS and would experience significant cumulative impacts. For each of these intersections along Brokaw Road, the project would contribute less than 25 percent of the cumulative growth anticipated at these respective intersections; thereIRre the SIRMeFt's FRntrIEutIRn Is FRnsIdered cumulatively insignificant. In addition, significant cumulative traffic impacts were disclosed at these intersections in the North San Jose Development Policy EIR and no feasible traffic P ItIJ DtIRn wDs IdentIIIed. 7hIs SIRMeFt's FRntrIEution to the cumulative impact is concluded to be cumulatively insignificant.

The two intersections of Berryessa Road at Commercial Street, and Commercial Street at Oakland Road would also experience significant cumulative impacts during the AM peak hour. At these locations, the project related traffic would be less than 25 percent of the anticipated cumulative growth; therefore the project is considered cumulatively insignificant. The project however, intends to participate in the currently proposed Oakland/Mabury Transportation Development Policy that is currently in development, which would improve capacity vicinity of the Oakland Road at Commercial Street and Berryessa Road at Commercial Street.

**Berryessa Road and Lundy**

The intersection of Berryessa Road at Capitol Avenue would deteriorate from LOS D to LOS E, and the average vehicle delay would increase by approximately 17.3 seconds with the addition of cumulative and project growth during the PM peak hour. As shown in Table 10 above, project related traffic is approximately six percent of the anticipated cumulative growth, and therefore the project would be considered cumulatively insignificant. The Sision North San Jose EIR has identified mitigation for this intersection under the North San Jose Phase 4, which would improve the operating conditions to an acceptable LOS D during the PM peak hour. The improvements consist of adding second eastbound and westbound left turn lanes. It should be noted that the timing of the Sision North San Jose Phase 4 is unknown at this time. The unacceptable LOS E conditions at this intersection may persist until improvements under the Phase 4 of the Sision North San Jose project are completed.

**Capitol Avenue and Berryessa Road**

The intersection of Berryessa Road at Capitol Avenue would decrease from LOS D to LOS E+, and the average vehicle delay would increase by approximately 2.1 seconds with the addition of cumulative growth and project related trips during the AM peak hour. As shown in Table 10 above, the project related traffic is approximately 33 percent of the anticipated cumulative growth, and therefore the project would be considered cumulatively significant. The poor

level of service at this intersection during the AM peak is primarily due to the high amount of southbound right-turn traffic. Converting the southbound approach to provide one through lane, one shared through/right-turn lane, and one right-turn only lane would improve the operating conditions to an acceptable LOS D. The overlapping right-turn phasing for the southbound approach may need to be removed, however the intersection would continue to operate at acceptable levels of service with the recommended change in striping. The estimated cost for this improvement is approximately $10,000 or less, and would not require modification to the existing curb line. The City may require the Pepper Lane project to contribute toward improvements to this intersection.

### 2.6.4 Cumulative Freeway Segment Analysis

An analysis of freeway segments in the vicinity of the project site was conducted using estlp Dted trDfflc voQp es frop the CIty of SDn ¯ose's trDfflc p odeO Due to the trDfflc p odeO limitations in estimating travel speeds and density, the operating conditions of the freeway segments were based on the estimated volume to capacity (v/c) ratios. To determine if cumulative impacts would occur, impact criteria are based on the change in v/c ratio. Cor segments operating a v/c ratio of 1.0 or less, Dn lp SDct wouQ occur lf the roDdwDy segp ent's v/c ration would increase to greater than 1.0. Cor segments operating with a v/c ratio of greater than 1.0, an impact would occur if the project added trips greater than one percent of the segp ent's estlp Dted cDSDclty.

The CIty of SDn ¯ose's trDfflc p odeOlncQdes the proposed project in its current land use assumptions and there is included in the estimate of cumulative traffic volumes. To estimate the no-project conditions, project related traffic was subtracted from the cumulative traffic volumes. fn addition, on some roadway segments the forecasted cumulative traffic volumes were less than the existing traffic volumes. fn these cases, the existing traffic volumes were used for the cumulative scenario.

r nder the cumulative without project conditions, several freeway segments along r S 101, f-S80, and f-880 would operate at deficient levels. The amount of project related traffic added to the study freeway segments would be less than one percent of the respective capacity at each location. **Tables 11 and 12** summarize the cumulative freeway conditions, and the amount of traffic that would be added to each segment during the AM and PM peak hours respectively. The added traffic accounts for both the proposed project and residential uses at the Nola Property.

During the AM Peak hour, two freeway segments would operate with v/c ratios greater than 1.0 under the cumulative without project scenario. During the PM Peak hour, eight freeway segments would operate with v/c ratios greater than 1.0. The proposed project would not increase traffic by more than one percent of the respective freeway capacities during both the AM and PM peak hours. The proposed project would not result in any cumulative impacts at the study freeway segments.

## Table 11 Cumulative Freeway Segment Analysis - AM Peak Hour

| Freeway Segment | | | | CUMULATIVE without Project | | | | CUMULATIVE CONDITIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | From | To | Dir. | Lanes | Cap. | Volume | V/C Ratio | Project Trips | Volume | V/C Ratio | % of Capacity | Impact? |
| US 101 | Yerba Buena | Capitol Exp | NB | 3 | 6,900 | 5,650 | 0.82 | 10 | 5,660 | 0.82 | 0.14% | |
| US 101 | Yerba Buena | Capitol Exp | NB-HOV | 1 | 2,300 | 2,017 | 0.88 | 3 | 2,020 | 0.88 | 0.14% | |
| US 101 | Yerba Buena | Capitol Exp | SB | 3 | 6,900 | 5,003 | 0.73 | 15 | 5,018 | 0.73 | 0.22% | |
| US 101 | Yerba Buena | Capitol Exp | SB-HOV | 1 | 2,300 | 725 | 0.32 | 5 | 730 | 0.32 | 0.22% | |
| US 101 | Capitol Exp | Tully Rd | NB | 3 | 6,900 | 5,487 | 0.80 | 10 | 5,497 | 0.80 | 0.14% | |
| US 101 | Capitol Exp | Tully Rd | NB-HOV | 1 | 2,300 | 2,087 | 0.91 | 3 | 2,090 | 0.91 | 0.14% | |
| US 101 | Capitol Exp | Tully Rd | SB | 3 | 6,900 | 5,835 | 0.85 | 15 | 5,850 | 0.85 | 0.22% | |
| US 101 | Capitol Exp | Tully Rd | SB-HOV | 1 | 2,300 | 643 | 0.28 | 5 | 648 | 0.28 | 0.22% | |
| US 101 | Tully Rd | Story | NB | 3 | 6,900 | 6,615 | 0.96 | 10 | 6,625 | 0.96 | 0.14% | |
| US 101 | Tully Rd | Story | NB-HOV | 1 | 2,300 | 1,847 | 0.80 | 3 | 1,850 | 0.80 | 0.14% | |
| US 101 | Tully Rd | Story | SB | 3 | 6,900 | 5,212 | 0.76 | 15 | 5,227 | 0.76 | 0.22% | |
| US 101 | Tully Rd | Story | SB-HOV | 1 | 2,300 | 1,001 | 0.44 | 5 | 1,006 | 0.44 | 0.22% | |
| US 101 | Old Oakland | I-880 | NB | 3 | 6,900 | 7,274 | **1.05** | 20 | 7,294 | **1.06** | **0.29%** | **NO** |
| US 101 | Old Oakland | I-880 | NB-HOV | 1 | 2,300 | 1,952 | 0.85 | 7 | 1,959 | 0.85 | 0.29% | |
| US 101 | Old Oakland | I-880 | SB | 3 | 6,900 | 4,320 | 0.63 | 11 | 4,331 | 0.63 | 0.16% | |
| US 101 | Old Oakland | I-880 | SB-HOV | 1 | 2,300 | 664 | 0.29 | 4 | 668 | 0.29 | 0.16% | |
| US 101 | I-880 | Old Bayshore | NB | 3 | 6,900 | 7,882 | **1.14** | 20 | 7,902 | **1.15** | **0.29%** | **NO** |
| US 101 | I-880 | Old Bayshore | NB-HOV | 1 | 2,300 | 1,870 | 0.81 | 7 | 1,877 | 0.82 | 0.29% | |
| US 101 | I-880 | Old Bayshore | SB | 3 | 6,900 | 4,489 | 0.65 | 11 | 4,500 | 0.65 | 0.16% | |
| US 101 | I-880 | Old Bayshore | SB-HOV | 1 | 2,300 | 743 | 0.32 | 4 | 747 | 0.32 | 0.16% | |

Source: 2004 Monitoring & Conformance Report. Santa Clara County Congestion Management Program. March 2005. City of San Jose
Values in **BOLD** represent v/c ratios greater than or equal to 1.0.
(Table Continued)

## Table 11 Cumulative Freeway Segment Analysis - AM Peak Hour (Continued)

| Freeway Segment | | | | CUMULATIVE without Project | | | | CUMULATIVE CONDITIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | From | To | Dir. | Lanes | Cap. | Volume | V/C Ratio | Project Trips | Volume | V/C Ratio | % of Capacity | Impact? |
| I-680 | N. Capitol | Hostetter | NB | 4 | 9,200 | 8,431 | 0.92 | 19 | 8,450 | 0.92 | 0.21% | |
| I-680 | N. Capitol | Hostetter | SB | 4 | 9,200 | 7,380 | 0.80 | 10 | 7,390 | 0.80 | 0.11% | |
| I-680 | Hostetter | Berryessa | NB | 4 | 9,200 | 8,551 | 0.93 | 19 | 8,570 | 0.93 | 0.21% | |
| I-680 | Hostetter | Berryessa | SB | 4 | 9,200 | 7,036 | 0.76 | 10 | 7,046 | 0.77 | 0.11% | |
| I-680 | Berryessa | McKee | NB | 4 | 9,200 | 8,774 | 0.95 | 26 | 8,800 | 0.96 | 0.28% | |
| I-680 | Berryessa | McKee | SB | 4 | 9,200 | 7,455 | 0.81 | 41 | 7,496 | 0.81 | 0.45% | |
| I-680 | McKee | Alum Rock | NB | 4 | 9,200 | 7,784 | 0.85 | 26 | 7,810 | 0.85 | 0.28% | |
| I-680 | McKee | Alum Rock | SB | 4 | 9,200 | 8,229 | 0.89 | 41 | 8,270 | 0.90 | 0.45% | |
| I-880 | Great Mall | Montague | NB | 3 | 6,900 | 6,289 | 0.91 | 25 | 6,314 | 0.92 | 0.36% | |
| I-880 | Great Mall | Montague | SB | 3 | 6,900 | 5,337 | 0.77 | 13 | 5,350 | 0.78 | 0.19% | |
| I-880 | Montague | Brokaw | NB | 3 | 6,900 | 5,825 | 0.84 | 25 | 5,850 | 0.85 | 0.36% | |
| I-880 | Montague | Brokaw | SB | 3 | 6,900 | 6,218 | 0.90 | 13 | 6,231 | 0.90 | 0.19% | |
| I-880 | US 101 | 1st | NB | 3 | 6,900 | 6,615 | 0.96 | 25 | 6,640 | 0.96 | 0.36% | |
| I-880 | US 101 | 1st | SB | 3 | 6,900 | 5,973 | 0.87 | 13 | 5,986 | 0.87 | 0.19% | |
| I-880 | 1st | SR 87 | NB | 3 | 6,900 | 6,483 | 0.94 | 25 | 6,508 | 0.94 | 0.36% | |
| I-880 | 1st | SR 87 | SB | 3 | 6,900 | 5,837 | 0.85 | 13 | 5,850 | 0.85 | 0.19% | |

Source: 2004 Monitoring & Conformance Report. Santa Clara County Congestion Management Program. March 2005. City of San Jose
Values in **BOLD** represent v/c ratios greater than or equal to 1.0.

## Table 12 Cumulative Freeway Segment Analysis - PM Peak Hour

| Freeway Segment | | | | CUMULATIVE without Project | | | | CUMULATIVE CONDITIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | From | To | Dir. | Lanes | Cap. | Volume | V/C Ratio | Project Trips | Volume | V/C Ratio | % of Capacity | Impact? |
| US 101 | Yerba Buena | Capitol Exp | NB | 3 | 6,900 | 4,711 | 0.68 | 17 | 4,728 | 0.69 | 0.25% | |
| US 101 | Yerba Buena | Capitol Exp | NB-HOV | 1 | 2,300 | 794 | 0.35 | 6 | 800 | 0.35 | 0.25% | |
| US 101 | Yerba Buena | Capitol Exp | SB | 3 | 6,900 | 5,235 | 0.76 | 10 | 5,245 | 0.76 | 0.14% | |
| US 101 | Yerba Buena | Capitol Exp | SB-HOV | 1 | 2,300 | 1,137 | 0.49 | 3 | 1,140 | 0.50 | 0.14% | |
| US 101 | Capitol Exp | Tully Rd | NB | 3 | 6,900 | 5,643 | 0.82 | 17 | 5,660 | 0.82 | 0.25% | |
| US 101 | Capitol Exp | Tully Rd | NB-HOV | 1 | 2,300 | 884 | 0.38 | 6 | 890 | 0.39 | 0.25% | |
| US 101 | Capitol Exp | Tully Rd | SB | 3 | 6,900 | 6,310 | 0.91 | 10 | 6,320 | 0.92 | 0.14% | |
| US 101 | Capitol Exp | Tully Rd | SB-HOV | 1 | 2,300 | 1,577 | 0.69 | 3 | 1,580 | 0.69 | 0.14% | |
| US 101 | Tully Rd | Story | NB | 3 | 6,900 | 5,922 | 0.86 | 17 | 5,939 | 0.86 | 0.25% | |
| US 101 | Tully Rd | Story | NB-HOV | 1 | 2,300 | 894 | 0.39 | 6 | 900 | 0.39 | 0.25% | |
| US 101 | Tully Rd | Story | SB | 3 | 6,900 | 6,316 | 0.92 | 10 | 6,326 | 0.92 | 0.14% | |
| US 101 | Tully Rd | Story | SB-HOV | 1 | 2,300 | 2,187 | 0.95 | 3 | 2,190 | 0.95 | 0.14% | |
| US 101 | Old Oakland | I-880 | NB | 3 | 6,900 | 4,740 | 0.69 | 10 | 4,750 | 0.69 | 0.15% | |
| US 101 | Old Oakland | I-880 | NB-HOV | 1 | 2,300 | 667 | 0.29 | 3 | 670 | 0.29 | 0.15% | |
| US 101 | Old Oakland | I-880 | SB | 3 | 6,900 | 7,253 | **1.05** | 19 | 7,272 | **1.05** | **0.28%** | **NO** |
| US 101 | Old Oakland | I-880 | SB-HOV | 1 | 2,300 | 2,150 | 0.93 | 6 | 2,156 | 0.94 | 0.28% | |
| US 101 | I-880 | Old Bayshore | NB | 3 | 6,900 | 5,168 | 0.75 | 10 | 5,178 | 0.75 | 0.15% | |
| US 101 | I-880 | Old Bayshore | NB-HOV | 1 | 2,300 | 797 | 0.35 | 3 | 800 | 0.35 | 0.15% | |
| US 101 | I-880 | Old Bayshore | SB | 3 | 6,900 | 8,310 | **1.20** | 19 | 8,329 | **1.21** | **0.28%** | **NO** |
| US 101 | I-880 | Old Bayshore | SB-HOV | 1 | 2,300 | 1,834 | 0.80 | 6 | 1,840 | 0.80 | 0.28% | |

Source: 2004 Monitoring & Conformance Report. Santa Clara County Congestion Management Program. March 2005. City of San Jose
Values in **BOLD** represent v/c ratios greater than or equal to 1.0.
(Table Continued)

## Table 12 Cumulative Freeway Segment Analysis - PM Peak Hour (Continued)

| Freeway Segment | | | | CUMULATIVE without Project | | | | CUMULATIVE CONDITIONS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | From | To | Dir. | Lanes | Cap. | Volume | V/C Ratio | Project Trips | Volume | V/C Ratio | | % of Capacity | Impact? |
| I-680 | N. Capitol | Hostetter | NB | 4 | 6,900 | 8,343 | 0.91 | 10 | 8,353 | 0.91 | E | 0.11% | |
| I-680 | N. Capitol | Hostetter | SB | 4 | 2,300 | 8,199 | 0.89 | 18 | 8,217 | 0.89 | D | 0.20% | |
| I-680 | Hostetter | Berryessa | NB | 4 | 6,900 | 8,503 | 0.92 | 10 | 8,513 | 0.93 | E | 0.11% | |
| I-680 | Hostetter | Berryessa | SB | 4 | 2,300 | 8,199 | 0.89 | 18 | 8,217 | 0.89 | D | 0.20% | |
| I-680 | Berryessa | McKee | NB | 4 | 6,900 | 8,128 | 0.88 | 46 | 8,174 | 0.89 | D | 0.50% | |
| I-680 | Berryessa | McKee | SB | 4 | 2,300 | 9,389 | 1.02 | 26 | 9,415 | 1.02 | **F** | **0.28%** | **NO** |
| I-680 | McKee | Alum Rock | NB | 4 | 6,900 | 7,494 | 0.81 | 46 | 7,540 | 0.82 | D | 0.50% | |
| I-680 | McKee | Alum Rock | SB | 4 | 2,300 | 8,244 | 0.90 | 26 | 8,270 | 0.90 | D | 0.28% | |
| I-880 | Great Mall | Montague | NB | 3 | 6,900 | 7,956 | 1.15 | 13 | 7,969 | 1.15 | **F** | **0.18%** | **NO** |
| I-880 | Great Mall | Montague | SB | 3 | 2,300 | 7,315 | 1.06 | 24 | 7,339 | 1.06 | **F** | **0.35%** | **NO** |
| I-880 | Montague | Brokaw | NB | 3 | 6,900 | 7,083 | 1.03 | 13 | 7,096 | 1.03 | **F** | **0.18%** | **NO** |
| I-880 | Montague | Brokaw | SB | 3 | 2,300 | 7,112 | 1.03 | 24 | 7,136 | 1.03 | **F** | **0.35%** | **NO** |
| I-880 | US 101 | 1st | NB | 3 | 6,900 | 6,537 | 0.95 | 13 | 6,550 | 0.95 | E | 0.18% | |
| I-880 | US 101 | 1st | SB | 3 | 2,300 | 7,116 | 1.03 | 24 | 7,140 | 1.03 | **F** | **0.35%** | **NO** |
| I-880 | 1st | SR 87 | NB | 3 | 6,900 | 6,706 | 0.97 | 13 | 6,719 | 0.97 | E | 0.18% | |
| I-880 | 1st | SR 87 | SB | 3 | 2,300 | 6,410 | 0.93 | 24 | 6,434 | 0.93 | E | 0.35% | |

Source: 2004 Monitoring & Conformance Report. Santa Clara County Congestion Management Program. March 2005. City of San Jose
Values in **BOLD** represent v/c ratios greater than or equal to 1.0.

## 2.7 RECOMMENDED IMPROVEMENT MEASURES

Recommended improvement measures are presented for the study intersections which would experience potentially significant impacts due to the addition of new project trips to the Background Conditions. An analysis of potential improvement measures was conducted and the following describes the recommended improvement measures for the potentially significant impacts identified under the Project Conditions scenario.

### US 101 Northbound Ramps / Old Oakland Road Intersection Impact #1

During the AM peak hour, the intersection of the US 101 Northbound Ramps and Old Oakland Road would operate at an unacceptable LOS F during the Background Conditions. The addition of project related traffic would result in an increase of average delay of approximately seven seconds, and the critical v/c ratio would increase by approximately .018, resulting in a potentially significant impact.

During the peak periods, the critical movements are the northbound left, the southbound right, and the westbound right-turn movements. During the AM peak hour of the Project Conditions scenario, the proposed project would account for approximately 1.6 percent of the total peak hour traffic through this intersection. During the AM peak hour, the proposed project would add approximately 24 trips to the northbound through movement and 46 trips to the southbound right turn movement. During the PM peak period, the proposed project would add approximately 68 trips through the intersection.

<u>Improvement Measure #1</u>

The recommended improvement measure for this intersection is consistent with the planned roadway improvements identified as part of the North San Jose Development Plan and the Flea Market Development Project. These improvements consist of adding a second southbound right-turn lane and a second northbound left-turn lane. This improvement would require significant modification to the existing structure. The project sponsor has the following alternatives

- Reduce project size such that the impact would no longer be triggered
- Construct the improvement measure such that the impact would be reduced to less than significant levels
- Wait for other developments to improve the interchange area, and determine if a significant impact would still occur.
- PDUWHLSDWd In Wle CLW's TUDnsSRUWtion Development Policy (TDP) program.

Alternatively to implementing the recommended improvement measure, the project sponsor P DY SDUWHLSDW In Wle CLW's TDP SURJUDP . The CLW RI 6Dn ¯Rse Is In Wle SURFess RI FUeDWnJ a transportation policy for the Old Oakland/Mabury/101 transportation corridor, which will allow developments to pay a traffic impact fee based on the amount traffic sent to the corridor. Three intersections 101/Oakland (N), 101/Oakland (S) and Oakland/Commercial are all covered under this policy. The policy is in draft form but is expected to go for Council approval in October 200T, and a draft version of the TDP report is included in **Appendix F**.

The purpose of the US 101/Oakland/Mabury TDP is to provide additional capacity to the freeway access at the US 101/Oakland Road interchange in order to encourage new development. The intent of the TDP would be to allow more projects to develop and tep SRUDUJ9 geneUDte tUDffic cRngestiRn in excess Rf the City's /OS SR@cy stDndDUd fRU D limited period of time prior to construction of the required transportation improvements. 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 the buildout of the US 101/Oakland Road interchange and construction of a new US 101/Mabury Road interchange. Based on the new available capacity that would be created, each new development would be required to contribute $30,000 per new PM Peak hour vehicle trip that it would add to the US 101/Oakland Road interchange.

Significance after fmprovement Measure

During the AM peak hour, the intersection would operate at an acceptable i OS D with approximately 4S.4 seconds of average delay with implementation of the recommended improvement measure. The impact would be reduced to a less than significant level with implementation of the improvement measure.

### Interstate 880 Southbound Ramps / Brokaw Road Intersection Impact #2

During the PM peak hour, the intersection of the fnterstate 880 Southbound Ramps and Brokaw Road would operate at an unacceptable i OS C during the Background Conditions. The addition of project related traffic would result in an increase of average delay of approximately four seconds, and the critical v/c ratio would increase by approximately .01S, resulting in a potentially significant impact.

During the peak periods, the critical movements are the southbound left, the eastbound through, and the westbound left-turn movements. During the AM peak hour, the proposed project would add approximately O4 trips to the southbound left-turn movement, nine trips to the eastbound through movement, and five trips to the westbound through movement.

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This intersection of Oakland/Brokaw is located in the North San 9ose Development Policy Area, and mitigation is covered under the NS9 Development Policy, which designates this intersection as exempt from mitigation. Therefore, no further mitigation is required.

### Old Oakland Road / Commercial Street Intersection Impact #3

During the AM peak hour, the intersection of Old Oakland Road and Commercial Street would operate at an unacceptable i OS E during the Background Conditions. The addition of project related traffic would result in an increase of average delay of approximately seven seconds, and the critical v/c ratio would increase by approximately .031, resulting in a potentially significant impact.

During the peak periods, the critical movements are the northbound through, the southbound left, the eastbound through, and the westbound left-turn movements. During the AM peak hour, the proposed project would add approximately O4 trips to the northbound right-turn movement and 4S trips to the westbound left-turn movement.

Improvement Measure #3

The recommended improvement measure for this intersection is consistent with the planned roadway improvements identified as part of the North San Jose Development Plan and the Flea Market Development Project. This improvement consists of adding a second westbound left-turn lane.

Alternatively to implementing the recommended improvement measure, the project sponsor P DY SDrtiFiSDte in the City's TD3 SroJrDP . SiP ilDr to 'nterseFtion 'P SDFt #1 disFussed above, this intersection would be included in the City's TD3 SroJrDP , Dnd would be inFluded under the proposed traffic impact fee of the TDP.

Significance after Improvement Measure

During the PM peak hour, the intersection would operate at an acceptable i l S D with approximately 40.0 seconds of average delay. The impact would be reduced to a less than significant level with implementation of the improvement measure.

**Jackson Avenue / Commodore Drive Impact #4**

The unsignalized intersection of Jackson Avenue and Commodore Drive is currently on the City's SijnDl WDrrDnt List, Dnd sDtisIies several warrants for a traffic control signal. The proposed project would add approximately 100 new trips (approximately seven percent increase) to the intersection during the AM peak hour, and approximately 90 new trips during the PM peak hour (approximately six percent increase). The intersection is in close proximity to the SroMeFt's DFFess roDds, Dnd the Dddition of project related traffic would result in an increase of average delay.

Improvement Measure #3

Per the request of City Staff, the project sponsor should contribute to improvement costs of installing a traffic control signal.

Significance after Improvement Measure

t ith signalization, this intersection would operate at an acceptable i l S B or better during both the AM and PM peak periods. The impact would be reduced to a less than significant level with implementation of the improvement measure.

# 3.0 SANTA CLARA COUNTY CONGESTION MANAGEMENT PROGRAM (CMP)

This section provides an evaluation of traffic and transportation issues related to the proposed mixed-used development project according to CMP traffic analysis methodology. Based on consultation with the City of San Jose staff and per the CMP Guidelines for Traffic Impact Analysis, the following seven CMP intersections were selected for analysis as part of the Santa Clara Congestion Management Program:

1. US 101 Northbound Ramp & Old Oakland Road
2. US 101 Southbound Ramp & Old Oakland Road
3. Interstate 880 Northbound Ramp & Brokaw Road
4. Interstate 880 Southbound Ramp & Brokaw Road
5. Berryessa Road & Lundy Avenue
6. Brokaw Road & Old Oakland Road
7. Murphy Avenue & Lundy Avenue

**Figure 12** illustrates each study intersection and its location in relation to the project site. The operation of these intersections was evaluated for the following scenarios:

**Scenario 1:** ExlstlnJ &RnGltlRn – Level of service based on existing peak-hour volumes.

**Scenario 2:** BacNJURunG &RnGltlRn – ExlstlnJ SeaN-hRuU vR@P es S@s JURwth IURP approved, but not yet constructed, developments in the vicinity of the proposed project that would occur prior to the completed construction of the proposed mixed-used development project.

**Scenario 3:** 3URMect &RnGltlRn – BacNJURunG SeaN-hRuU vR@P es S@s SURMect-generated traffic estimated for the mixed-use development project.

**Scenario 4:** &uP u@tlve &RnGltlRn – 3URMect Condition peak-hour volumes plus traffic generated by approved and pending developments.

Potentially significant traffic-related impacts along the nearby freeways were also analyzed. Creeway segments analyzed include:

- US 101 between Verba Buena Road and Capitol Expressway
- US 101 between Capitol Expressway and Tully Road
- US 101 between Tully Road and Story Road
- US 101 between Old Oakland Road and I-880
- US 101 between I-880 and Old Bayshore

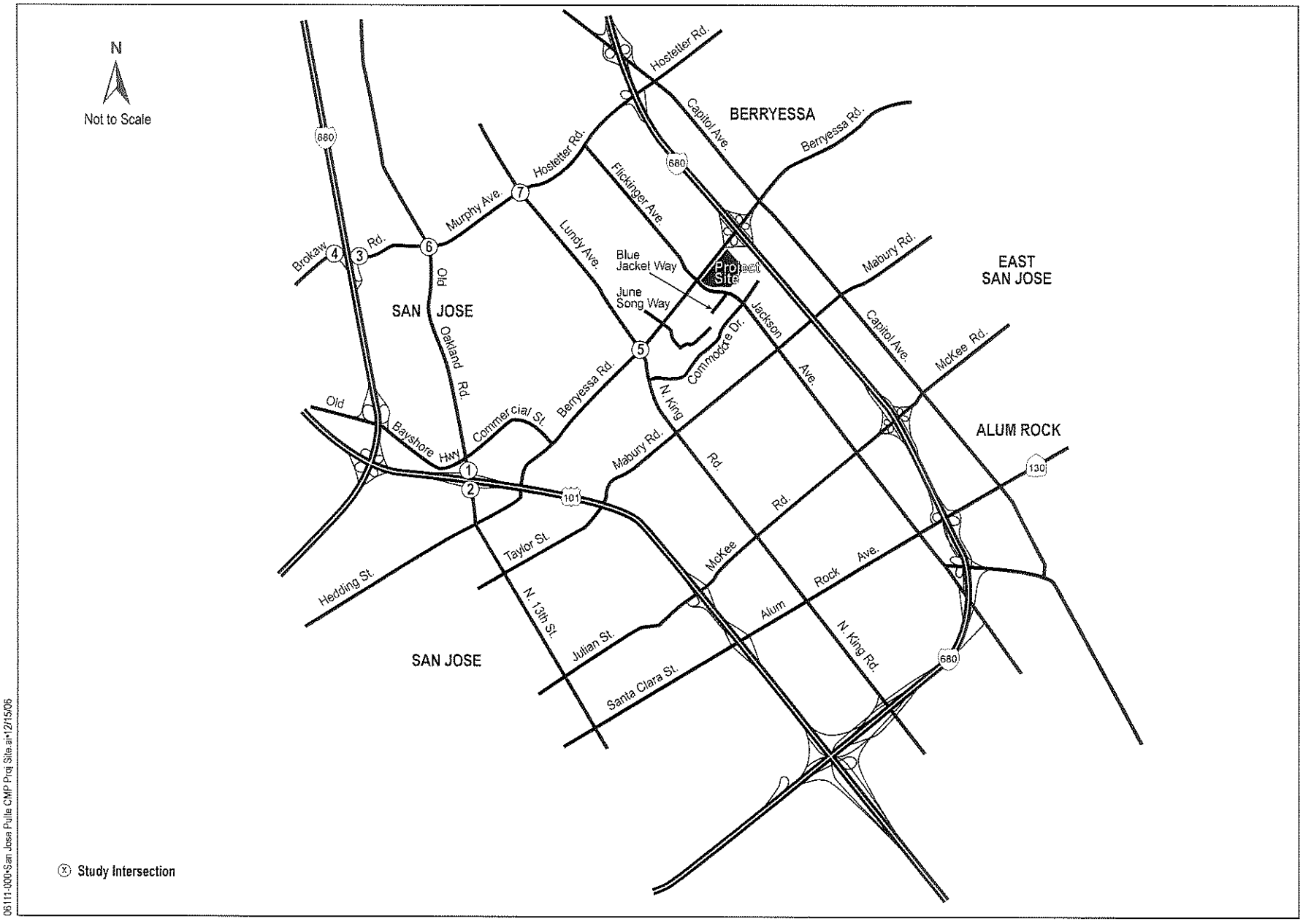


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**Figure 12**
**CMP Study Intersection Locations and Roadway Network**

- I-680 between N. Capitol Expressway and Hostetter Road
- I-680 between Hostetter Road and Berryessa Road
- I-680 between Berryessa Road and McKee Road
- I-680 between McKee Road and Alum Rock Avenue
- I-880 between Great Mall Parkway and Montague Expressway
- I-880 between Montague Expressway and Brokaw Road
- I-880 between US 101 and 1st Street
- I-880 between 1st Street and State Route 87

## 3.1 EXISTING TRANSPORTATION SYSTEM

A description of the existing transportation system facilities including roadway network facilities, intersections, transit service, bicycles, pedestrians and parking can be found in section 2.0 of this report.

### 3.1.1 Intersection Level of Service

Existing traffic conditions at CMP signalized intersections have been evaluated for AM and PM peak hours using the operational analysis procedures from the Transportation Research Board's *2000 Highway Capacity Manual* as required by the Santa Clara County Congestion Management Program

### 3.1.2 Intersection Level of Service Methodology

The Santa Clara County Congested Management Program designated intersection level of service software analysis program is *TRAFFIX*. *TRAFFIX* evaluates CMP signalized intersections operation on the basis of average stopped delay for all vehicles at the intersection.

### 3.1.3 Level of Service Definition

The LOS evaluation indicates the degree of congestion that occurs during peak travel periods and is the principal measure of roadway performance. Levels of service can range from "A" representing free flow conditions, to "F" representing extreme congestion. LOS A and B signify stable conditions with acceptable delays. LOS D is typically considered acceptable for peak hour in urban areas, with average delays in the range of 25 to 40 seconds. LOS E is approaching capacity and LOS F represents conditions at or above capacity, with average delays over 80 seconds.

The correlation between average delay and level of service is contained in **Table 1** as part of Section 2.0 of this report.

### 3.1.4 Standards of Significance

According to the County of Santa Clara, the performance standard of a CMP facility is LOS "E". The @veOof servlce at CMP lntersectlons is based on evaluations of all intersection movements.

## 3.2 EXISTING CONDITIONS

The City of San Jose provided existing AM peak hour and PM peak hour intersection level of service calculations for each of the seven existing CMP study intersections.

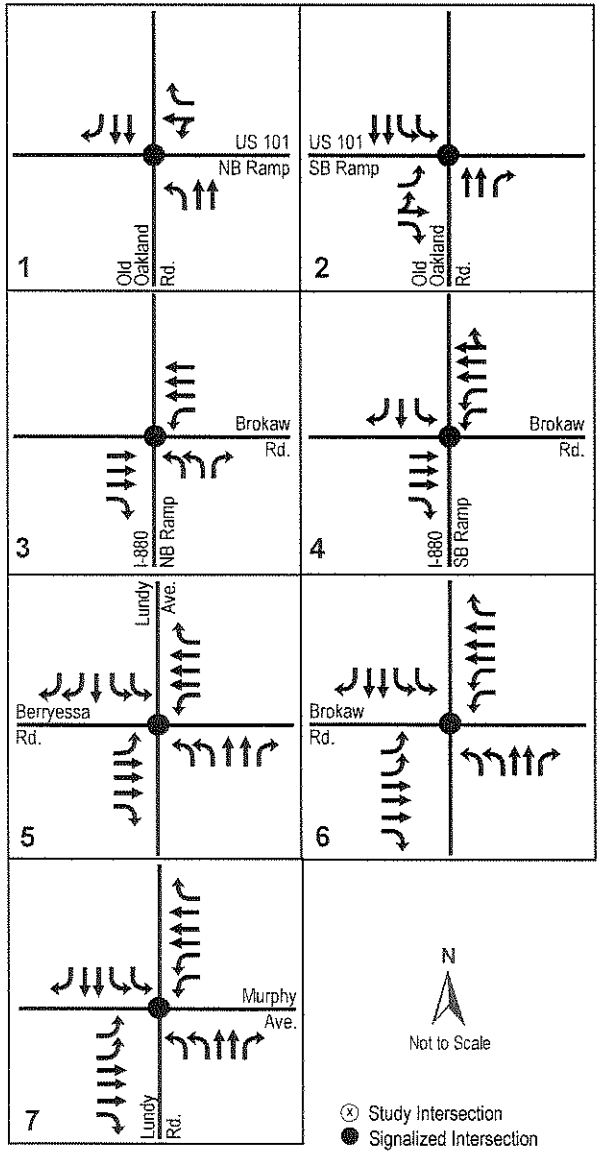
**Figure 13** illustrates the current lane geometry and traffic control at each of the study area intersections. **Figure 14** illustrates the existing traffic volumes at each study intersection. The intersections and their corresponding existing levels of service are presented in **Table 12**.

**Appendix A** includes the detailed TOACCfX calculation level of service analysis sheets, including the weekday AM and PM peak hours.

**Table 13 Existing CMP Conditions Level of Service**

| # | Intersection Name | AM Peak | | PM Peak | |
|---|---|---|---|---|---|
| | | Avg. Delay | LOS | Avg. Delay | LOS |
| 1 | US 101 Northbound Ramp & Old Oakland Road | **61.8** | **E** | 22.9 | C+ |
| 2 | US 101 Southbound Ramp & Old Oakland Road | 22.4 | C | 33.6 | C- |
| 3 | Interstate 880 Northbound Ramp & Brokaw Road | 30.5 | C | 19.3 | B- |
| 4 | Interstate 880 Southbound Ramp & Brokaw Road | 45.6 | D | 36.6 | D+ |
| 5 | Berryessa Road & Lundy Avenue | 44.1 | D | 48.2 | D |
| 6 | Brokaw Road & Old Oakland Road | 39.8 | D | 40.7 | D |
| 7 | Murphy Avenue & Lundy Avenue | 39.4 | D | 36.7 | D+ |

Average Delay - in seconds per vehicle
LOS – Level of Service



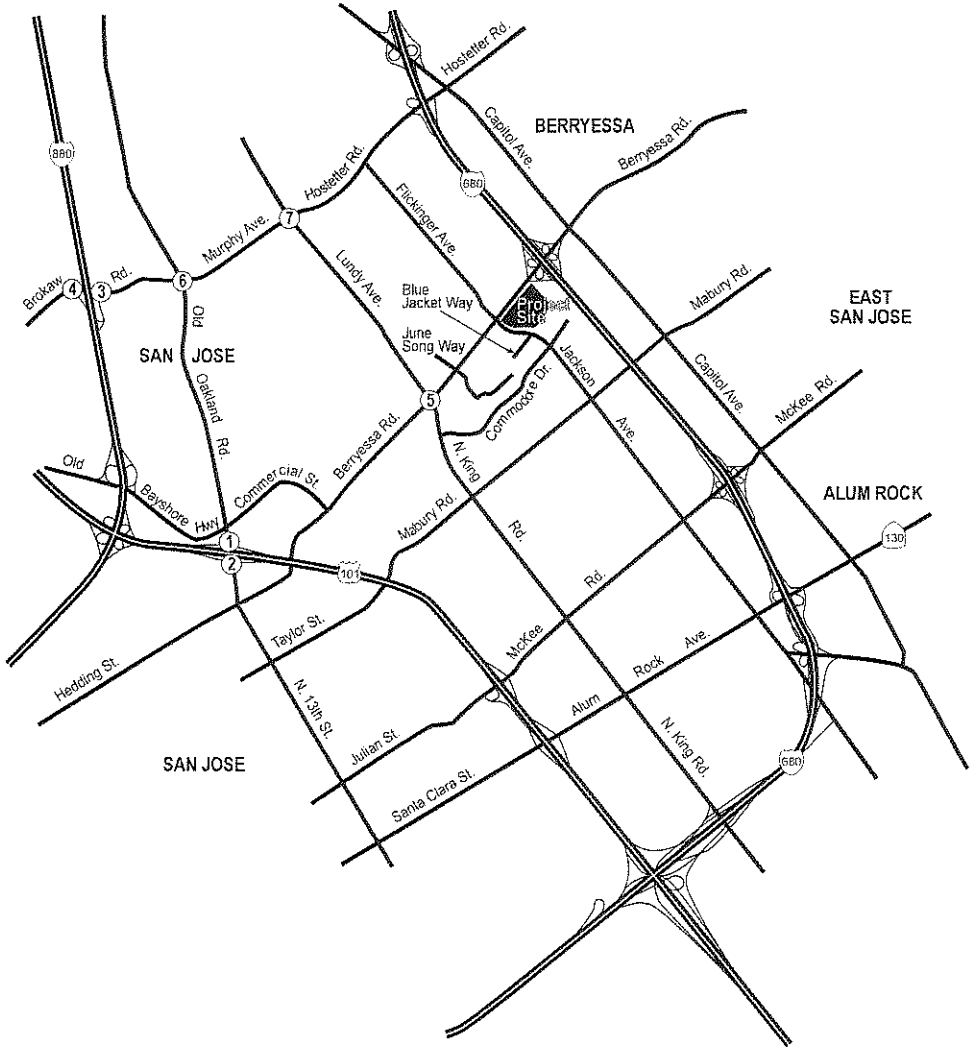




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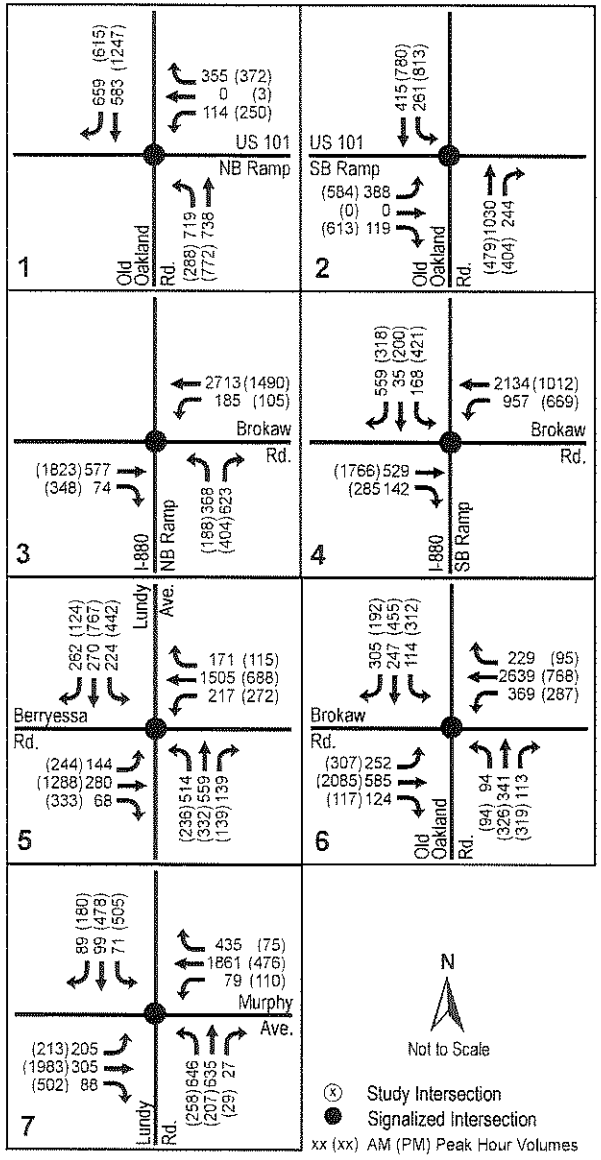
**Figure 13**
**Existing CMP Intersection Lane Geometry**



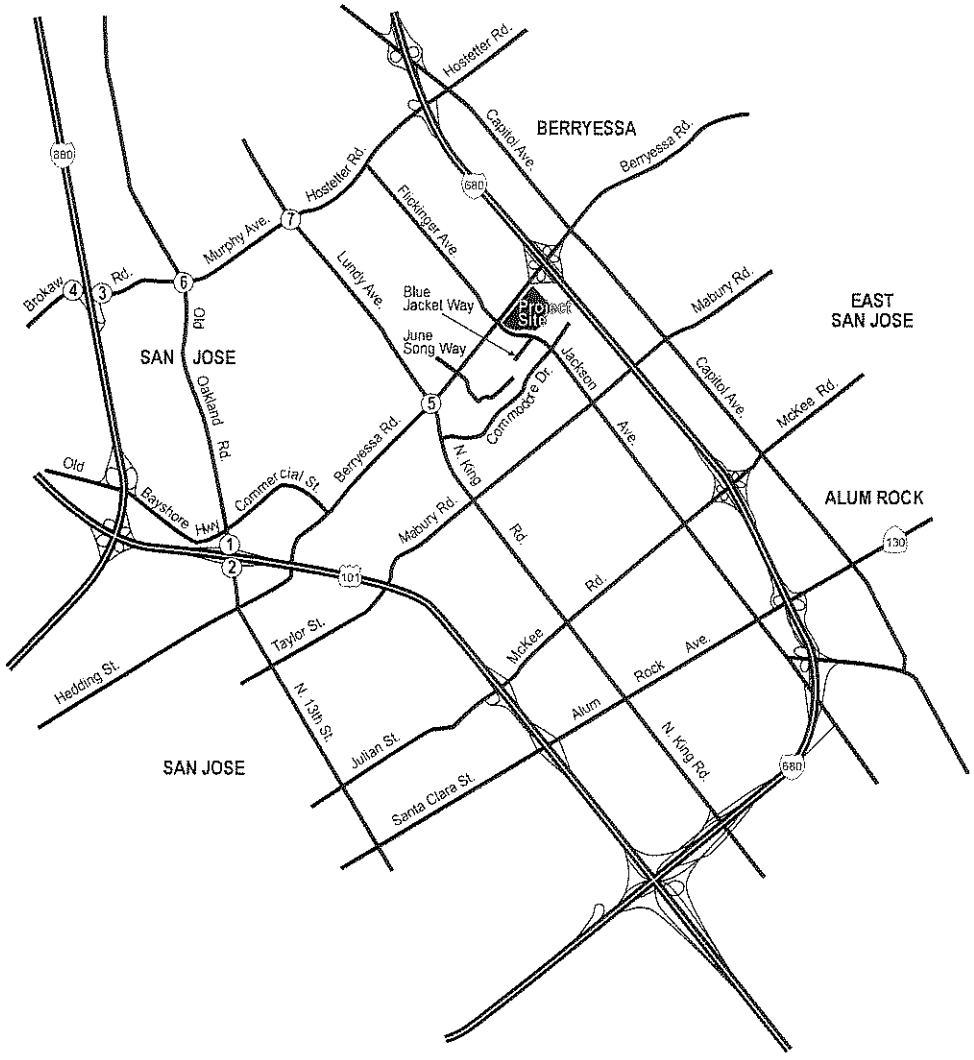




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**Figure 14**
**Existing CMP Peak Hour Volumes**

### 3.2.1 Intersection Operation

According to the Santa Clara County Congestion Management Program intersection level of service standards, all study intersections operate at acceptable levels of service E or better under the existing conditions.

## 3.3 BACKGROUND CONDITIONS

This section discusses the traffic operating conditions at the study intersections under the background condition. The background condition includes the traffic expected to be generated by the approved projects (as detailed in the Approved Trip Inventory (ATI) database, provided by the City of San Jose staff in July 2006) prior to the completion of the proposed development. **Appendix C** includes the ATI sheets.

**Figure 15** illustrates the background peak hour traffic volumes at each study intersection. Intersection operational levels of service along with their associated critical and average delays are summarized in **Table 13**.

**Appendix A** includes the detailed TRAFFIX level of service calculations for the CMP analysis for the weekday AM and PM peak hours.

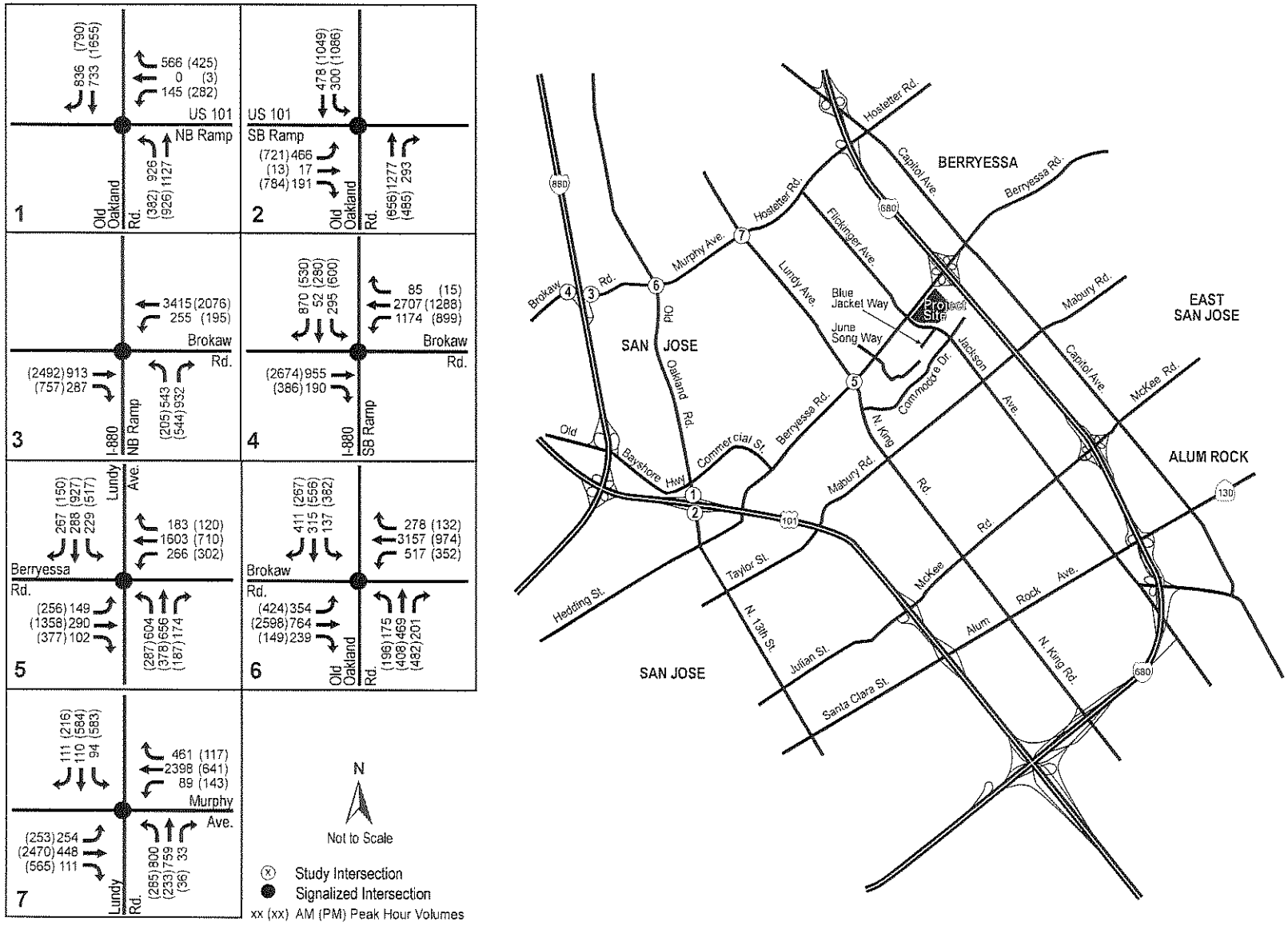
**Table 14 Background CMP Conditions Level of Service**

| # | INTERSECTION | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|
| | | Avg. Delay | Critical V/C | LOS | Avg. Delay | Critical V/C | LOS |
| 1 | US 101 Northbound Ramp & Old Oakland Road | **142.5** | **1.443** | **F** | 46.0 | 1.037 | D |
| 2 | US 101 Southbound Ramp & Old Oakland Road | 24.1 | 0.616 | C | **77.2** | **1.216** | **E-** |
| 3 | Interstate 880 Northbound Ramp & Brokaw Road | 53.1 | 1.038 | D- | 22.1 | 0.802 | C+ |
| 4 | Interstate 880 Southbound Ramp & Brokaw Road | **89.3** | **1.092** | **F** | **96.0** | **1.176** | **F** |
| 5 | Berryessa Road & Lundy Avenue | 45.1 | 0.689 | D | 51.2 | 0.810 | D- |
| 6 | Brokaw Road & Old Oakland Road | 50.7 | 0.904 | D | 51.1 | 0.927 | D- |
| 7 | Murphy Avenue & Lundy Avenue | 45.4 | 0.852 | D | 39.9 | 0.788 | D |

Average Delay - in seconds per vehicle
/2 6 – /eveQ,I 6eUylce

### 3.3.1 Intersection Operation

According to the Santa Clara County Congestion Management Program intersection LOS standards, two study intersections would deteriorate from LOS D to an unacceptable LOS F during the AM peak hour; and one intersection would operate at an unacceptable level during the PM peak hour under the background conditions.




06111-000-San Jose Pulte CMP Background Vols.ai-2/7/08

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**Figure 15**
**Background CMP Conditions Peak Hour Volumes**

During the AM peak hour, the intersections of US 101 Northbound Ramps / Old Oakland Road and Interstate 880 Southbound Ramps / Brokaw Road would both operate at LOS F with approximately 132 and 89 seconds of delay respectively.

During the PM peak hour, the intersection Interstate 880 Southbound Ramps / Brokaw Road would also operate at LOS F with approximately 96 seconds of delay during the PM peak hour. Each of the remaining CMP study intersections would operate at an acceptable LOS during both the AM and PM peak hours under the Background Conditions.

## 3.4 PROJECT CONDITIONS

This section evaluates background traffic conditions plus project-generated traffic estimated for the proposed project. The amount of traffic associated with a project is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. Trip generation is the process of predicting the number of peak hour trips a proposed development would contribute to the roadways, and whether these trips would be entering or exiting the site. After the number of trips is determined, the distribution process projects the direction these trips use to approach and depart the site, from a regional perspective. Trip assignment involves determining which specific roadways a vehicle would use to travel between its origin and destination.

### 3.4.1 Significance Criteria and Project Impacts

According to the Santa Clara County Congestion Management Program, the standards of significance for traffic impacts are:

For CMP intersection, a significant impact for a project is defined as:

- : hen the DddlttRn RI SURMtFt tUDTIIF FDuses Inteusetftlrn's /26 undeU background condition to deteriorate from DFFeSTDE@ @veORI seUVIFe (/26) "(" tR /26 ")", RU

- For intersections already operating at unacceptable LOS F, and under the project, critical movement delay increase by the proposed project causes:

  - An increase in critical delay by 4.0 or more seconds; and,
  - An increase in the critical volume-to-capacity ratio (v/c) of 0.010 or more.

If there is a decrease (negative change) in critical delay or v/c with the added traffic, then only one of the two criteria need to apply to determine the impact of the proposed project.

For CMP freeway segment, a significant impact for a project is defined as:

- 'I D IUeewDy segP ent DQeDdy RSeUDtes Dt /26 ")", Dnd undeU the SURMtFt condition, traffic increases by 1% or more of capacity.

### 3.4.2 Trip Generation

Trip generation for the proposed project was based on the City of San Jose Trip Generation Rates. In consultation with City of San Jose staff, a capture rate reduction of 25% was asslieG tR the retail cRmsRnent Gue tR the srRject's mixeG-use (hRusinJ-retail) cRmsRnents. In addition, a 13% vehicle trip-reduction was applied to the retail components, in accordance with STA policy for mixed-use development projects, for its residential-retail mixed-use. The 13% retail vehicle trip-reduction was applied to the residential land use, as most of these trips were assumed to be internal trips.

Combined, the proposed project and residential development the Nola mroperty would generated approximately 4,445 daily trips, including 382 Aj peak hour trips (149 inbound, 233 outbound) and 419 mj peak hour trips (267 inbound, 152 outbound). **Table 14** summarizes the trip generation for the project condition during the Aj and mj peak hours, respectively.

### 3.4.3 Trip Distribution

The approach and departure for project trips of the proposed mixed-use project were estimated based on existing travel patterns, the locations of complementary land uses, and consultation with City of San Jose Staff. **Figure 16** illustrates the trip distribution of the proposed retail and residential uses.

### 3.4.4 Trip Assignment

mroject-generated trips were assigned to the roadway network based on access points and likely travel patterns. The proportion of these trips that would travel through the study intersections was used for the intersection i l S analysis under the project condition.

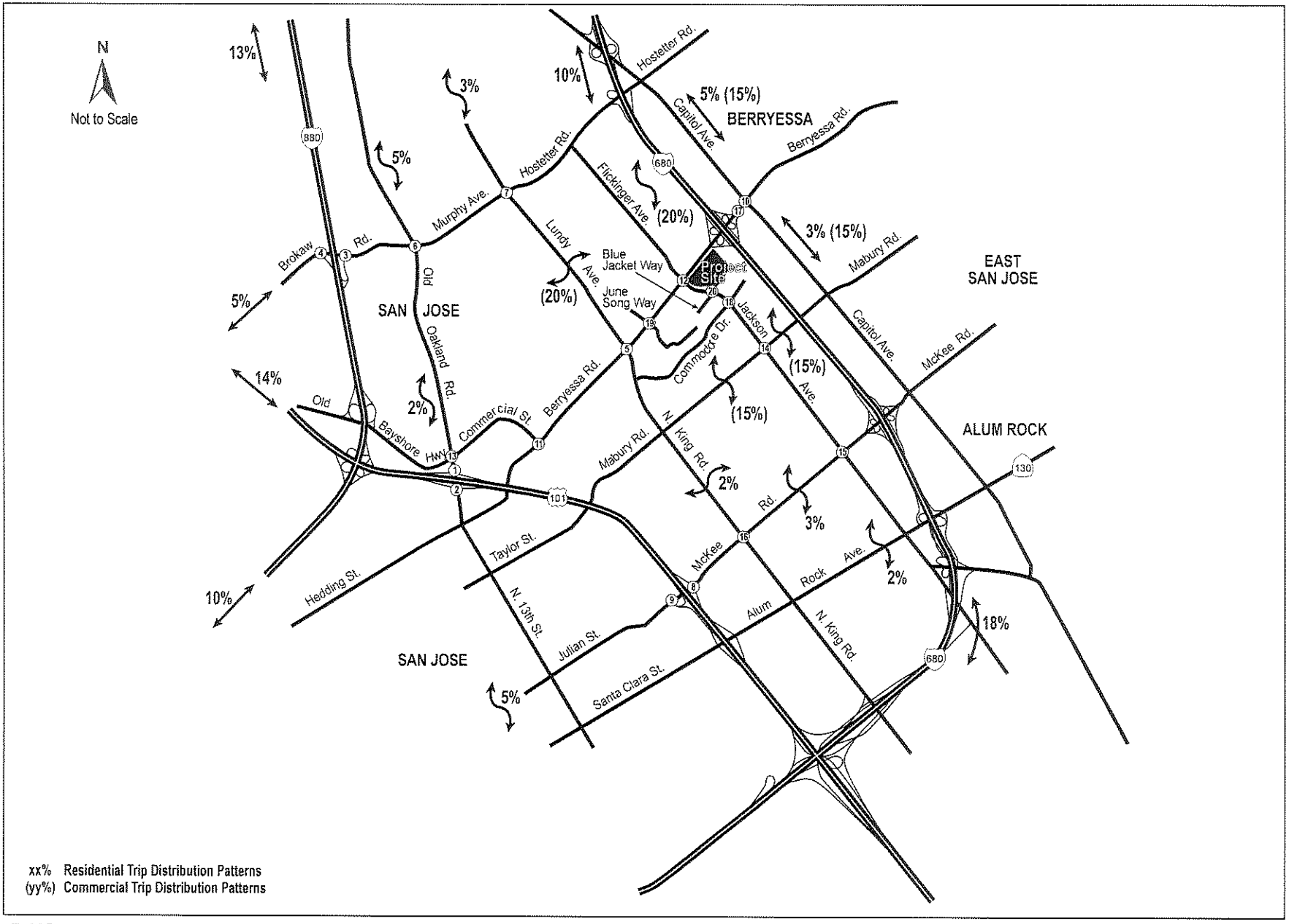
**Figure 17** illustrates the project trips at each of the study intersections for the Aj and mj peak hours. **Figure 18** illustrates the project scenario traffic volumes at each of the study intersections for the Aj and mj peak hours.

Intersection operational levels of service along with their associated critical and average delays are summarized in **Table 15**.

## Table 15 Trip Generation – Proposed Project and Nola Development

| Land Use | Size | Units | Daily | | AM PEAK | | | | | | | PM PEAK | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Peak Hour Rate | Percent (%) | | Rate | | Vehicle Trips | | Peak Hour Rate | Percent (%) | | Rate | | Vehicle Trips | |
| | | | Rate | Trips | | In | Out | In | Out | In | Out | | In | Out | In | Out | In | Out |
| COMMERCIAL | | | | | | | | | | | | | | | | | | |
| Specialty Retail | 25 | ksf[2] | 40 | 1000 | 0.80 | 70 | 30 | 0.56 | 0.24 | 14 | 6 | 3.60 | | | 1.80 | 1.80 | 59 | 32 |
| *Capture Rate Reduction (25%)* | | | | *-250* | | | | | | *-4* | *-2* | | | | | | *-11* | *-11* |
| *Mixed-Use Reduction[1] (13%)* | | | | *-130* | | | | | | *-2* | *-1* | | | | | | *-6* | *-6* |
| Sit Down High T.O. Restaurant | 5 | ksf[2] | 206 | 1030 | 16.48 | 50 | 50 | 8.24 | 8.24 | 41 | 41 | 16.48 | 50 | 50 | 8.24 | 8.24 | 41 | 41 |
| **SUB-TOTAL (Commercial)** | | | | **1650** | | | | | | **49** | **44** | | | | | | **83** | **56** |
| RESIDENTIAL | | | | | | | | | | | | | | | | | | |
| Single Family Attached (Pulte) | 310 | du[3] | 7.5 | 2,325 | 0.75 | 35 | 65 | 0.26 | 0.49 | 81 | 151 | 0.75 | 65 | 35 | 0.49 | 0.26 | 151 | 81 |
| Single Family Attached (Nola) | 80 | du[3] | 7.5 | 600 | 0.75 | 35 | 65 | 0.26 | 0.49 | 21 | 39 | 0.75 | 65 | 35 | 0.49 | 0.26 | 39 | 21 |
| Total Residential Trips | | | | 2,925 | | | | | | 102 | 190 | | | | | | 190 | 102 |
| *Mixed-Use Reduction[1] (13%)* | | | | *-130* | | | | | | *-2* | *-1* | | | | | | *-6* | *-6* |
| **SUB-TOTAL (Residential)** | | | | **2,795** | | | | | | **100** | **189** | | | | | | **184** | **96** |
| **PROJECT TOTAL TRIPS** | | | | **4,955** | | | | | | **157** | **237** | | | | | | **290** | **175** |
| *Total Trip Reduction* | | | | *-510* | | | | | | *-8* | *-4* | | | | | | *-23* | *-23* |
| **PROJECT GRAND TOTAL TRIPS** | | | | **4,445** | | | | | | **149** | **233** | | | | | | **267** | **152** |

Source: City of San Jose, Department of Public Works, Transportation Division, Common Vehicular Trip Generation Rates for the San Jose Area, March 1994.
[1] Santa Clara Valley Transportation Authority, Transportation Impact Analysis Guidelines. February 1998.
[2] ksf: 1,000 square feet
[3] du: dwelling-unit




xx% Residential Trip Distribution Patterns
(yy%) Commercial Trip Distribution Patterns

06111-000-San Jose Pulte CMP Trip Dist.ai•9/17/07

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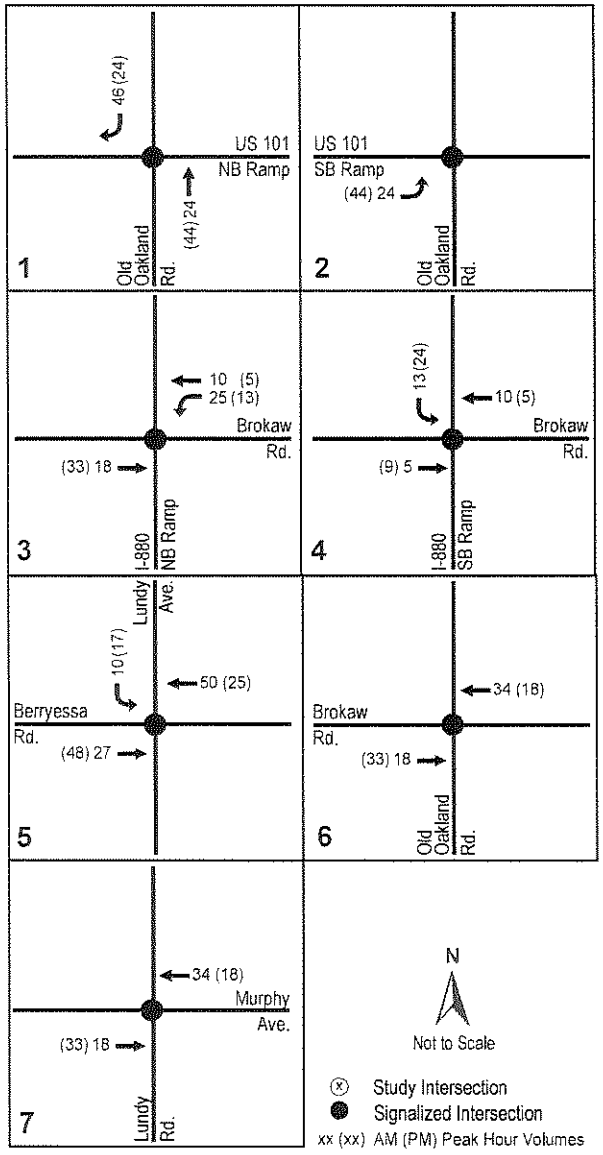
**Figure 16**
**Trip Distribution Patterns**



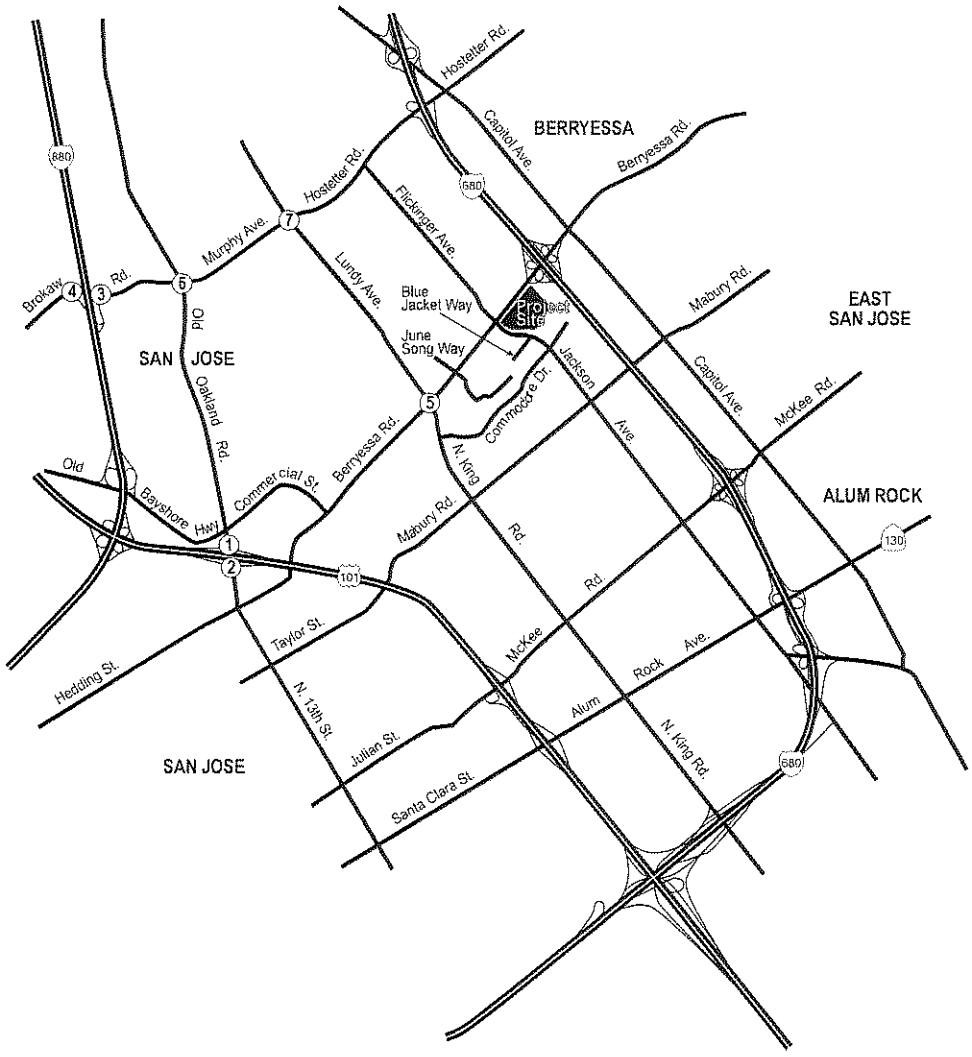




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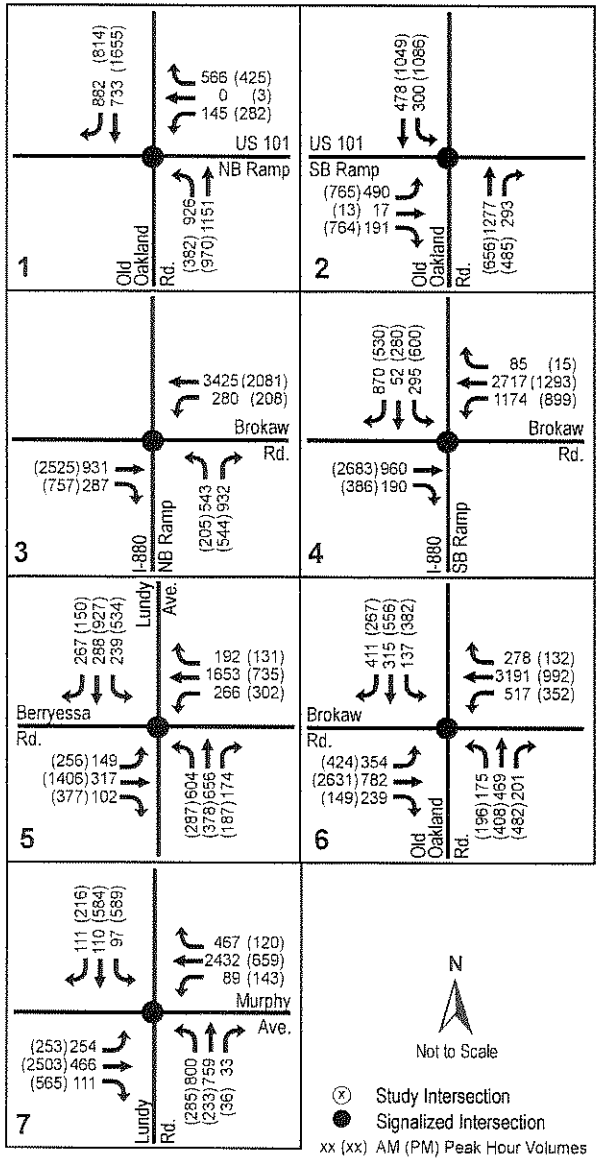
**Figure 17**
**Peak Hour Project Trips at CMP Intersection**



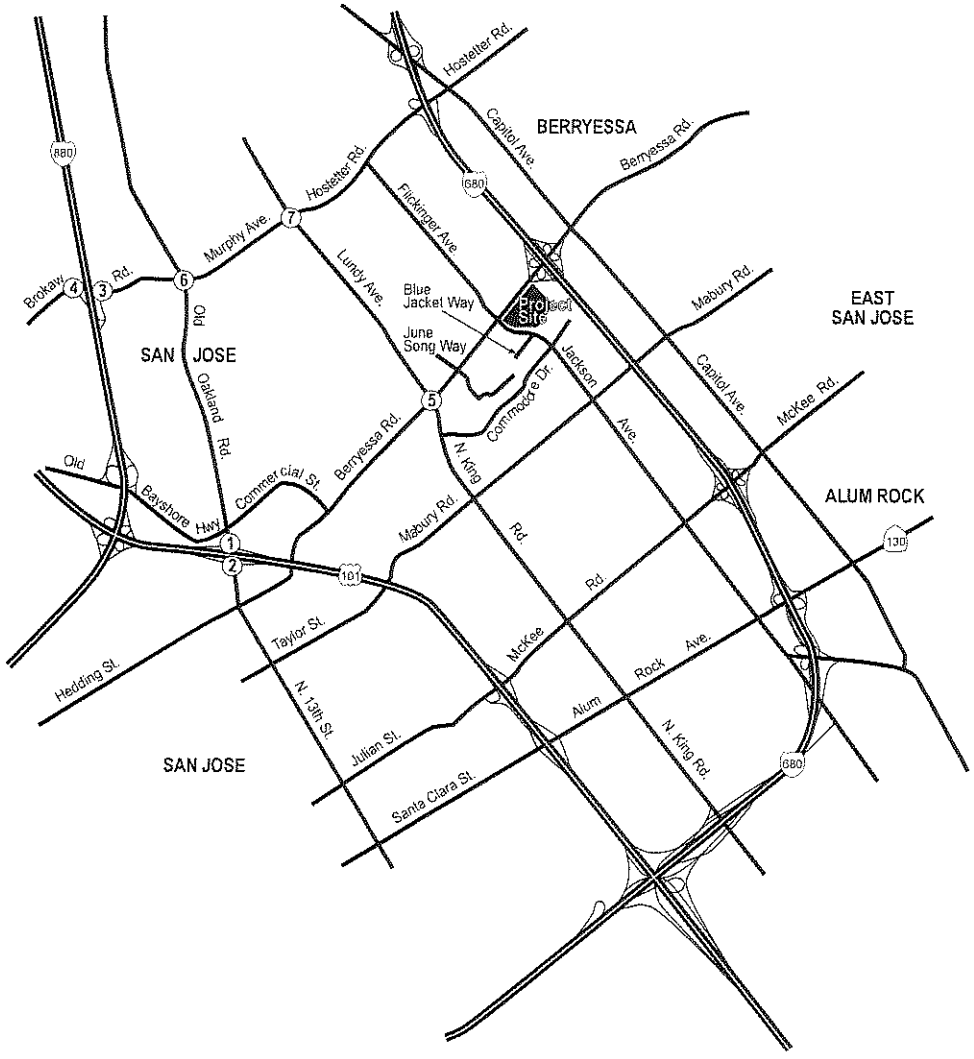




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**Figure 18**
**Project CMP Conditions Peak Hour Volumes**

**Table 16 Project CMP Conditions Level of Service**

| # | INTERSECTION | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|
| | | Avg. Delay | Critical V/C | LOS | Avg. Delay | Critical V/C | LOS |
| 1 | US 101 Northbound Ramp & Old Oakland Road | **149.9** | **1.472** | **F** | 45.9 | 1.028 | D |
| 2 | US 101 Southbound Ramp & Old Oakland Road | 24.4 | 0.623 | C | **76.8** | **1.216** | **E-** |
| 3 | Interstate 880 Northbound Ramp & Brokaw Road | 50.5 | 1.025 | D | 22.1 | 0.808 | C+ |
| 4 | Interstate 880 Southbound Ramp & Brokaw Road | **89.6** | **1.093** | **F** | **100.0** | **1.192** | **F** |
| 5 | Berryessa Road & Lundy Avenue | 45.3 | 0.698 | D | 51.4 | 0.819 | D- |
| 6 | Brokaw Road & Old Oakland Road | 51.1 | 0.911 | D- | 51.5 | 0.933 | D- |
| 7 | Murphy Avenue & Lundy Avenue | 45.6 | 0.859 | D | 40.1 | 0.797 | D |

Average Delay - in seconds per vehicle
/2 6 – /eveQ,I 6eUlce

### 3.4.5 Intersection Operation

According to the City of San Jose intersection level of service standards, all study intersections would operate at acceptable levels of service under the project condition, with the exceptions of two intersections during the AM peak period, and one intersections during the PM Peak period.

The addition traffic generated by the proposed project would result in potentially significant impacts at one intersection during the AM peak hour and at one intersection during the PM peak hour.

During the AM Peak Hour, the proposed project would add traffic resulting in a greater than four second increase in average delay, and a 0.01 or greater increase in the Critical V/C ratio at the intersections of US 101 Northbound Ramps/Old Oakland Road; resulting in a potentially significant impact. The intersection of I-880 Southbound/Brokaw Road would operate at a deficient LOS F, however the project would not add a significant amount of traffic to the critical movements and the average delay would not significantly increase. Each of the remaining study intersections would operate at an acceptable LOS E or better during the AM peak hour.

During the PM Peak Hour, the proposed project would add traffic resulting in a greater than four second increase in average delay, and a 0.01 or greater increase in the Critical V/C ratio at the intersection of I-880 Southbound/Brokaw Road; resulting in a potentially significant impact. Each of the remaining study intersections would operate at an acceptable LOS E or better during the PM peak hour.

### 3.4.6 Transit Analysis

Based on observations of the capacity and occupancy rates of the public transit routes servicing the project area, it was concluded that transit trips to be generated by the proposed project would not significantly impact the public transit service. With an estimated transit mode share of five to 12 percent, the proposed project would generate 15 to 35 peak-hour transit trips each weekday distributed to the various routes and directions, which would not significantly increase load factors on transit vehicles. The estimate of five to 12 percent transit trips is based on the trip reduction values that would be applied to the vehicle trip generation estimates if the project site were within 2,000 feet of a light rail station. However, because the project site is approximately 3,000 feet from the Berryessa Light Rail Station, the five to 12 percent was used as a conservative estimate for transit trips. A transit-related reduction was not applied to the vehicle trip generation estimates previously discussed. The proposed project is not anticipated to negatively affect any of the existing transit routes, service, or bus stop locations.

### 3.4.7 Bicycles and Pedestrians

The study intersections in the immediate vicinity of the project site are currently signalized and equipped with pedestrian crossing signals and crosswalks. The expected increase in vehicular traffic volumes at these intersections would not significantly impact the pedestrian movements. The intersection of Jackson Avenue and Berryessa Road would be modified as part of the proposed project, and existing pedestrian facilities would be maintained or improved.

Also, the pedestrian movements along the roadway network adjacent to the project site would be improved by the addition of proposed sidewalks (along the project frontage), and therefore no adverse impacts are anticipated.

## 3.5 FREEWAY LEVEL OF SERVICE

Existing traffic conditions at selected freeway segments have been evaluated for AM and PM peak hours using the operational analysis procedures from the Transportation Research Board's *2000 Highway Capacity Manual* as required by the Santa Clara County Congestion Management Program.

### 3.5.1 Freeway Level of Service Methodology

As described in the 2000 Highway Capacity Manual, the determination of LOS for freeway segments is based on density, with density calculated as:

$$d = \frac{V}{N \times S}$$

where, d: density (vehicles per mile per lane, vpmpl)
V: peak hour volume (vehicles per hour, vph)
N: number of travel lanes (lanes)
S: average travel speed (miles per hour, mph)

**Table 16** identifies the ranges of density used to define levels of service for freeway segments. LOS ranges from LOS A, or free-flow conditions, to LOS F, or highly congested conditions.

**Table 17 CMP Freeway Level of Service Definitions**

| Level Of Service | Density* | Speed (miles/hr) | Description of Traffic Condition* |
|---|---|---|---|
| A | Density ≤ 11.0 | 67.0 ≤ speed | Free flow operations |
| B | 11.0 < density ≤ 18.0 | 66.5 ≤ speed < 67.0 | Reasonably free-flow, and free-flow speeds are maintained. |
| C | 18.0 < density ≤ 26.0 | 66.0 ≤ speed < 66.5 | Flow with speeds and or near the free-flow speed |
| D | 26.0 < density ≤ 46.0 | 46.0 ≤ speed < 46.0 | Level at which speed begin to decline with increasing flow |
| E | 46.0 < density ≤ 58.0 | 35.0 ≤ speed < 46.0 | Operation at capacity |
| F | 58.0 < density | Speed < 35.0 | Breakdowns in vehicular flow |

Source: Santa Clara County Congestion Management Prograp – Traffic LOS Analysis Guidelines, June 2003,
G ªensity based on passenger cars per mile per lane (pcpmpl).

### 3.5.2 Freeway Segment Operation

According to the County of Santa Clara, the performance standard of a CMP facility is LOS "(". The @veOof \ervlFe at CMP freeway \egp ents is based on density in terms of passenger cars per mile per lane (pcpmpl).

The impact criteria for freeway segments are as follows:

- The addition of the project traffic causes a freeway segment operating at LOS E or better under the existing plus approved projects (background condition) to operate at LOS F, a significant impact would occur.

- t hen a freeway segment is already operating at Level of Service F under the background condition, and the addition of the project traffIF lV greater than one ser-ent of a freeway \egp ent'V capacity, a significant impact would occur.

Under the existing conditions, several freeway segments along US 101, I-680, and I-880 currently operate at deficient levels. The amount of project related traffic added to the study freeway segments would be less than one percent of the respective capacity at each location. **Tables 17** and **18** summarized the existing freeway segments and the amount of traffic that would be added to each segment by both the proposed project and residential uses at the Nola Property.

## Table 18 CMP Freeway Segment Analysis - AM Peak Hour

| Segment | | | | EXISTING CONDITIONS | | | | | PROJECT CONDITIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Freeway | From/To | To/From | Direction | Lanes | Ave. Speed | Volume | Density | LOS | Project Trips | Density | LOS | Increase % of Capacity | Impact ? |
| US 101 | Yerba Buena | Capitol Expwy | NB | 3 | 29 | 5,660 | 65 | **F** | 10 | 65.2 | **F** | 0.14% | **NO** |
| US 101 | Yerba Buena | Capitol Expwy | NB-HOV | 1 | 65 | 2,020 | 31 | D | 3 | 31.1 | D | 0.14% | |
| US 101 | Yerba Buena | Capitol Expwy | SB | 3 | 66 | 4,550 | 23 | A | 15 | 23.1 | C | 0.22% | |
| US 101 | Yerba Buena | Capitol Expwy | SB-HOV | 1 | 67 | 670 | 10 | A | 5 | 10.1 | A | 0.22% | |
| US 101 | Capitol Expwy | Tully Rd | NB | 3 | 21 | 5,100 | 81 | **F** | 10 | 81.1 | **F** | 0.14% | **NO** |
| US 101 | Capitol Expwy | Tully Rd | NB-HOV | 1 | 41 | 2,090 | 51 | E | 3 | 51.1 | E | 0.14% | |
| US 101 | Capitol Expwy | Tully Rd | SB | 3 | 65 | 5,850 | 30 | A | 15 | 30.1 | D | 0.22% | |
| US 101 | Capitol Expwy | Tully Rd | SB-HOV | 1 | 67 | 540 | 8 | A | 5 | 8.1 | A | 0.22% | |
| US 101 | Tully Rd | Story | NB | 3 | 51 | 6,580 | 43 | D | 10 | 43.1 | D | 0.14% | |
| US 101 | Tully Rd | Story | NB-HOV | 1 | 66 | 1,850 | 28 | D | 3 | 28.1 | D | 0.14% | |
| US 101 | Tully Rd | Story | SB | 3 | 66 | 4,750 | 24 | A | 15 | 24.1 | C | 0.22% | |
| US 101 | Tully Rd | Story | SB-HOV | 1 | 67 | 400 | 6 | A | 5 | 6.0 | A | 0.22% | |
| US 101 | Old Oakland | I-880 | NB | 3 | 21 | 5,040 | 80 | **F** | 20 | 80.3 | **F** | 0.29% | **NO** |
| US 101 | Old Oakland | I-880 | NB-HOV | 1 | 24 | 1,800 | 75 | **F** | 7 | 75.3 | **F** | 0.29% | **NO** |
| US 101 | Old Oakland | I-880 | SB | 3 | 67 | 3,420 | 17 | A | 11 | 17.1 | B | 0.16% | |
| US 101 | Old Oakland | I-880 | SB-HOV | 1 | 67 | 340 | 5 | A | 4 | 5.1 | A | 0.16% | |
| US 101 | I-880 | Old Bayshore | NB | 3 | 12 | 3,850 | 107 | **F** | 20 | 107.5 | **F** | 0.29% | **NO** |
| US 101 | I-880 | Old Bayshore | NB-HOV | 1 | 21 | 1,680 | 80 | **F** | 7 | 80.3 | **F** | 0.29% | **NO** |
| US 101 | I-880 | Old Bayshore | SB | 3 | 67 | 3,220 | 16 | A | 11 | 16.1 | B | 0.16% | |
| US 101 | I-880 | Old Bayshore | SB-HOV | 1 | 67 | 270 | 4 | A | 4 | 4.1 | A | 0.16% | |

(Table Continued)

## TABLE 17 Freeway Segment Analysis - AM Peak Hour (Continued)

| Segment | | | | EXISTING CONDITIONS | | | | | PROJECT CONDITIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Freeway | From/To | To/From | Direction | Lanes | Ave. Speed | Volume | Density | LOS | Project Trips | Density | LOS | Increase % of Capacity | Impact ? |
| I-680 | N. Capitol | Hostetter | NB | 4 | 64 | 8,450 | 33 | D | 19 | 33.1 | D | 0.21% | |
| I-680 | N. Capitol | Hostetter | SB | 4 | 66 | 7,390 | 28 | D | 10 | 28.0 | D | 0.11% | |
| I-680 | Hostetter | Berryessa | NB | 4 | 63 | 8,570 | 34 | D | 19 | 34.1 | D | 0.21% | |
| I-680 | Hostetter | Berryessa | SB | 4 | 66 | 5,540 | 21 | C | 10 | 21.0 | C | 0.11% | |
| I-680 | Berryessa | McKee | NB | 4 | 50 | 8,800 | 44 | D | 26 | 44.1 | D | 0.28% | |
| I-680 | Berryessa | McKee | SB | 4 | 66 | 6,340 | 24 | C | 41 | 24.2 | C | 0.45% | |
| I-680 | McKee | Alum Rock | NB | 4 | 32 | 7,810 | 61 | **F** | 26 | 61.2 | **F** | 0.28% | **NO** |
| I-680 | McKee | Alum Rock | SB | 4 | 38 | 8,270 | 53 | E | 41 | 54.7 | E | 0.45% | |
| I-880 | Great Mall | Montague | NB | 3 | 66 | 5,150 | 26 | C | 25 | 26.1 | D | 0.36% | |
| I-880 | Great Mall | Montague | SB | 3 | 66 | 5,350 | 27 | D | 13 | 27.1 | D | 0.19% | |
| I-880 | Montague | Brokaw | NB | 3 | 65 | 5,850 | 30 | D | 25 | 30.1 | D | 0.36% | |
| I-880 | Montague | Brokaw | SB | 3 | 66 | 4,950 | 25 | C | 13 | 25.1 | C | 0.19% | |
| I-880 | US 101 | 1st | NB | 3 | 54 | 6,640 | 41 | D | 25 | 41.1 | D | 0.36% | |
| I-880 | US 101 | 1st | SB | 3 | 66 | 5,540 | 28 | D | 13 | 28.0 | D | 0.19% | |
| I-880 | 1st | SR 87 | NB | 3 | 63 | 6,430 | 34 | D | 24.8 | 34.2 | D | 0.36% | |
| I-880 | 1st | SR 87 | SB | 3 | 65 | 5,850 | 30 | D | 13.3 | 30.1 | D | 0.19% | |

[1] 2004 Monitoring & Conformance Report. Santa Clara County Congestion Management Program. March 2005

## Table 19 Freeway Segment Analysis - PM Peak Hour

| Segment | | | | EXISTING CONDITIONS | | | | | PROJECT CONDITIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Freeway | From/To | To/From | Direction | Lanes | Ave. Speed | Volume | Density | LOS | Project Trips | Density | LOS | Increase % of Capacity | Impact ? |
| US 101 | Yerba Buena | Capitol Expwy | NB | 3 | 66 | 3,960 | 20 | C | 17 | 20.1 | C | 0.25% | |
| US 101 | Yerba Buena | Capitol Expwy | NB-HOV | 1 | 67 | 800 | 12 | B | 6 | 12.0 | B | 0.25% | |
| US 101 | Yerba Buena | Capitol Expwy | SB | 3 | 66 | 3,760 | 19 | C | 10 | 19.0 | C | 0.14% | |
| US 101 | Yerba Buena | Capitol Expwy | SB-HOV | 1 | 67 | 1,140 | 17 | B | 3 | 17.1 | B | 0.14% | |
| US 101 | Capitol Expwy | Tully Rd | NB | 3 | 65 | 5,660 | 29 | D | 17 | 29.1 | D | 0.25% | |
| US 101 | Capitol Expwy | Tully Rd | NB-HOV | 1 | 67 | 800 | 12 | B | 6 | 12.0 | B | 0.25% | |
| US 101 | Capitol Expwy | Tully Rd | SB | 3 | 43 | 6,320 | 49 | E | 10 | 49.1 | E | 0.14% | |
| US 101 | Capitol Expwy | Tully Rd | SB-HOV | 1 | 66 | 1,580 | 24 | C | 3 | 24.0 | C | 0.14% | |
| US 101 | Tully Rd | Story | NB | 3 | 66 | 5,350 | 27 | D | 17 | 27.1 | D | 0.25% | |
| US 101 | Tully Rd | Story | NB-HOV | 1 | 67 | 670 | 10 | A | 6 | 10.1 | A | 0.25% | |
| US 101 | Tully Rd | Story | SB | 3 | 23 | 5,310 | 77 | **F** | 10 | 77.1 | **F** | 0.14% | **NO** |
| US 101 | Tully Rd | Story | SB-HOV | 1 | 51 | 2,190 | 43 | D | 3 | 43.0 | D | 0.14% | |
| US 101 | Old Oakland | I-880 | NB | 3 | 66 | 4,750 | 24 | C | 10 | 24.0 | C | 0.15% | |
| US 101 | Old Oakland | I-880 | NB-HOV | 1 | 67 | 670 | 10 | A | 3 | 10.1 | A | 0.15% | |
| US 101 | Old Oakland | I-880 | SB | 3 | 15 | 4,280 | 95 | F | 19 | 95.5 | F | 0.28% | |
| US 101 | Old Oakland | I-880 | SB-HOV | 1 | 42 | 2,100 | 50 | E | 6 | 50.2 | E | 0.28% | |
| US 101 | I-880 | Old Bayshore | NB | 3 | 66 | 4,360 | 22 | C | 10 | 22.1 | C | 0.15% | |
| US 101 | I-880 | Old Bayshore | NB-HOV | 1 | 67 | 800 | 12 | B | 3 | 12.0 | B | 0.15% | |
| US 101 | I-880 | Old Bayshore | SB | 3 | 10 | 3,420 | 114 | **F** | 19 | 114.6 | **F** | 0.28% | **NO** |
| US 101 | I-880 | Old Bayshore | SB-HOV | 1 | 27 | 1,840 | 68 | **F** | 6 | 68.4 | **F** | 0.28% | **NO** |

(Table Continued)

## Table 18 Freeway Segment Analysis - PM Peak Hour (Continued)

| Segment | | | | EXISTING CONDITIONS | | | | | PROJECT CONDITIONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Freeway | From/To | To/From | Direction | Lanes | Ave. Speed | Volume | Density | LOS | Project Trips | Density | LOS | Increase % of Capacity | Impact ? |
| I-680 | N. Capitol | Hostetter | NB | 4 | 66 | 5,810 | 22 | C | 10 | 22.0 | C | 0.11% | |
| I-680 | N. Capitol | Hostetter | SB | 4 | 17 | 6,120 | 90 | **F** | 18 | 90.3 | **F** | 0.20% | **NO** |
| I-680 | Hostetter | Berryessa | NB | 4 | 66 | 7,390 | 28 | D | 10 | 28.0 | D | 0.11% | |
| I-680 | Hostetter | Berryessa | SB | 4 | 27 | 7,340 | 68 | **F** | 18 | 68.1 | **F** | 0.20% | **NO** |
| I-680 | Berryessa | McKee | NB | 4 | 66 | 6,860 | 26 | C | 46 | 26.2 | D | 0.50% | |
| I-680 | Berryessa | McKee | SB | 4 | 37 | 8,140 | 55 | E | 26 | 55.2 | E | 0.28% | |
| I-680 | McKee | Alum Rock | NB | 4 | 65 | 7,540 | 29 | D | 46 | 29.2 | D | 0.50% | |
| I-680 | McKee | Alum Rock | SB | 4 | 39 | 8,270 | 53 | E | 26 | 53.2 | E | 0.28% | |
| I-880 | Great Mall | Montague | NB | 3 | 66 | 5,150 | 26 | D | 13 | 26.1 | D | 0.18% | |
| I-880 | Great Mall | Montague | SB | 3 | 39 | 6,200 | 53 | E | 24 | 53.2 | E | 0.35% | |
| I-880 | Montague | Brokaw | NB | 3 | 66 | 4,360 | 22 | C | 13 | 22.1 | C | 0.18% | |
| I-880 | Montague | Brokaw | SB | 3 | 21 | 5,100 | 81 | **F** | 24 | 81.3 | **F** | 0.35% | **NO** |
| I-880 | US 101 | 1st | NB | 3 | 59 | 6,550 | 37 | D | 13 | 37.1 | D | 0.18% | |
| I-880 | US 101 | 1st | SB | 3 | 10 | 3,420 | 114 | **F** | 24 | 114.8 | **F** | 0.35% | **NO** |
| I-880 | 1st | SR 87 | NB | 3 | 66 | 4,950 | 25 | C | 13 | 25.1 | C | 0.18% | |
| I-880 | 1st | SR 87 | SB | 3 | 17 | 4,590 | 90 | **F** | 24 | 90.5 | **F** | 0.35% | **NO** |

[1] 2004 Monitoring & Conformance Report. Santa Clara County Congestion Management Program. March 2005

## 3.6 FUTURE GROWTH CONDITION

The Cumulative Conditions represent a future scenario with the addition of traffic, growth, and roadway improvements that are from both approved and anticipated, but yet to be approved developments in the vicinity of the project site.

### 3.6.1 Cumulative Traffic Volumes

The Cumulative scenario represents growth in traffic in addition to the approved trip inventory that was analyzed in the Background Conditions. In addition to the trips related to approved projects, trips related to reasonably forecasted projects that have yet to be approved were added to the study intersections. The additional trips added for the cumulative conditions are related to the following projects:

- City oI San Jose Downtown Strategy Plan – Phase 2
- North San Jose Development Plan – Phase 2
- Pan gose/Berryessa oad Flea Market aevelopment
- Goodwill/aAi oesidential aevelopment
- aobbin arive oesidential aevelopment

mroject generated traffic as described in the mroject Conditions analysis was added to the roadway network. **Figure 19** illustrates the Cumulative plus mroject meak eour traffic volumes at each of the study intersections.

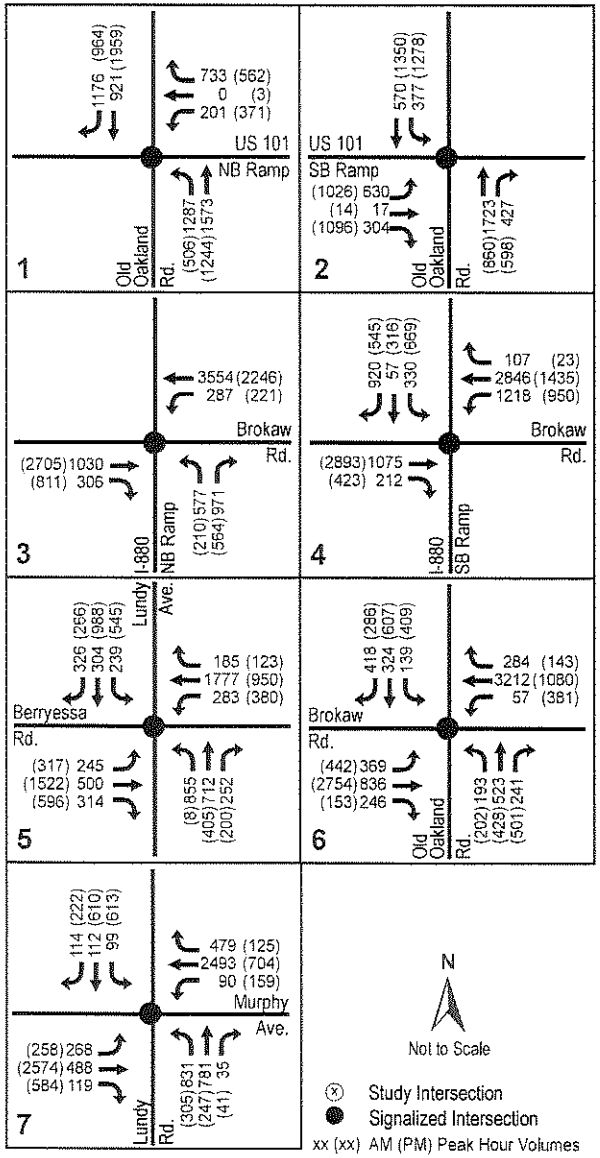
### 3.6.2 Planned Roadway Improvements

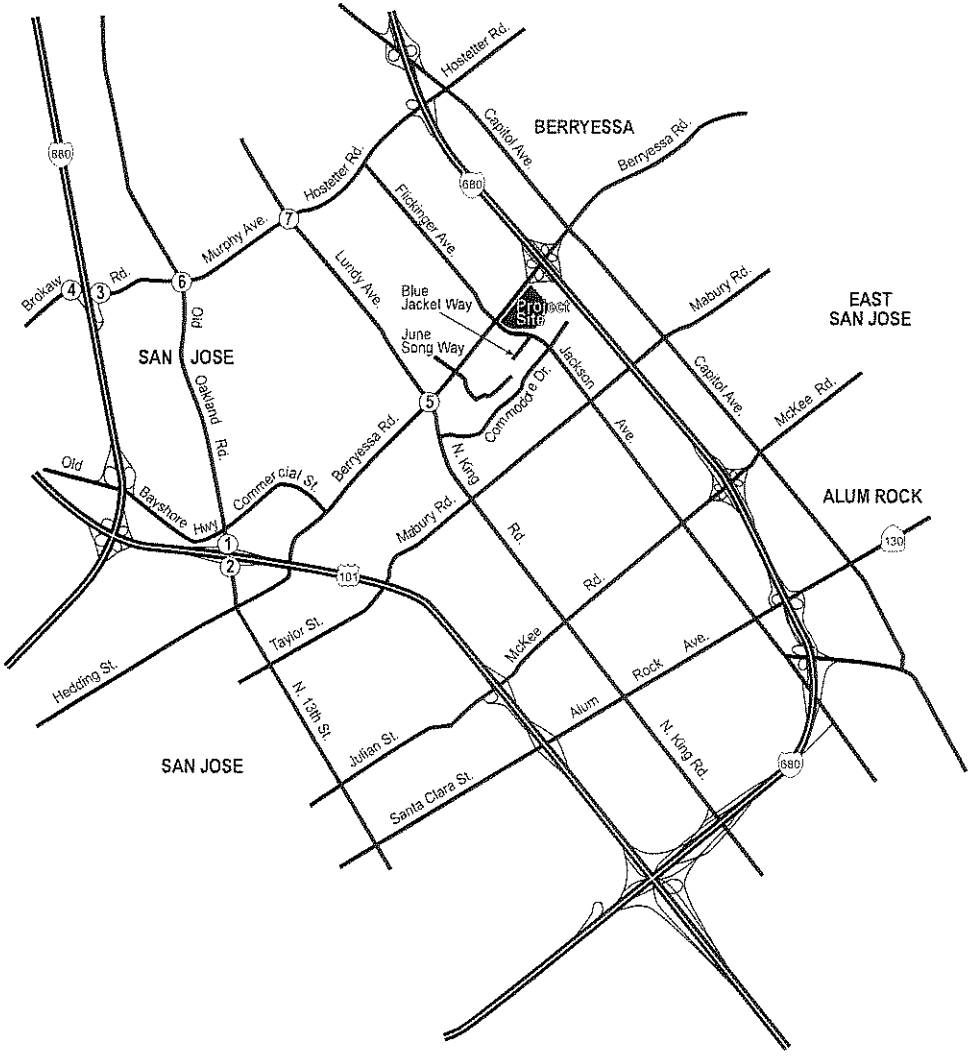
In addition to the anticipated growth in traffic, several planned improvement measures would be included in the cumulative conditions. oadway improvements for this analysis were based on the improvement and mitigation measures presented in the respective traffic analyses conducted for the planned projects described above. The roadway improvements include the following changes:

- US 101 (NB) / OlG OaklanG RoaG – AGG 2nd pB oight Turn and Ond kB i eft Turn i ane
- US 101 (SB) / OlG OaklanG RoaG – AGG 2nd EB oight Turn i ane

### 3.6.3 Intersection Operations

The anticipated growth and the planned roadway improvements were analyzed for the cumulative scenario. Intersection operational levels of service along with their associated critical and average delay are summarized in **Table 19**.

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DKS Associates
TRANSPORTATION SOLUTIONS

**Figure 19**
**Cumulative Plus Project CMP Conditions Peak Hour Volumes**

**Table 20 Future Growth Conditions**

| # | INTERSECTION | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|
| | | Avg. Delay | Critical V/C | LOS | Avg. Delay | Critical V/C | LOS |
| 1 | US 101 Northbound Ramp & Old Oakland Road | 54.2 | 1.06 | D- | 20.5 | 0.78 | C+ |
| 2 | US 101 Southbound Ramp & Old Oakland Road | 27.5 | 0.58 | C | 45.3 | 1.05 | D |
| 3 | Interstate 880 Northbound Ramp & Brokaw Road | 59.4 | 1.07 | E+ | 23.2 | 0.85 | C |
| 4 | Interstate 880 Southbound Ramp & Brokaw Road | **109.3** | **1.16** | **F** | **122.4** | **1.28** | **F** |
| 5 | Berryessa Road & Lundy Avenue | 48.1 | 0.84 | D | 65.3 | .99 | E |
| 6 | Brokaw Road & Old Oakland Road | 53.6 | 0.92 | D- | 56.4 | 0.98 | E+ |
| 7 | Murphy Avenue & Lundy Avenue | 47.7 | 0.89 | D | 41.9 | 0.83 | D |

Avg. Delay: in seconds per vehicle, LOS: Level of Service

For the purposes of this analysis, the estimated operating conditions for the Cumulative Scenario are presented for informational purposes. Significant traffic impacts were not identified for this scenario, as project impacts are based on a near-term analysis as presented previously in this report.

According to the CMP intersection level of service standards, only the intersection of I-880 Southbound Ramps and Brokaw Road would operate at an unacceptable LOS F during the AM peak hour of the cumulative scenario. During the PM peak hour, the same intersection would operate at a deficient LOS F under the cumulative scenario.

## 3.7 RECOMMENDED IMPROVEMENT MEASURES

Recommended improvement measures are presented for the study intersections which would experience potentially significant impacts due to the addition of new project trips to the Background Conditions. An analysis of potential improvement measures was conducted and the following describes the recommended improvement measures for the potentially significant impacts identified under the Project Conditions scenario.

### US 101 Northbound Ramps / Old Oakland Road Intersection Impact #1

During the AM peak hour, the intersection of the US 101 Northbound Ramps and Old Oakland Road would operate at an unacceptable LOS F during the Background Conditions. The addition of project related traffic would result in an increase of average delay of approximately seven seconds, and the critical v/c ratio would increase by approximately .029, resulting in a potentially significant impact.

During the peak periods, the critical movements are the northbound left, the southbound right, and the westbound right-turn movements. During the AM peak hour of the Project Conditions scenario, the proposed project would account for approximately 1.6 percent of the total peak hour traffic through this intersection. During the AM peak hour, the proposed project would add approximately 24 trips to the northbound through movement and 46 trips to the southbound right turn movement. During the PM peak period, the proposed project would add approximately 68 trips through the intersection.

<u>Improvement Measure #1</u>

The recommended improvement measure for this intersection is consistent with the planned roadway improvements identified as part of the North San Jose Development Plan and the Flea Market Development Project. These improvements consist of adding a second southbound right-turn lane and a second northbound left-turn lane. This improvement would require significant modification to the existing structure. The project sponsor has the following alternatives

- Reduce project size such that the impact would no longer be triggered
- Construct the improvement measure such that the impact would be reduced to less than significant levels
- Wait for other developments to improve the interchange area, and determine if a significant impact would still occur.
- PDUWLSDWd In Wie CLW's TUDnsSRUWtion Development Policy (TDP) program.

Alternatively to implementing the recommended improvement measure, the project sponsor P DY SDUWLSDW In Wie CLW's TDP SURJUDP . The CLW RI 6Dn ¯Rse Is In Wie SURFess RI FUEDWnJ a transportation policy for the Old Oakland/Mabury/101 transportation corridor, which will allow developments to pay a traffic impact fee based on the amount traffic sent to the corridor. Three intersections 101/Oakland (N), 101/Oakland (S) and Oakland/Commercial are all covered under this policy. The policy is in draft form but is expected to go for Council approval in October 200T, and a draft version of the TDP report is included in **Appendix F**.

The purpose of the US 101/Oakland/Mabury TDP is to provide additional capacity to the freeway access at the US 101/Oakland Road interchange in order to encourage new development. The intent of the TDP would be to allow more projects to develop and tep SRUDUiQ geneUDte tUDffic cRngestiRn in excess Rf the City's /OS SRQcy stDndDUd fRU D limited period of time prior to construction of the required transportation improvements. 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 the build out of the US 101/Oakland Road interchange and construction of a new US 101/Mabury Road interchange. Based on the new available capacity that would be created, each new development would be required to contribute $30,000 per new PM Peak hour vehicle trip that it would add to the US 101/Oakland Road interchange.

Significance after fmprovement Measure

Per the currently proposed TDP program, the intersection would operate at an acceptable i OS D with approximately 43.4 seconds of average delay during the AM peak hour of the cumulative scenario with implementation of the recommended improvement measure. The impact would be reduced to a less than significant level with implementation of the improvement measure.

**Interstate 880 Southbound Ramps / Brokaw Road Intersection Impact #2**

During the PM peak hour, the intersection of the fnterstate 880 Southbound Ramps and Brokaw Road would operate at an unacceptable i OS c during the Background Conditions. The addition of project related traffic would result in an increase of average delay of approximately four seconds, and the critical v/c ratio would increase by approximately .01S, resulting in a potentially significant impact.

During the peak periods, the critical movements are the southbound left, the eastbound through, and the westbound left-turn movements. During the AM peak hour, the proposed project would add approximately O4 trips to the southbound left-turn movement, nine trips to the eastbound through movement, and five trips to the westbound through movement.

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This intersection of Oakland/Brokaw is located in the North San 9ose Development Policy Area, and mitigation is covered under the NS9 Development Policy, which designates this intersection as exempt from mitigation. Therefore, no further mitigation is required.

# 4.0 CONCLUSION

This section describes the traffic impacts identified in the previous sections.

## 4.1 CITY OF SAN JOSE TRAFFIC IMPACT ANALYSIS

### 4.1.1 Project Impacts

The proposed mixed-use development project would increase traffic by approximately 4,445 daily trips, including 382 AM peak hour trips (149 inbound, 233 outbound) and 419 PM peak hour trips (267 inbound, 152 outbound) would be generated by the proposed developments. Based on the City of San Jose traffic impact criteria, the addition of project-generated traffic would result in potentially significant impacts at two of the study intersections during the AM peak hour, and at one intersection during the PM peak hour.

The number of currently proposed parking spaces would result meet the number of parking spaces required by the Municipal Code.

Recommended improvement measures would improve the operating conditions at the potentially impacted intersections at the US 101/Oakland Road interchange area. The project sponsor should contribute its fai ushaue tR the City's 7D3 S@n for the US 101/Oakland/Mabury corridor based on the amount of traffic added to the intersections during the impacted peak period.

### 4.1.2 Future Growth Impacts

Forecasted traffic generated by future growth would result in deficiently operating intersections in the future growth scenario. auring the AM peak hour, five study intersections would operate at i OS E or worse. auring the PM peak hour, two study intersections would operate at i OS E or worse. Based on the projected number of project trips, the project would be considered cumulatively insignificant at all but one intersection (the intersection of Berryessa Road and Capitol Avenue during the AM peak period). Recommended improvement measures for this intersection would improve cumulative operating conditions to acceptable levels of service and reduce the cumulative impact to a less than significant level.

## 4.2 CMP TRAFFIC IMPACT ANALYSIS

### 4.2.1 CMP Project Impacts

The proposed mixed-use development project would increase traffic by approximately 4,445 daily trips, including 382 AM peak hour trips (149 inbound, 233 outbound) and 419 PM peak hour trips (267 inbound, 152 outbound) would be generated by the proposed developments. Based on the CMP traffic impact criteria, the addition traffic generated by the proposed project would result in potentially significant impacts at one intersection during the AM peak hour and at one intersection during the PM peak hour.

### 4.2.2 Future CMP Growth Impacts

The proposed mixed-use development project in addition to the anticipated growth in the vicinity would result in two CMP intersections operating at i OS F during each of the AM and PM peak hours.