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NOTICE OF AVAILABILITY OF THE MITIGATED NEGATIVE DECLARATION (MND) FOR GENERAL PLAN AMENDMENT, ZONING AMENDMENT, MILPITAS TRANSIT AREA SPECIFIC PLAN AMENDMENT AND SITE DEVELOPMENT PERMIT FOR RESIDENTIAL DEVELOPMENT

Date: August 26, 2011 (*amended 9/28/11*)

Name of Project: Harmony Residential Development & Trade Zone Blvd. Rezone

Location: The proposed project includes rezoning 13.16 acres from Mixed Use Very High Density (MXD3) to Multi-Family High Density (R3), rezone 10.87 acres from Multi-Family High Density (R3) to Parks and Open Space (POS) relocating the park within the Specific Plan, and update some preliminary street locations within the Specific Plan. See Figures 1-6 for rezone locations and project location.

The proposed development project located at 1765 McCandless Drive, APN's 086-41-019, 020, 021, and 022. As shown on Figure 2, the project site is currently developed with three Industrial buildings built in the 1990's. The site and neighboring properties are built-out with office/industrial type uses.

Description of Project: The proposed development would demolish the existing buildings and develop the 12.3 acre McCandless site for 276 single family attached homes and condos. The townhomes and condos will stand between three and four stories high, not to exceed 50' in height, and have a mixed variety of styles that complement one another. Street trees along McCandless Drive are proposed to be removed, but replaced with mitigation. The Trade Zone Blvd. rezone will accommodate future development proposals.

Lead Agency: City of Milpitas

Lead Agency Contact Person: Tiffany Brown, Assistant Planner: (408)586-3283
Tbrown@ci.milpitas.ca.gov

Review Period: Begins August 29, 2011– Ends ~~September 27, 2011~~ October 25, 2011 (*the comment time period has been extended*)

Where Documents are Available for Review:

Milpitas City Hall
Public Service Counter
455 E. Calaveras Blvd
Milpitas, CA 95035

Milpitas Library
40 N. Milpitas Blvd.
Milpitas, CA 95035

City of Milpitas Website
http://www.ci.milpitas.ca.gov/government/planning/environmental.asp

Where to Send Comments: All written comments on the MND must be submitted by ~~September 27, 2011~~ October 25th to:

Tiffany Brown
c/o Lori Casagrande
Milpitas Planning Division
455 East Calaveras Blvd.
Milpitas, CA 95035

LCasagrande@ci.milpitas.ca.gov

Public Comment Session: Public comments regarding the MND will be received at the following meeting: Wednesday, ~~September 28~~ October 26, 2011 at 7:00 p.m., Milpitas City Hall Council Chambers located on the 2nd floor at 455 E. Calaveras Blvd., Milpitas, CA 95035.

Signature: Tiffany Brown Date: August 26, 2011 (*amended 9/28/11*)
Tiffany Brown, Assistant Planner for the City of Milpitas

Appendix G

ENVIRONMENTAL CHECKLIST FORM

1. Project title: Harmony Development & Tade Zone Blvd. Rezone

2. Lead agency name and address: City of Milpitas, 455 E Calaveras Blvd, Milpitas, CA 95035

3. Contact person and phone number: Tiffany Brown, 408-586-3283

4. Project location: North West intersection at McCandless Drive and Montague Expressway & Montague and Trade Zone Blvd.

5. Project sponsor's name and address: Dean Mills with D.R. Horton, 6630 Owens Drive, Pleasanton, CA 94588

6. General plan designation: Multi-Family Residential High Density and Boulevard Very High Density Mixed Use

7. Zoning: Multi-Family Residential High Density (R3) and Very High Density Mixed Use (MXD3)

8. Description of project:

The project includes two components. The first component referred to as “Rezone” includes a General Plan, Zoning, and Specific Plan Amendment to rezone 13.16 acres from Mixed Use Very High Density (MXD3) to Multi-Family High Density (R3), update the Parks Master Plan Area Map for location of the park, and rezone 10.87 acres from Multi-Family High Density (R3) to Parks and Open Space (POS) relocating to be consistent with the Transit Area Specific Plan, and update some preliminary street locations within the Specific Plan. The second component referred to as “Development” includes the development of 276 single family attached homes and condos on approximately 12.3 acres. The Development site is wholly located on the northwest of the McCandless and Montague Expressway Intersection (APN’s: 86-41-020, 201, and 022) , while the Rezone changes occur along McCandless Drive and also on a triangular shaped property at the intersection of Montague Expressway and Trade Zone Blvd (APN: 856-36-043). See Figures 1-6 for Development and Rezone locations.

9. Surrounding land uses and setting:

The proposed Development is within the McCandless/Centre Pointe sub-district of the Transit Area Specific Plan and is located at the intersection of Montague Expressway and McCandless Drive. The property is surrounded on four sides by developed parcels and/or creeks. East of the site includes numerous vacant industrial and office buildings (which is the new location of the park within the Specific Plna). To the north of the project are the East Penitencia Creek and other existing industrial buildings on residentially zoned properties. To the South of the project is Montague Expressway, a six lane east/west arterial and the boundary of Milpitas to the City of San Jose. To the west of the property is the Lower Penitencia Creek, a rail line and the existing paragon residential community.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	☐	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Geology /Soils
☐	Greenhouse Gas Emissions	☐	Hazards & Hazardous Materials	☐	Hydrology / Water Quality
☐	Land Use / Planning	☐	Mineral Resources	☐	Noise
☐	Population / Housing	☐	Public Services	☐	Recreation
☐	Transportation/Traffic	☐	Utilities / Service Systems	☐	Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation:

☐ 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.

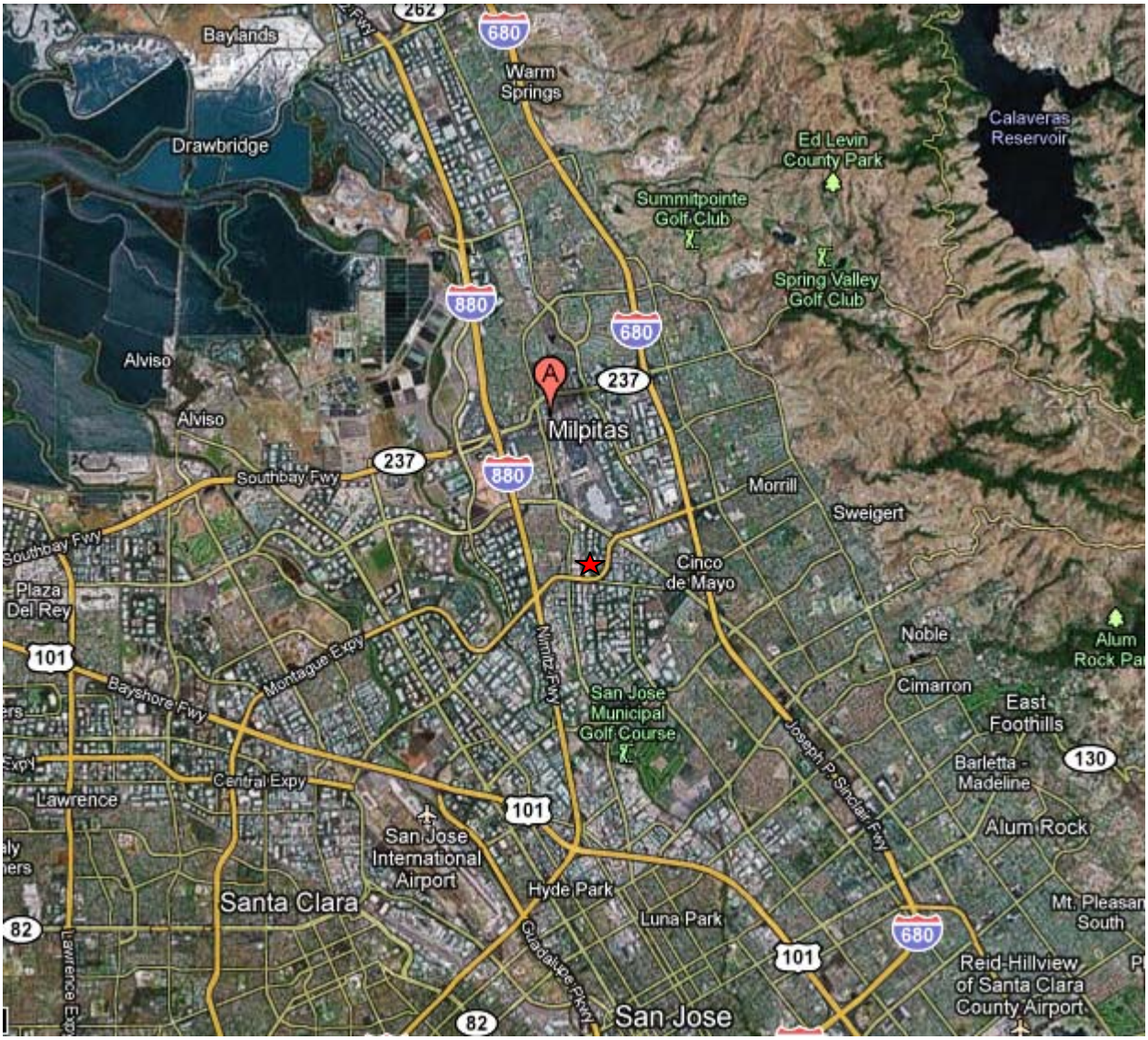
☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to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

_____ _____
Signature Date

_____ _____
Printed Name For

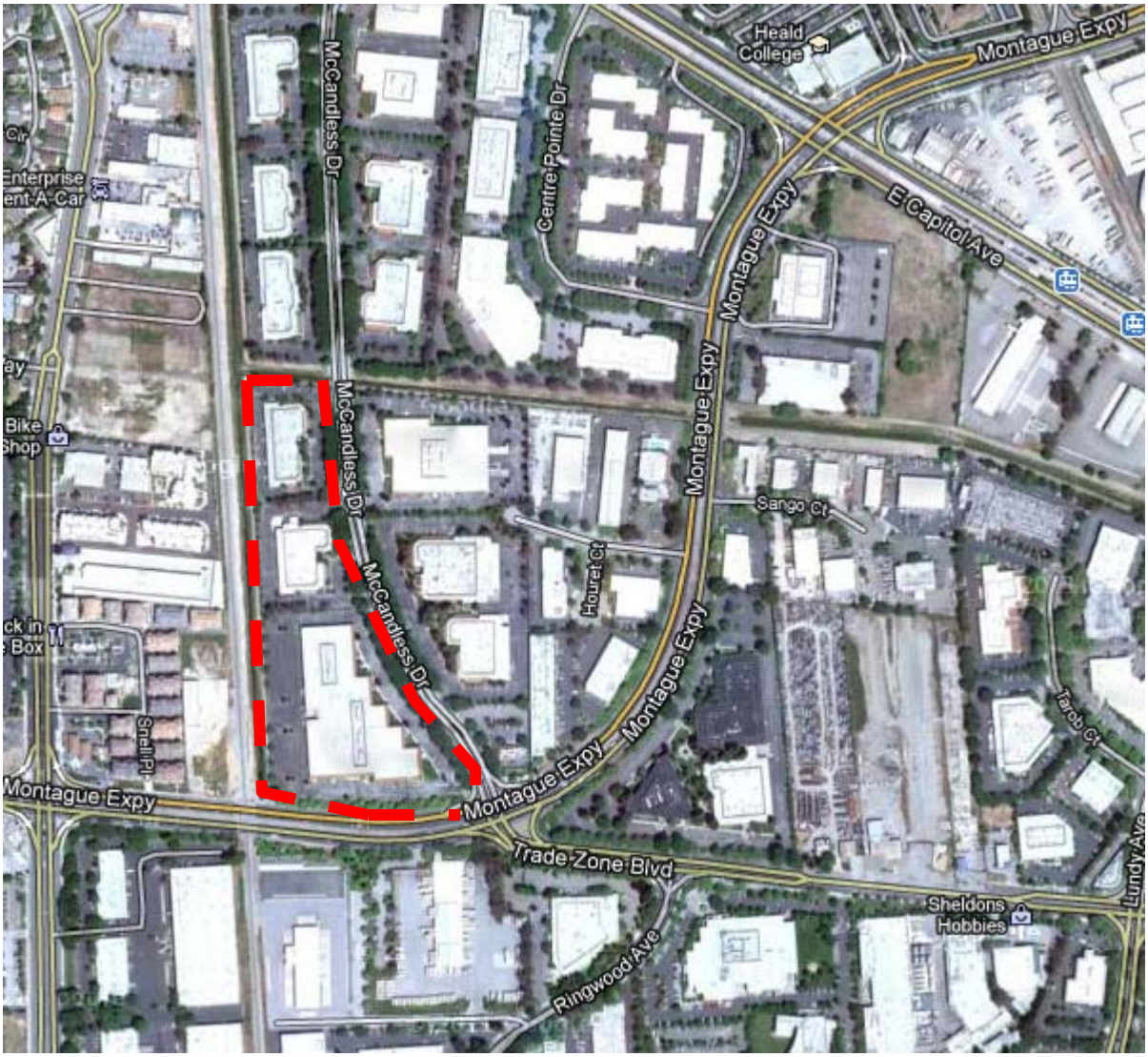
MAPS

Figure 1: Regional Map



★- Project location

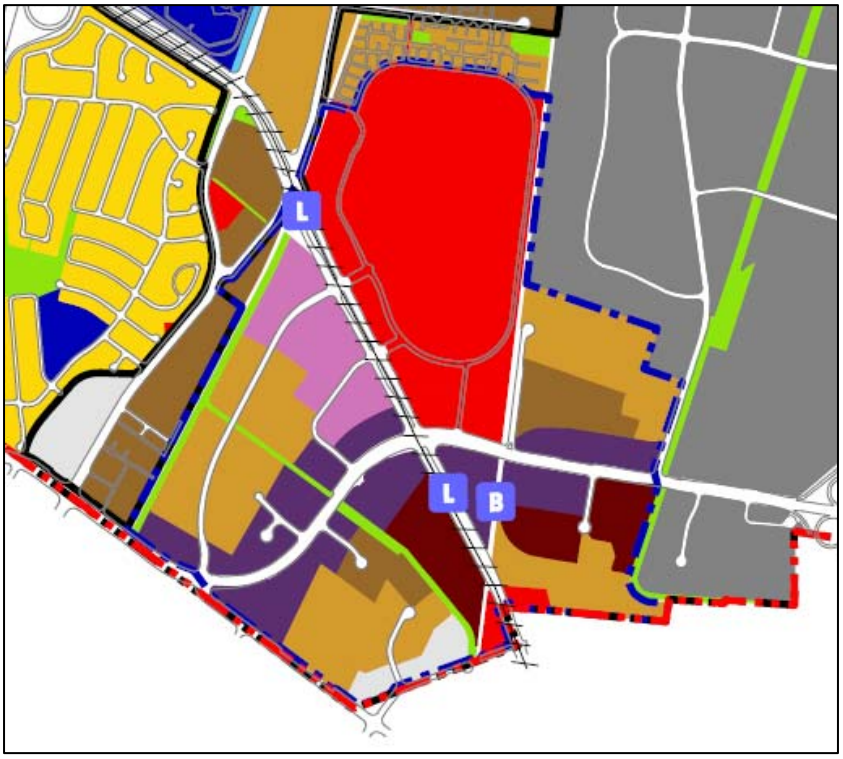
Figure 2: Development Project Vicinity Map



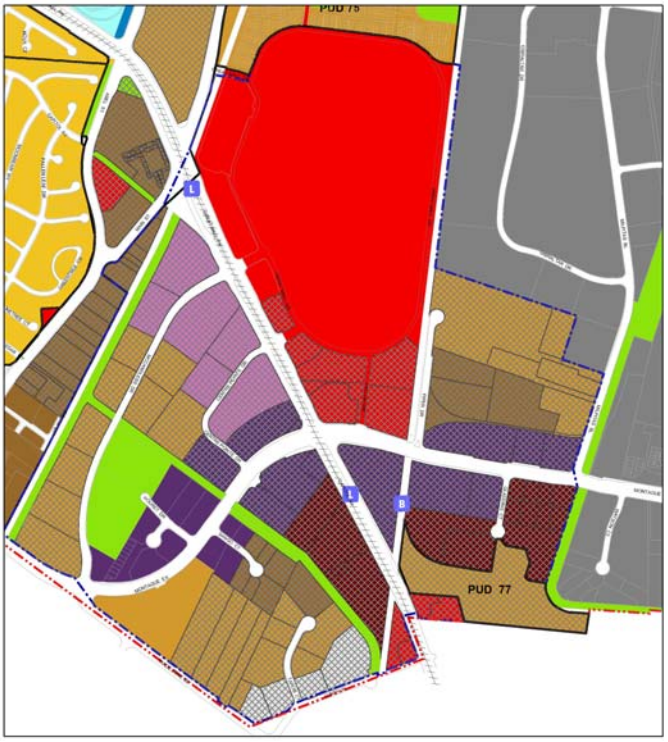
- Project Site

Figure 3: General Plan Amendment

Existing General Plan



General Plan Amendment

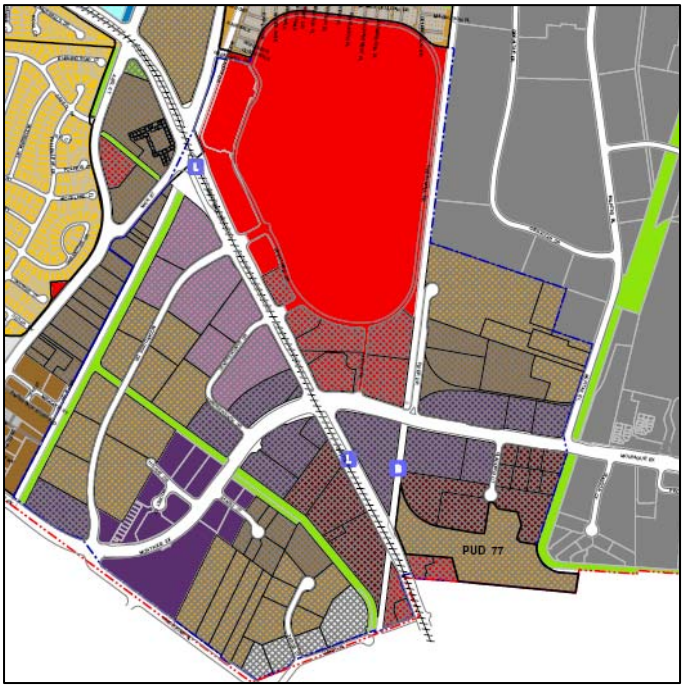


Legend

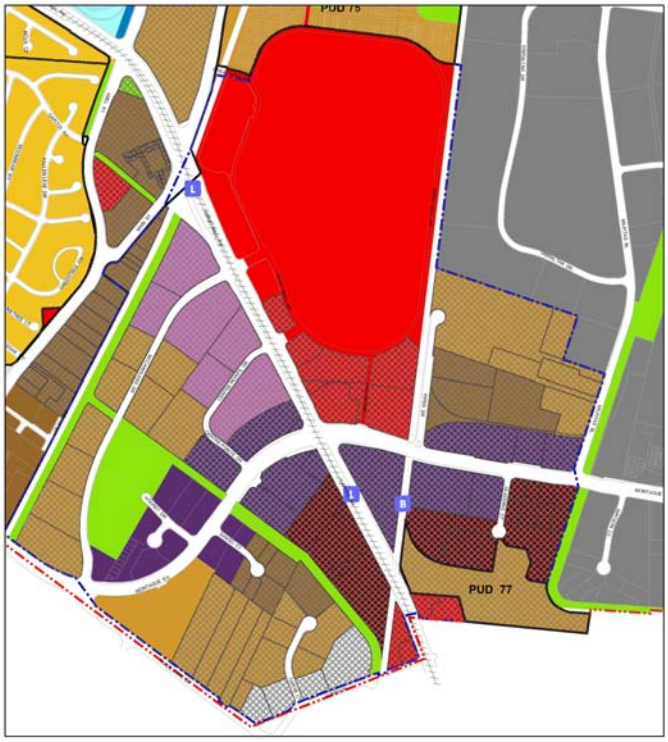
- Hillside Very Low Density (HVL) up to 1 unit/10 gross acres
- Hillside Low Density (HLD) up to 1 unit/gross acre
- Hillside Medium Density (HMD) up to 3 units /gross acre
- Single Family Low Density (SFL) 3-5 units/gross acre
- Single Family Medium Density (SMD) 6-15 units/gross acre
- Multi-Family Residential Medium Density (MFM) 7-11units/gross acre
- Multi-Family Residential High Density (MFH) 12-20 units/gross acre; up to 40 units/gross acre with special findings and PUD approval
- Multi-Family Residential, Very High Density (VHD) 31-40 units/gross acre; up to 60 units/gross acre in TOD
- Urban Residential (URR) 41-75 units/ gross acre; up to 25% additional density with CUP approval
- Mobile Home Park Overlay (MHP)
- Mixed Use (MXD)
- Residential Retail High Denisty Mixed Use (RRMU)
- Boulevard Very High Density Mixed Use (BVMU)
- Professional and Administrative Office (PAO)
- Retail Subcenter (RSC)
- General Commercial (GNC)
- Highway Services (HWS)
- Town Center (TWC)
- Manufacturing and Warehousing (MW)
- Industrial Park (INP)
- Public Facilities (PF)
- Parks and Open Space (POS)
- Waterways (Shown for reference only)
- Midtown Specific Plan Area Boundary
- Transit Area Specific Plan Area Boundary
- Sphere Influence
- City Boundary
- Urban Service Area Boundary
- Urban Growth Boundary
- Light Rail
- Future BART Station
- VTA Light Rail Station
- Fire Station
- Police Station

Figure 4: Zoning Map Amendment

Existing Zoning Map



Proposed Zoning Map



Legend

- Single Family Residential min. 2,500 s.f. lot (R1-2.5)
- Single Family Residential min. 3,000 s.f. lot (R1-3)
- Single Family Residential min. 4,000 s.f. lot (R1-4)
- Single Family Residential min. 5,000 s.f. lot (R1-5)
- Single Family Residential min. 6,000 s.f. lot (R1-6)
- Single Family Residential min. 10,000 s.f. lot (R1-10
- Single Family Residential - Hillside (R1-H)
- One or Two Family (R2)
- Multi-Family Residential, High Density (R3)
- Multi-Family Residential, Very High Density (R4)
- Urban Residential (R5)
- Mixed Use
- Mixed Use High Density (MXD2)
- Mixed Use Very High Density (MXD3)
- Town Center (TC)
- Commercial Office (CO)
- Neighborhood Commercial (C1)
- General Commercial (C2)
- Highway Services (HS)
- Light Industrial (M1)
- Heavy Industrial (M2)
- Industrial Park (MP)
- Institutional (I)
- Agriculture (A)
- Parks and Open Space (POS)
- Waterways
- Proposed BART Station
- VTA LRT Station
- Ground Floor Commercial
- Light Rail
- Urban Growth Boundary
- Urban Service Boundary
- City Boundary
- Transit Area Specific Plan Boundary
- Midtown Specific Plan Boundary
- High Rise Overlay (HR)
- Transit Oriented Development Overlay (TOD)
- Office Overlay (OO)
- Mobile Home Park Overlay (MHP)

Figure 5: Existing Transit Area Specific Plan Area Map

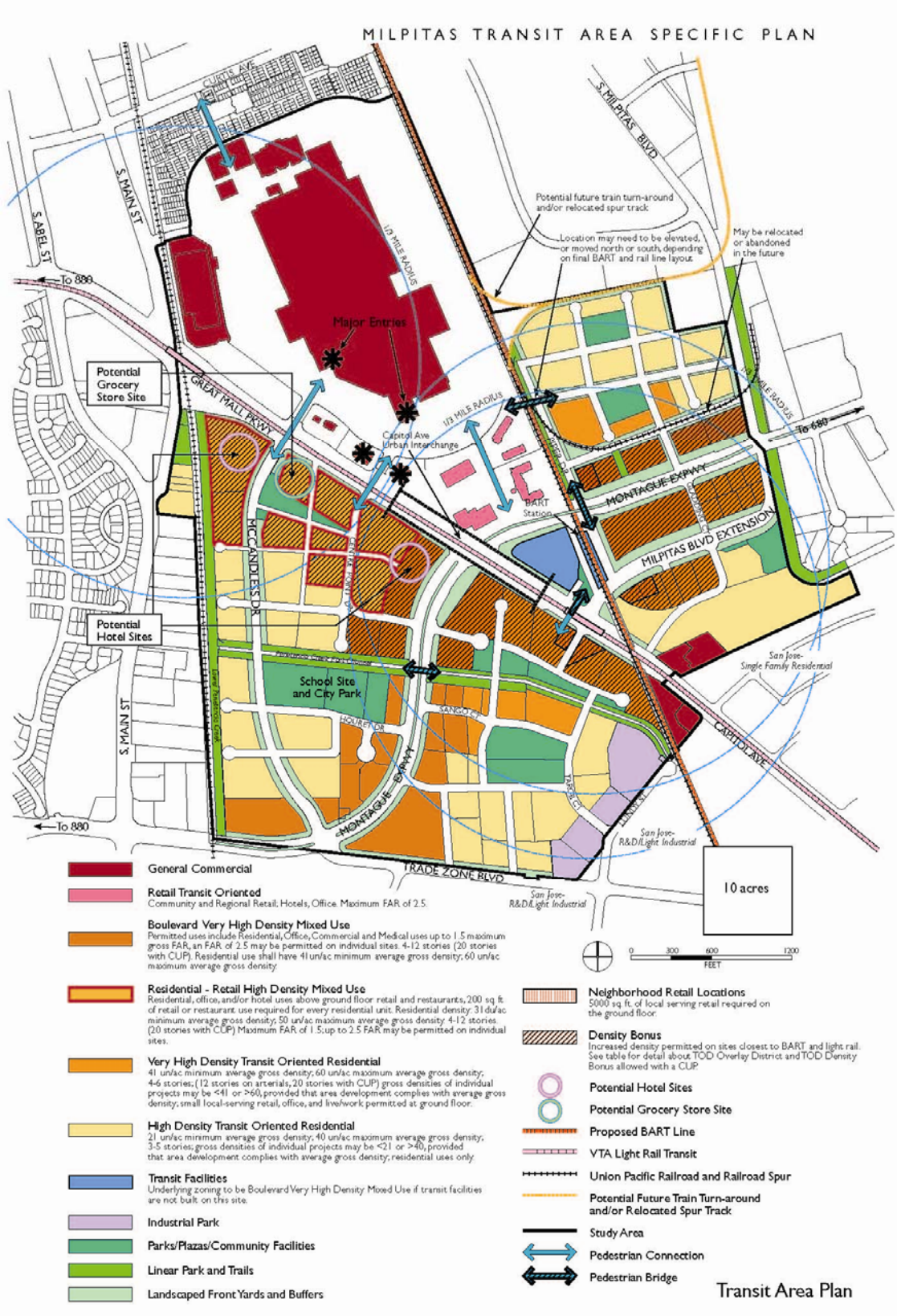
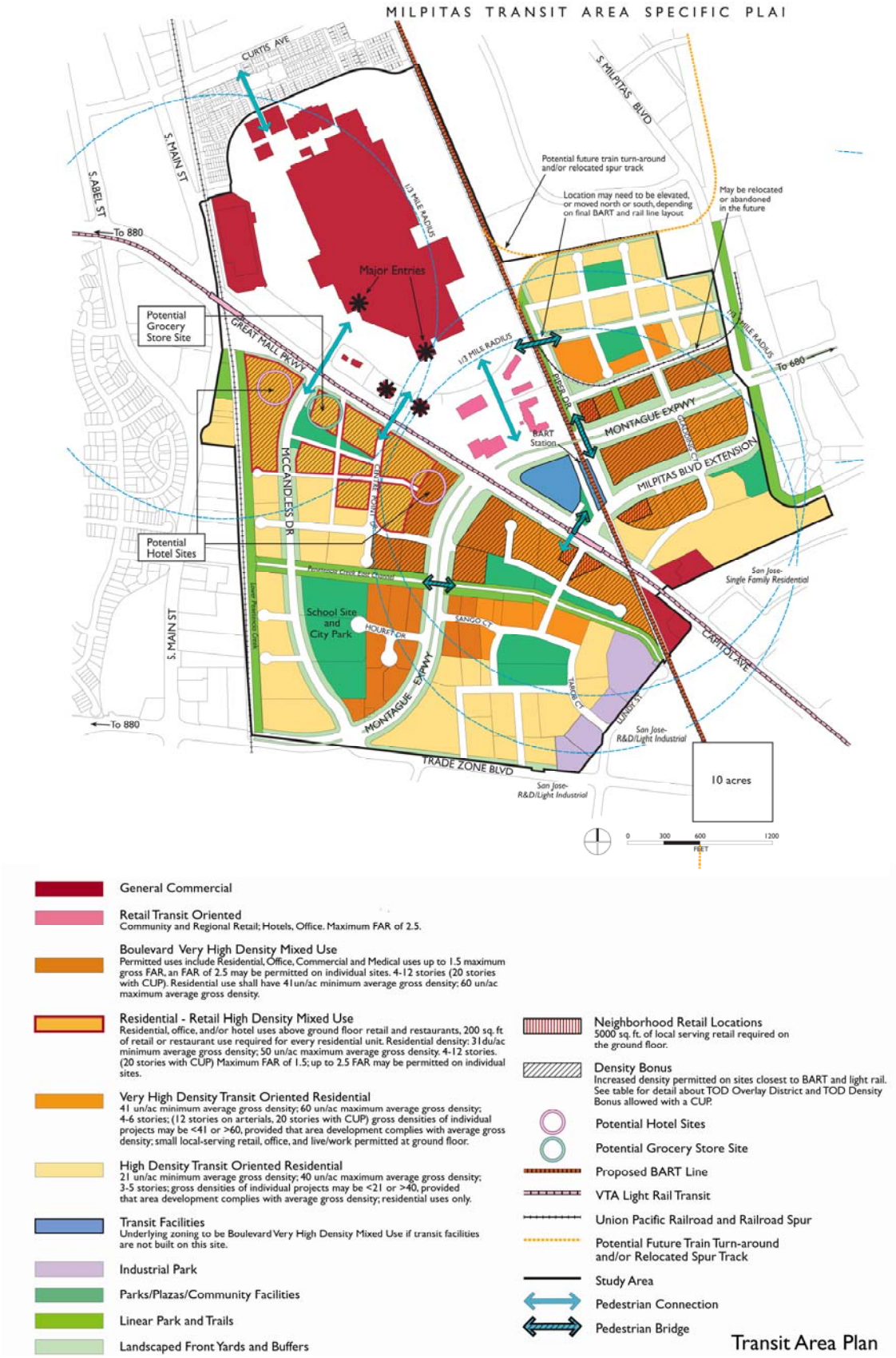


Figure 6: Proposed Transit Area Specific Plan Area Map



EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to less than significance

Introduction:
In 2008 the City of Milpitas adopted the Transit Area Specific Plan and Environmental Impact Report which encompasses 437 acres of land located just south and southeast of Great Mall to the Milpitas border near San Jose. The Specific Plan rezoned Industrial land to incorporate a variety of High Density Mixed Uses and Residential around the existing light rail station and the new location of BART. The Specific Plan established development standards, goals, and policies to help guide new development within the plan area. (See Transit Area Specific Plan Map, Figures 5, 6)

I. AESTHETICS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	
3) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒	☐	☐	
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐	

Setting:
The project requires a General Plan, Zoning, and Specific Plan Amendment to rezone 13.16 acres from Mixed Use Very High Density (MXD3) to Multi-Family High Density (R3), update the Parks Master Plan Area Map for location of the park, and rezone 10.87 acres from Multi-Family High Density (R3) to Parks and Open Space (POS) relocating to be consistent with the Transit Area Specific Plan, and update some preliminary street locations within the Specific Plan. See Figures 1-6 for rezone locations and project location.

The project development for 276 residential units is located at 1765 McCandless Drive, APN's 086-41-019, 020, 021, and 022. As shown on Figure 2, the project site is currently developed with three Industrial buildings built in the 1990's. The Site and neighboring properties are fully developed with office/industrial type uses. The topography is flat and views of the eastern foothills are partially blocked by existing structures in the area.

The Transit Area Specific Plan envisions this area to incorporate High Density Residential and Mixed uses. Recent permits were approved for the property just to the north of the project site for a mixed use product with 1,328 dwelling units in eight buildings, including 92,000 square feet of commercial space on 23 acres (57.7 dwellings per acre). (APNs: 86-33-092, -101, -093, -099, -094, -095, -098).

The proposed development project would demolish the existing buildings, grade and prepare the 12.3 acre site for 276 single family attached homes and condos. The townhomes and condos will stand between

three and four stories high, not to exceed 50' in height, and have a mixed variety of styles that complement one another.

There are approximately 187 trees located on the Development site. Of these trees, 55 are protected under the City's Tree Ordinance. Some of them are mature and established, and line McCandless Drive. Within the McCandless/Centre Pointe Subdistrict, the street trees along McCandless were to be preserved and the protection of the those trees were identified as a mitigation measure in the TASP EIR and as a development policy in the TASP (Policy 4.59). The applicant proposes to remove all the existing trees which could substantially degrade the existing visual character or quality of the site and its surroundings, especially along McCandless Drive. The applicant proposes planting 685 new trees onsite along with 52 trees following the upgraded City Trail. The City trail runs parallel to the rear side of the property.

The existing visual character for this area is industrial and offices. Bringing residential to the project site area will change the existing character. However, the Transit Area Specific Plan designated this area for residential type uses and the project is consistent with the Transit Area Specific Plan.

Mitigation Measure
AES-1: The City of Milpitas has a Tree Ordinance that identifies a tree replacement program for the removal of trees. All City ordinances will be enforced on the project. As mentioned, the applicant proposes removal of approximately 187 trees and planting new 685 new trees onsite including 52 new trees along the creek/trail (3.6:1 planting ratio onsite). To mitigate the loss of protected trees along McCandless, the applicant will replace those trees with 36" and 48" box trees interspersed along McCandless Drive.

Conclusion:
The removal of trees will be mitigated pursuant to the Mitigation Measure. Although bringing in residential to this area will change the character of the site, the Transit Area Specific Plan call for new high density residential in this location. The style and materials proposed for the new homes are consistent with the Specific Plan and will be complementary to the approved project to the North and future development. **[Less Then Significant with Mitigation]**

II. AGRICULTURAL AND FOREST 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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined by Public Resources Code section 4526)?	☐	☐	☐	☒	
4) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	

Comment:

The project (Development and Rezone) are not currently used for agricultural purposes and are not designated as farmland of any type.

Conclusion:

The proposed project would not result in impacts to agricultural resources. **[No Impact]**

Setting:

Local and Regional Air Quality
The project site is within the San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is the regional government agency that monitors and regulates air pollution within the air basin.

Both the U.S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The major criteria pollutants are ozone, carbon monoxide, nitrogen dioxide (NOx) sulfur dioxide, and particulate matter.

Toxic Air Contaminants (TACs) are another group of pollutants of concern. There are many different types of TACs, with varying degrees of toxicity. Cars and trucks release at least forty different toxic air contaminants. The most important, in terms of health risk, are diesel particulate, benzene, formaldehyde, 1,3-butadiene and acetaldehyde. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases.

Sensitive Receptors
BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, school playgrounds, childcare centers, retirement homes, convalescent homes, hospitals and medical clinics. There are no close receptors in close proximity to the project site.

III. 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.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	☐	☐	☒	☐	

III. 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.					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
4) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	
5) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	

Comment:

TASP EIR
The BAAQMD generally does not recommend a detailed air quality analysis for projects generating less than 2,000 vehicle trips per day, unless warranted by the specific nature of the project setting. Under the TASP EIR, 7,000 housing units were anticipated to be built. The TASP EIR already analyzed this potential impact of trips generated by the new housing. This project is within the scope of the EIR for the TASP.

Long-Term Air Quality Impacts
BAAQMD has established thresholds for what would be considered a significant addition to existing air pollution. According to the BAAQMD CEQA guidelines, a project that generates more than 80 pounds per day of ozone precursors (i.e., reactive organic gases (ROG) and nitrogen oxides) is considered to have a potentially significant impact on regional air quality.

On an annual basis, the threshold is 15 tons per year.
For a project that does not individually have significant operational air quality impacts, the determination of a significant cumulative air quality impact is based upon an evaluation of the consistency of the project with the local general plan and of the general plan with the most current Clean Air Plan (CAP).

Short-Term Air Quality Impacts
Construction-related air quality impacts associated from the proposed project would be the result of dust creating activities and exhaust emissions of construction equipment. Due to the negligible amount and short duration of these impacts, all are considered to be less than significant, except for the activities generating dust. Construction activities such as demolition, excavation and grading operations and construction vehicles driving over and wind blowing over exposed earth, generate fugitive particulate matter that will affect local and regional air quality. The effects of these dust generating activities will be increased dustfall and locally elevated levels of PM10 downwind of construction activity. Construction dust also has the potential for creating a nuisance at nearby properties. If uncontrolled, dust generated by construction activities could be a significant impact.

Impacts Identified under the Transit Area Specific Plan EIR

1. New development under the proposed Plan could increase population and vehicle miles traveled in the area at a rate greater than that assumed in regional air quality planning and therefore conflict with the implementation of the Bay Area Ozone Strategy. (Significant and Unavoidable)

The City Council adopted a Statement of Overriding Considerations related to Air Quality

Mitigation Measures:
BAAQMD has prepared a list of feasible construction dust control measures that can reduce construction impacts to a level that is less than significant. The following construction practices shall be implemented during construction of the proposed project:

a) Water all active construction areas at least twice daily.

b) Cover all trucks hauling soil, sand, or other loose materials or require all trucks to maintain at least two feet of freeboard

c) Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction site.

d) Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.

e) Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

f) Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).

g) Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)

h) Install sandbags or other effective erosion control measures to prevent silt runoff to public roadways.

i) Replant vegetation in disturbed areas as quickly as possible.

Conclusion:
The development under the entire Transit Area Specific Plan could increase population and vehicle miles traveled in the area at a rate greater than that assumed in the regional air quality planning and therefore conflict with the implementation of the Bay Area Ozone Strategy, the proposed project would not result in significant long-term regional or local air quality impacts. Short-term air quality impacts associated with construction would be reduced to less than significant levels wit the implementation of standard construction measures and mitigation measures. **[Less Than Significant Impact with Mitigation]**

IV. BIOLOGICAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐	
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒	
3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒	
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☐	☒	☐	
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐	
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	

Comment:
There are approximately 187 trees located on the Development site located northwest of the McCandless and Montague Expressway Intersection. These trees range in age, health, size and species. Of these trees,

55 are protected under the City's Tree Ordinance. Policy 4.59 of the TASP calls for the preservation of the trees along the McCandless Drive corridor. The applicant proposes to remove all the existing trees, develop the site, and plant 685 new trees onsite along with planting 52 new trees following the creek/trail. The removal of these existing trees could affect wildlife habitat. **[Significant Impact]**

Mitigation Measure

BIO-1: The City of Milpitas has a Tree Ordinance that identifies a tree replacement program for the removal of trees. All City ordinances will be enforced on the project. As mentioned, the applicant is removing approximately 187 trees and planting new 685 new trees onsite including 52 new trees along the creek/trail (3.6:1 planting ratio onsite). To mitigate the loss of protected trees along McCandless, the applicant will replace those trees with 36" and 48" box trees interspersed along McCandless Drive.

BIO-2: As conditioned, the applicant or designee for the development of the new townhome and condominiums on the 12.3 acres northeast of McCandless and Montague Expressway will be required to conduct a raptor study to determine the nesting period of any birds making habitat within the trees proposed for removal. The removal of the trees will not be permitted within the nesting period of the birds.

Conclusion:

The removal of trees will be mitigated pursuant to mitigation Measure BIO-1. The protection of wildlife species making habitat within the trees will be mitigated pursuant to mitigation Measure BIO-2. As mitigated, the proposed development would not result in a significant, adverse, visual or aesthetic impacts. **[Less then Significant Impact with Mitigation]**

CULTURAL RESOURCES

Setting:

Prehistoric Context

The Milpitas area was likely settled by Native Americans between 12,000 and 6,000 years ago. Penutian-speaking peoples migrated into central California around 4,500 years ago and were firmly settled around San Francisco Bay by 1,500 years ago. The descendants of the native groups who lived between the Carquinez Strait and the Monterey area prefer to be called Ohlone, although they are often referred to by the name of their linguistic group, Costanoan.

Milpitas is within the ethnographic territory of the Alson tribe of Ohlone, who occupied the area near the mouth of the Coyote Creek. One factor which likely increased traffic through the Milpitas area was the presence of a deposit of cinnabar (later famous as the mines of
New Almaden) within Tamyen territory, which increased traffic through the early Milpitas area. The cinnabar (used as body paint) stimulated considerable trade. The deposits were known over much of northern California, and parties from as far away as the Columbia River journeyed to Costanoan territory to obtain it.

Trade for other items—such as wooden bows, salt, and pine nuts—also brought many visitors to the Tamyen territories. Wooden bows and salt from the bay were traded to the Plains Miwok. The words “salt” and “bow” were also taken from the Costanoan. Two notable Costanoan village sites lay within the city limits of Milpitas. One, a huge shell mound near the present-day Elmwood Rehabilitation Center, was discovered in 1949 and dates back to the eighteenth century. The other, on the site of the Alviso Adobe near the corner of Calaveras and Piedmont, is at least 3,000 years old and is one of only a handful of archaeological sites in California with such a long history of continuous occupation. Neither of these sites is within the Transit Area Specific Plan boundary.

Historic Context

During the Spanish expeditions of the late 1700s, several missions were founded in the San Francisco Bay Area. After the Mexican government took over the vast missions lands and distributed them among the Californios (Mexican pioneers living in California), the brief but lively "rancho" period began. The land in modern-day Milpitas was divided between the 6,352.9-acre Rancho Rincon de los Esteros, the 4,457.66-acre Rancho Milpitas and the 4,394- acre Rancho Tularcitos.

In the 1850s, large numbers of Americans from the East, Canadians, Irish, Chileans, British, Germans and more arrived to farm the fertile lands of Milpitas. They brought with them their own agricultural traditions, adopting them to the local soils and climate. They continued to raise cattle and horses, but they also conducted dairy operations and planted new crops, such as potatoes. In 1850, they introduced a new means of irrigation, artesian wells, which made possible the cultivation of new vegetable crops and berries. The early settlers farmed the land and set up many businesses on a section of what was then called Mission Road, which by the late 20th century became known as the "Midtown" district. The Midtown area, the oldest part of Milpitas, has few remaining historic residences and was the only commercial district that existed before 1945. Midtown is situated along Main and Abel Streets and is bordered by Montague Expressway in the south and Weller Street in the north.

Milpitas was named after Alviso's rancho by Joseph Weller when the first U.S. Post Office was opened on Main Street. However many locals had taken to calling the collection of buildings at the crossroads along Penitencia Creek "Penitencia," after the small Catholic building next to the creek that was used by the Spanish Padres to hear confession by the nearby natives. The word Milpitas is from the word “Milpa” which is derived from a Mexican Indian word for "place were maize grows."

In the early 1900s, Milpitas served as a popular rest stop for travelers on the old Oakland–San Jose Highway. At the intersection of that road with the Milpitas-Alviso Road, Smith's Corners, patrons for a century before becoming a restaurant in 2001; it still stands. In the 1920s, one of America's earliest "fast food" chain restaurants, "The Fat Boy," opened nearby but was demolished in 1985. When the Ford Motor Assembly Plant came to the southern edge of town, San José indicated interest in making it part of that city. The local inhabitants fought back. The City of Milpitas was the result of a defensive incorporation on January 26, 1954. Later, in 1960, San José attempted to incorporate the city again, but was met with a very lopsided defeat in the election.

The Minute Man was added to the city's seal and flag following this campaign. Ironically, Ford Corporation called the facility the San Jose Ford Motor Assembly Plant. The automobile manufacturing era in Milpitas lasted little more than a quarter century. After the plant closed it remained largely unused for nearly fifteen years. Today, it is the Great Mall of the Bay Area.

The primary impact that could occur would be disturbance of cultural resources during grading and/or development of property, subsequent to adoption of the Specific Plan. Based on the NWIC's evaluation of the environmental setting and features associated with known sites, there is a reasonable possibility of uncovering and identifying additional archaeological deposits in the Planning Area. Existing national, state and local laws as well as policies contained in the General Plan, Midtown Plan, and this Specific Plan would reduce these potential impacts on historic and archaeological resources to less than significant levels. Paleontological resources have been documented to occur in Milpitas in the vicinity of the Planning Area. There is the potential to encounter unidentified fossils during construction of new development in the Transit Area, as Pleistocene alluvium is considered sensitive for vertebrate fossils, which are considered a significant paleontological resource. Since fossils are considered to be nonrenewable resources, such impacts would be considered significant.

The subject properties are located in an area of moderate to low archaeological sensitivity. The prehistoric and historic records search revealed that no prehistoric or historic era sites have been recorded in or adjacent to the project parcel. There is no evidence of recorded historic and/or prehistoric archaeological resources inside or immediately adjacent to the project area.

V. CULTURAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	☐	☐	☒	☐	
2) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	☒	☐	
3) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☐	☒	☐	
4) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	

Comment:

Buried Prehistoric and Historic Resources
Based on relevant archaeological reports for the immediate area, the proposed rezone and development project should have no effect on archaeological resources. The proposed project does include disturbance of native soils for trenching, site grading and other construction activities.
Although it is unlikely that buried cultural materials would be encountered, standard conditions for excavation activities would be applied to the project as described below.

Mitigation Measure: The proposed project shall implement the following standard measure:

CUL-1: As required by County ordinance, this project has incorporated 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.

Conclusion:
The proposed project, with the implementation of the above mitigation measure, would not result in significant impacts to cultural resources. **[Less Than Significant Impact with Mitigation]**

GEOLOGY AND SOILS

Setting:

On-Site Geologic Conditions

The Planning Area is located approximately eight miles from the shoreline of San Francisco Bay. The Project Area slopes gently (less than 2 percent) west towards Lower Penitencia Creek, which runs south to north along the western boundary of the Project Area.

Sediments underlying the Project Area are Quarternary alluvial soils that consist of interlayered, poorly sorted gravel, sand, silt, and clay. The composition and consistency of alluvial soils varies laterally and vertically over small distances and depths. The thickness of the alluvial soils ranges from 1,000 feet at the western edge of the city, along the bay margin, to zero at the base of the foothills of the Diablo Range to the east (City of Milpitas, 2002). Sediments underlying the Project Area consist of fine- to coarse-grained alluvial deposits, and groundwater is located less than 20 feet below the ground surface (ESA, 2005).

Seismicity

The San Francisco Bay Area is one of the most seismically active regions in the United States. Santa Clara County is classified as Zone 4, the most seismically active zone. An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the project site. The degree of shaking is dependent on the magnitude of the event, the distance to its zone of rupture and local geologic conditions.

Several active faults have the potential to cause widespread damage to the City of Milpitas. The California State Mining and Geology Board classifies active faults as faults that have had surface displacement within Holocene time (within the last 11,000 years). The primary active faults in the region are the Hayward and San Andreas faults. The Hayward Fault trends northwest approximately 2 miles east of the planning area; the San Andreas Fault trends northwest through the Santa Cruz Mountains approximately 13 miles to the west. The Hayward Fault was identified by the USGS Working Group on California Earthquake Probabilities as the most likely (27 percent chance) to experience a 6.7 or higher magnitude earthquake by 2032. Also of particular importance to the City of Milpitas is the Calaveras Fault, which trends northwest through Calaveras Reservoir approximately 4 miles east of the project site.

Liquefaction

Soil liquefaction is a condition where saturated granular soils near the ground surface undergo a substantial loss of strength during seismic events. Loose, water-saturated soils are transformed from a solid to a liquid state during ground shaking. Liquefaction can result in significant deformations. Soils most susceptible to liquefaction are loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface. The project site is located within a State of California Seismic Hazard Zone for liquefaction.1

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as a steep bank of a stream channel. The site is directly adjacent to the Penetencia Creek channel.

VI. GEOLOGY AND SOILS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
a) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☒	☐	
b) Strong seismic ground shaking?	☐	☐	☒	☐	
c) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	
d) Landslides?	☐	☐	☒	☐	
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	
3) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐	
4) 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?	☐	☐	☒	☐	
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	

Comment:
The project area along with the project site is located in a mapped liquefaction hazard zone, and soils on the site have a moderate potential for expansion. The project site is not located within a fault rupture zone or landslide hazard zone.

The project area is located in a seismically active region. Geologic conditions on the site will require that the new buildings be designed and constructed in accordance with standard engineering techniques and Uniform Building Code guidelines for Seismic Zone 4, to avoid or minimize potential damage from seismic shaking and liquefaction on the site.

Any proposed development will be designed and constructed in accordance with a design level geotechnical investigation prepared for the site, which will identify the specific design features that will be required for the project, including site preparation, recompaction and lime treatment of subgrade solid, fill replacement and compaction, trench excavations, surface drainage, flexible pavements, slabs-on-grade and curbs, landscape retaining walls, and foundations. With implementation of recommendations in the design level geotechnical report, the project will not expose people or property to significant impacts associated with geologic or seismic conditions on site.

Conclusion:
The proposed project would not result in significant, adverse geology, soils, or seismicity impacts that cannot be avoided through standard engineering and construction techniques.
[Less Than Significant Impact]

Setting:
Global climate change refers to alterations in temperature, wind patterns, precipitation, and other climatic conditions that occur across the earth. Of particular concern is the gradual increase in average temperatures and associated changes in environmental conditions such as rise in sea level. Although there is increasing acceptance of the concept that human activity has an impact on the earth's weather, the extent of the change and the exact contribution from human-caused sources remains in debate. Furthermore, the connection between local landuse decisions and global climate change is not well understood and is not reflected in climate modeling. Nevertheless, there is agreement that certain changes that can occur as a consequence of large-scale land use decisions, such as an increase in vehicle emissions associated with an increase in vehicle trips, may have a cumulative impact on global climate change when combined with emissions throughout California, the nation, and across the globe.

Gases that trap the heat in the Earth's atmosphere are called green house gases (GHG). These gases play a critical role in determining the Earth's surface temperature. Part of the solar radiation that enters the Earth's atmosphere from space is absorbed by the Earth's Surface. The Earth reflects this radiation back toward space, but green house gasses absorb some of the radiation. As a result, radiation that otherwise would have escaped back into space is retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect.

Bay Area Greenhouse Gas Emissions
The bay area Air Quality Management District (BAAQMD) published a Source Inventory of Bay Area Greenhouse Gas Emissions in November 2006. This report compiles direct emissions due to human activities from both stationary and mobile sources in the Bay Area. The green house gas emission factors for each green house gas.

Emissions from Transportation
California's demand for gasoline and diesel has nearly doubled over the last twenty years. In 2004, the State consumed more than 15 billion gallons of gasoline and almost three billion gallons of diesel fuel, which accounted for almost half of all fossil fuel energy that the State consumed.

Emissions from Use of Electricity
The majority of the homes and businesses in the Transit Area use energy that Pacific Gas & Electric (PG&E) obtains from power plants and natural gas fields in northern California and from energy it purchases from outside its service area. These energy sources include utility companies in other western states, including northwest hydroelectric power sources, and Mexico (CEC, 2003). The combustion of fossil fuels to produce electricity generates greenhouse gases including carbon dioxide and to a lesser extent, nitrous oxide and methane.

VII. GREENHOUSE GAS EMISSIONS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	

VII. GREENHOUSE GAS EMISSIONS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 2) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒	

Comment:
According to the Transit Area Specific Plan EIR, the primary sources of greenhouse gas emissions related to urban development in Transit Area are anticipated to continue to be from the combustion of fossil fuels by motor vehicles and from electric power generation. Short-term impacts are also anticipated from construction activity that will occur during buildout under the proposed Transit Area Specific Plan. Because the GHG generation rate is, for the most part, related to growth, policies that reduce energy consumption and fuel usage can have a positive effect. The Transit Area Specific Plan promotes development patterns that will reduce the vehicles miles traveled per capita and proposes a variety of other actions that can reduce emissions, including tree planning. The Transit Area Specific Plan EIR has specific policies for new development within the Transit Area. The implementation of these policies will make the projects impact less then significant.

Mitigation Measures:
Implementation of the following proposed specific Plan policies which encourage and support walking, bicycling and transit usage would reduce this impact to a level that is less than significant:

GRE-1: All development within the Transit Area Specific Plan shall be consistent with the Transit Area Specific Plan EIR Green House Gas Policies that reduce the impacts to less then significant.

Conclusion:
With the implementation of the mitigation measure, the proposed project is less then significant. **[Less then Significant]**

HAZARDS AND HAZARDOUS MATERIALS

Setting:

Background Information

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

Site Conditions

The properties to be rezoned are currently developed light industrial offices. The project development site (12.3 acres) for 276 residential units is currently a fully developed light industrial/office campus with a total of three buildings as well as associated parking lots and landscaped areas.

Potential On-Site Sources of Contamination

For project development site, Tetra Tech compiled a report and at the time of the site reconnaissance, the development project site was occupied by one tenant, Rorze Automation Inc. in Unit 1625 of Building 11. The remaining units are vacant. Tetra Tech reviewed 12 previous environmental reports per the ASTM standard for Phase I Assessments.

VIII. HAZARDS AND HAZARDOUS MATERIALS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒	
2) 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?	☐	☐	☐	☒	
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	

VIII. HAZARDS AND HAZARDOUS MATERIALS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	
6) 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?	☐	☐	☐	☒	
7) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	
8) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒	

Comment:
The properties to be rezoned are currently developed light industrial offices and the will remain unchanged at this time. Other sites will be subject to a Environmental Phase I evaluation and further studies may be necessary depending on the Phase I conclusions.

The Proposed Development Site
Ground water
No environmental concerns were documented based upon the regulatory review or visual observations made during the time of the site reconnaissance per the Phase I Environmental Site Assessment by Tetra Tech. The potential exists for groundwater beneath the target property to be affected above CRWQCB Environmental Screening Levels (ESLs) due to the industrial nature of the area and the number of former

leaking USTs nearby and the affected groundwater plumes which are known to exist in the immediate vicinity of the target property.

A Phase II Limited Subsurface Investigation was conducted by Tetra Tech to determine if soil and ground water at the project site for development had been adversely affected by the historic releases and or operational practices from the former onsite UST field and or surrounding industrial properties, leaking USTs and/or groundwater plumes known to exist in the immediate vicinity of the target property at concentrations exceeding the CRWQCB-San Francisco Bay Region. Analytical results from soil and groundwater samples collected from soil borings indicated that no COCs were detected at concentrations exceeding laboratory method detections limits, CRWQCB-SFBR ELSs for residential land use and/or California Human Health Screening Levels for residential land use.

Hazardous Materials
Tetra Tech conducted a hazardous Materials Survey for the proposed development project site. Analytical results from asbestos-containing materials (ACM) and lead-based paint (LBP) samples collected during the survey indicated that in two of the buildings, more then 1 percent of the samples collected contained asbestos. Also, within each structure, Tetra Tech collected bulk paint chips samples from representative painted surfaces. Three of the samples contained reportable lead concentrations above the respective laboratory reportable dedication limits.

Mitigation Measures:
The following mitigation measures will be conditions of approval for the development project.

HAZ-1: All ACM and suspect ACM (unless testing proves otherwise) should be removed by a licensed asbestos abatement contractor before demolition work disturbs the materials. The removed waste must be transported to a disposal site able to accept non-friable ACM.

HAZ-2: Based on the paint chip sample results, the contractor completing the demolition work much comply with the OSHA Lead in Construction Standard, Title 40 of the Code of Federal Regulations (CFR), Part 1926.62.

Conclusion:
The properties to be rezoned are currently developed light industrial offices and the will remain unchanged at this time. Therefore there will be no impact due to the unchanged state of the properties. For the development project site, all hazardous materials identified are located within the three existing buildings on the project site that will be demolished prior to the construction phase. The mitigation measures address the proper way to dispose of the hazardous materials during the demo phase and therefore there will be no impact for the future development. **[No Impact]**

HYDROLOGY AND WATER QUALITY

Setting:
All properties within the Transit Area Specific Plan including the proposed rezone and development project, will comply with the Transit Area Specific Plan Policies, General Plan Policies, Municipal Code regulations, Federal Emergency Management Agency and Flood Insurance Rate Map. This includes the properties to be rezoned.

Hydrology and Flooding
According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM), the project site is located within Zone AO (depth 1). Zone AO is defined as the areas of 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1.0 and 3.0 feet. Average whole-foot depths derived from the detailed hydraulic analyses are shown within this zone on the FIRM.

Storm Drainage
The City of Milpitas owns and maintains the municipal storm drainage system in the vicinity of the project.

Water Quality
All property within the Transit Area, including the proposed rezone area and development project of 276 units known as Harmony, is required to comply with Provision C.3 of the City's NPDES permit and the City's Local policies and ordinances regarding urban runoff and water quality. The C.3 requirements seek to reduce water pollution by both reducing the volume of stormwater runoff and the amount of pollutants that are contained within the runoff. The methods used to achieve these objectives vary from site to site, but can include measures such as a reduction in impervious surfaces, onsite detention facilities, biofiltration swales, settlement/debris basins, etc.

IX. HYDROLOGY AND WATER QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	
2) 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 groundwater table level (e.g., 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)?	☐	☐	☒	☐	

IX. HYDROLOGY AND WATER QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	☐	☐	☒	☐	
4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?	☐	☐	☒	☐	
5) 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?	☐	☐	☒	☐	
6) Otherwise substantially degrade water quality?	☐	☐	☒	☐	
7) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐	
8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐	
9) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒	
10) Be subject to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	

Comment:

Drainage and Flooding

All development within the Transit Area Specific Plan including the proposed rezone and Harmony development project would conform to the City flood hazard management ordinance, therefore, the rezone or implementation of the project(s) would not result in people or structures being exposed to any

significant flood risk. Impervious surfaces on the proposed project would be approximately the same as the amount of impervious surfaces that exist on the site. New landscaping and vegetated bioswales would be installed on site as part of the project, and would help to detain stormwater runoff and infiltrate excess water into the soil. This would ensure that stormwater runoff from the project site would not exceed the capacity of the existing storm drainage system, or contribute significantly to downstream flooding.

Water Quality

The proposed development project includes stormwater quality best management practices such as directing site runoff into vegetated swales in conformance with requirements in the City of Milpitas's Municipal NPDES Permit. The coverage of impervious surfaces would be more than the current condition. Vegetated swales may be located in or adjacent to trees and shrubs, but must include only vegetation consistent with their function.

Construction activities on the development site would temporarily generate dust, sediment, litter, oil, paint, and other pollutants that could contaminate runoff from the site.
[Significant Impact]

Mitigation Measures:
The following mitigation measures are included in the project to reduce water quality impacts during construction and post-construction periods to a less than significant level:

HYDRO-1.1: Prior to construction of the project, the City shall require the applicant to submit a Storm Water Pollution Prevention Plan (SWPPP) and a Notice of Intent (NOI) to the State of California Water Resource Quality Control Board to control the discharge of storm water pollutants including sediments associated with construction activities. Along with these documents, the applicant may also be required to prepare an Erosion Control Plan. The Erosion Control Plan may include Best Management Practices (BMPs) as specified in the California Storm Water Best Management Practice Handbook (such as silt fences/straw waddles around the perimeter of the site, regular street cleaning, and inlet protection) for reducing impacts on the City's storm drainage system from construction activities. The SWPPP shall include control measures during the construction period for:

- Soil stabilization practices,
- Sediment control practices,
- Sediment tracking control practices,
- Wind erosion control practices, and
- Non-storm water management and waste management and disposal control practices.

HYDRO-1.2: Prior to issuance of a grading permit, the applicant shall be required to submit copies of the NOI and Erosion Control Plan (if required) to the Department of Public Works. The applicant shall also be required to maintain a copy of the most current SWPPP on-site and provide a copy to any City representative or inspector on demand.

HYDRO-1.3: The development shall comply with City of Milpitas ordinances, including erosion- and dust-control during site preparation and grading, and maintaining adjacent streets free of dirt and mud during construction.

HYDRO-1.4: The proposed development shall comply with the NPDES permit issued to the City of Milpitas.

Conclusion:

The proposed project would not result in substantial adverse flooding or drainage impacts. **[Less Than Significant Impact]**

With implementation of the mitigation measures included in the project, possible impacts to water quality would be reduced to a less than significant level. **[Less Than Significant Impact with Mitigation]**

LAND USE

Setting:
The Transit Area Specific Plan envisions this area to incorporate High Density Residential, Mixed uses and a school site. Recent entitlements were approved for the property just to the north of the proposed development project, known as Harmony, for a mixed use product with 1,328 dwelling units in eight buildings, including 92,000 square feet of commercial space on 23 acres (57.7 dwellings per acre). (APNs: 86-33-092, -101, -093, -099, -094, -095, -098).

The project includes two components. The first is a Rezone of property and the second is a development proposal. The project includes a General Plan, Zoning, and Specific Plan Amendment to rezone 13.16 acres from Mixed Use Very High Density (MXD3) to Multi-Family High Density (R3), update the Parks Master Plan Area Map for location of the park, and rezone 10.87 acres from Multi-Family High Density (R3) to Parks and Open Space (POS) relocating to be consistent with the Transit Area Specific Plan, and update some preliminary street locations within the Specific Plan. A portion of this rezone will include the Development component. See Figures 1-6 for rezone locations and project location.

The project development for 276 residential units is located at 1765 McCandless Drive, APN's 086-41-019, 020, 021, and 022. As shown on Figure 2, the project site is currently developed with three Industrial buildings built back in the 1990's. The Site and neighboring properties are fully developed with office/industrial type uses. The topography is flat and views of the eastern foothills are partially blocked by existing structures in the area.

The proposed development project would demolish the existing buildings, grade and prepare the 12.3 acre site for 276 single family attached homes and condos. The townhomes and condos will stand between three and four stories high, not to exceed 50' in height, and have a mixed variety of styles that complement one another.

The existing visual character for this area is industrial and offices. Bringing residential to the project site area will change the existing character. However, the Transit Area Specific Plan designated this area for residential type uses and the project is consistent with the Transit Area Specific Plan.

The development site is approximately 12.3 acres with eight business park buildings and ancillary parking lots. The site is bisected by McCandless Drive and bounded to the north by Great Mall Parkway and bounded to the south by Penetencia Creek. Existing Land Use Classifications

X. LAND USE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Physically divide an established community?	☐	☐	☐	☒	

X. LAND USE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒	
3) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	

Comment:
Proposed General Plan and Zoning
The project will rezone properties as mentioned in the project setting. See summary below.

Current Zone	Existing Acres	Estimated Density	Rezoned To	Acres	Estimated Density
Mixed Use Very High Density (MXD3) / Very High Density Transit Oriented Residential	13.16	561	Multi-Family Residential High Density (R3) / High Density Transit Oriented Residential	13.6	175
Multi-Family Residential High Density (R3) / High Density Transit Oriented Residential	10.87	157	Parks and Open Space, Schools / Parks Plazas/ Community Facilities	10.87	*

Land Use Compatibility
The project would conform to the adopted plans, however, existing industrial uses will remain until such time that redevelopment occurs to make those properties consistent with the adopted plans.
The Transit Area Specific Plan EIR cleared 7,000 dwelling units under a Reasonable Worst Case Scenario approach to estimate the amount of residential and commercial development. Rezoning the acreage summarized in the table above will remain under the cleared 7,000 dwelling units. The proposed development project for 276 dwelling units is also within the cleared 7,000 dwelling units from the Transit Area Specific Plan EIR. To date, approximately 2,200 dwelling units have been entitled, but none constructed within the Transit Area.

Impacts to the Project
Landscaping is proposed along the boundaries of the project to buffer the project from surrounding uses. The eventual growth of the landscaping would complement the adjacent sites when they redevelop.

Conclusion

The proposed project's density as amended will be consistent with the overall density allowed for the site and envisioned by the Specific Plan

The proposed rezone and development project would not result in significant, adverse land use impacts. **[Less Than Significant Impact]**

MINERAL RESOURCES

Setting:
The project area is in an urban, built up area and has been developed with industrial/office buildings since 1990's.

XI. MINERAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) 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?	☐	☐	☐	☒	
2) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒	

Comment:
The project would not result in the loss of availability of a known mineral resource, and no mineral excavation sites are present within the general area. The proposed project, therefore, would not result in impacts to mineral resources.

Conclusion
The project would not result in impacts to known mineral resources. **[No Impact]**

NOISE

Setting:

Noise Background

Noise is defined as unwanted sound. Noise can be disturbing or annoying because of its pitch or loudness. Pitch refers to relative frequency of vibrations, higher pitch signals sound louder to people.

A decibel (dB) is measured based on the relative amplitude of a sound. Ten on the decibel scale marks the lowest sound level that a healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis such that each 10 decibel increase is perceived as a doubling of loudness. The California A-weighted sound level, or dBA, gives greater weight to sounds to which the human ear is most sensitive. Sensitivity to noise increases during the evening and at night because excessive noise interferes with the ability to sleep. Twenty-four hour descriptors have been developed that emphasize quiet-time noise events. The Day/Night Average Sound Level, Ldn, is a measure of the cumulative noise exposure in a community. It includes a 10 dB addition to noise levels from 10:00 PM to 7:00 AM to account for human sensitivity to night noise.

Applicable Noise Standard

The Environmental Quality Element of the City of Milpitas's General Plan identifies noise and land use compatibility standards for various land uses (General Plan Figure 5-G). Chapter 9.10 "Regulation of Noise and Vibration," of the City of Milpitas Municipal Code identifies allowable hours for construction to limit impacts to sensitive uses.

Proposed Development Site Existing Noise Environment

The proposed development for 276 units at the northwest cornier of Montague Expressway and McCandless Drive is east of the Union Pacific Railroad (UPRR) right of way. The major noise sources affecting the project site are vehicular traffic along Montague Expressway and McCandless Drive. Rail operations along the UPRR freight spur line also contribute to the noise environment but to a lesser extent.

Noise and Vibration Study

A Noise and Vibration Study was conducted by Charles M. Salter Associates, Inc. This study analyzed the sound presence of freight rail operations, light rail operations and vehicular traffic near the project site.

XII. NOISE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project result in: 1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒	

XII. NOISE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project result in:					
2) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒	
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒	
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒	
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	
6) 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?	☐	☐	☐	☒	

Comment:

Exterior Noise

The proposed development project site plan shows a recreation area along the western property line near the middle of the project, a children's play area near the southern portion of the project, and an open space are in the northwest corner of the project. Based on our the Noise and Vibration study, the on-site measurements and calculations, the L_{dn} noise levels will be approximately 59 dB at both the recreation and open space areas, meeting the City's exterior noise goal without further mitigation.

Interior Noise Levels

According to the noise and vibration study, to meet the City's interior noise requirement of an Ldn not exceeding 45 dB in habitable rooms, sound rated assemblies will be required at some exterior building facades. See Figures 2 and 3 on page 36 and page 37.

STC ratings are based on typical room, window, and door sizes. For the purposes of the analysis, Charles M. Salter Associates Inc. assumed no more than 40% window area (as a percentage of the exterior wall) and worst-case façade orientation (i.e., facing loudest noise source).

Noise Impacts from Construction
Construction related noise would be generated from construction equipment, loading and unloading trucks, and general construction operations.

Rezone areas without development proposed
These sites will remain subject to the conclusions of the TASP EIR and require compliance with the City's Noise Ordinance.

Mitigation Measures:

NOI-1: Pursuant to the recommendations of the noise and vibration study, sound-rated residential assemblies at exterior building facades shall be incorporated within the buildings. See figure 2 and 3 of the Environmental Noise and Vibration Study conducted by Charles M. Salter Associates Inc. on May 11, 2011.

NOI-2: STC ratings- If non-tested assemblies are to be used, an acoustical consultant must review the glazing and frame submittals, and the STC rating of the glass may need to be increased. A qualified acoustical engineer must review the design as it is developed to refine the specific STC ratings once building design and site layout has been refined. Rooms with higher than assumed percentage of window or door surface area will require higher STC ratings to meet the noise criteria.

NOI-3: Prior to issuance of building permits, applicants shall demonstrate that noise exposure to sensitive receptors from construction activities has been mitigated to the extent of feasible pursuant to the City's Noise Abatement Ordinance.

Conclusion:
As mitigated, Noise levels would be reduced to meet the City standards by incorporating sound rated assemblies at exterior building facades. Exterior noise levels at outdoor-use areas (i.e. , recreation areas in multi-family housing projects) currently meet the City standards as located. In addition, vibration levels at the proposed setback from the UPRR meet the goals stated in the Federal Transit Administration guidelines.

POPULATION AND HOUSING

XIII. POPULATION AND HOUSING					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒	
2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	

Conclusion:
The proposed project would not result in significant population or housing impacts. **[Less Than Significant Impact]**

PUBLIC SERVICES

Fire Service

The Milpitas Fire Department (MFD) provides full response, preparedness, and prevention services. The department's emergency response and preparedness division handles emergency incidents, safety, training, disaster preparedness and public information. The department fire prevention division handles fire plans, and permits, hazardous materials regulation, inspections and investigations.

Three fire stations are near the Transit Area: Fire station #1, just northwest of the Great Mall at Curtis and South Main streets, Station #2 located north east of the project on Yosemite and South Park Victoria, and Station #4 on Barber Lane just west of I-880. The City has automatic aid and mutual aid agreements with the cities of San Jose and Fremont.

The Transit Area Specific Plan presents unique operational issues for the MFD due to its high density residential and mixed-use structures. The increase in population, business and vehicular traffic resulting from the buildout of the area will increase the demand in service levels and has the potential to impact response times, in addition to presenting challenges to fire department vehicle access and firefighting operations. To maintain current levels of service, an increase in staffing and equipment will be necessary. A "standards-of-cover" analysis should be conducted to determine the precise impact on the department's staffing, equipment and any required facility enhancements.

Police Service

Law enforcement services in Milpitas are provided by the City of Milpitas Police Department (MPD). Additionally, the California Highway Patrol provides law enforcement services in the Planning Area, and the Transit Patrol Division of the Santa Clara County Sheriff provides contract security and law enforcement services for the Valley Transportation Authority. In 2005, the Police Department had a total of 95 sworn police officers: one chief, 21 officers in the Support Services Bureau and 73 officers in the Police Operations Bureau. In 2005, with a total population of 65,000, Milpitas had a ratio of 1.46 officers per 1,000 residents. This service ratio is within the California standards of 1.4 to 1.7 officers per 1,000 residents. The MPD headquarters are located at 1275 N. Milpitas Boulevard, around two miles from the Transit Area. There are no known community concerns about the location, condition, size, form, or condition of the current police stations. In 2005, the MPD received 18,243 emergency calls. In 2005, the average response time to emergency calls was 3:43. The average response time to non-emergency calls was 7:09. The average response time within the City is approximately four minutes and 40 seconds. Highest priority is assigned to emergency calls where life-threatening conditions occur. The target response time for such emergency calls is three minutes. The number of overall service calls being received by the MPD is currently increasing, rising 10.7 percent between 2004 and 2005, and the department expects the number of calls to continue increasing citywide. MPD's Communications Division has adopted the following standards for dispatching:

- 9-1-1 calls shall be answered by Public Safety Dispatchers within 10 seconds at least 95 percent of the time.
- Dispatch 95 percent of calls within 60 seconds of event creation in CAD.
- Dispatch 95 percent of non-emergency calls within 30 minutes of event creation in CAD.

Most of the crime that occurs in the Planning Area is specific to the Great Mall—thefts, forgery/fraud, and stolen vehicles—and there is little violent crime. In the rest of the Planning Area, more than half of the police-related calls are vehicle violations, traffic accidents, and theft from autos.

Parks and Schools

According to the Milpitas General Plan, the city has 161 acres of city owned parks and recreational facilities. Part of the 1,544-acre Ed Levin Regional Park is within City limits as well. Most of these parks are well outside of an accessible walking range of the Planning Area, with the exception of Parc Metro

East, which is located approximately 0.1 mile north of the Planning area, and Pinewood Park, which is located 0.25 miles west of the Planning Area. Parc Metro East is a 2-acre neighborhood park which provides playgrounds and barbeque pits.

Pinewood Park is an 8-acre park with tennis courts, barbeque pits, tables, and a tot lot.
MUSD operates nine elementary schools which cover kindergarten through 6th grade, two junior high schools (7th and 8th grades), and one traditional single high school. It also has an elementary school type facility (the Murphy site) that is leased out to a private institution until 2016; the lease revenue is needed for current MUSD operations, so if they repossess the school site that income will need to be replaced.

Enrollment and Capacity
In 2006-2007, enrollment in MUSD was approximately 5,043 elementary (grades K-6) school students, 1,462 middle school (grades 7-8) students, and 3,177 high school students, for a total of approximately 9,682 students. The total capacity for the district is 11,493 students, meaning that the district is at 84 percent of capacity overall. However, enrollment is not distributed evenly over school type. Using enrollment numbers from 2006/07, the MUSD elementary schools were at 88 percent of capacity (room for 690 additional students), middle schools were at 89 percent of capacity (room for 180 additional students), and the high school system of Milpitas High plus alternatives is at 95 percent of capacity (room for 165 additional students). MUSD's enrollment projections through the year 2016 expect the district to see the addition of 2,312 students from 10,270 new housing units, including areas covered by the Transit Area Specific Plan and the Midtown Milpitas Specific Plan. The District is considering several approaches to handling the anticipated growth, all which involve the construction of a new elementary school and the expansion of existing facilities.

Students from new housing built in the Planning Area and within the MUSD boundaries would likely attend Zanker Elementary School, Rancho Milpitas Middle School, and Milpitas High School.

- Zanker Elementary is the closest elementary school and the only MUSD school near the Planning Area. As of the 2005-06 school year, Zanker had an enrollment of 455 students, with a capacity for around 555 students, giving it room for another 100 students.
- Rancho Milpitas Middle School has an enrollment around 658 students, with room for 176 more students.
- Milpitas High School had an enrollment of around 2,922 students in a facility built for 2,100 students, although with temporary classrooms it is considered to have capacity for another 150 students.

XIV. PUBLIC SERVICES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)

XIV. PUBLIC SERVICES					
Would the project: 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire Protection?	☐	☐	☒	☐	
Police Protection?	☐	☐	☒	☐	
Schools?	☐	☐	☒	☐	
Parks?	☐	☐	☐	☒	
Other Public Facilities?	☐	☐	☐	☒	

SUMMARY OF IMPACTS:

Schools
The number of new students generated by buildout of the proposed Plan will require at least one new elementary school and expansions of existing facilities. Since the provision of public school facilities is outside the control of the City, this is a significant and unavoidable impact, although one that can be mitigated by action from the Milpitas Unified School District.

Fire Protection
With the proposed development of the Transit Area, the fire department would need to expand an existing fire station or build a new one, as well as provide new staff and equipment.

Police Services
Implementation of the proposed Plan would increase the long-term demand for police assistance and new staff and equipment would be required; however, a new police station would not be warranted.

Parks
The combination of Parks/Plazas and Linear Parks meets the expected park requirements for the Planning Area given the anticipated population at buildout. All land shown in the Plan as parks or landscape buffers with trails must be dedicated as public parks to meet the requirements (or an equivalent amount of land if park locations are adjusted).

Impacts Identified under the Transit Area Specific Plan EIR 2. New development under the proposed Milpitas Transit Area Specific Plan will increase the demand for school facilities. (Significant and Unavoidable)

Conclusion
The project would not result in significant impacts to public facilities. **[Less Than Significant Impact]**

RECREATION

XV. RECREATION					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) 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?	☐	☐	☒	☐	
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐	

Comments:
Part of the project is to rezone 10.87 acres of land from Multi-Family Residential High Density (R3) to Parks and Open Space, which amounts to a different configuration of the same amount of area as presently shown in the TASP . The proposed development project for 276 units northwest of McCandless and Montague Expressway will be located directly across from this new park area. The development project, along with any development projects located within the Transit Area, are subject to the Transit Area Specific Plan Impact Fee Program to ensure public infrastructure and public parks will be improved and provided within the Transit Area.

Conclusion
The proposed project would not result in significant impacts to parks and recreational facilities. **[Less Than Significant Impact]**

TRANSPORTATION/TRAFFIC

Existing Roadway Network
The project is accessed via Montague Expressway, a six-lane east-west roadway. McCandless Drive, a two-lane, north-south roadway bisects the project. Within the vicinity is Great Mall Parkway, a six-lane, east-west roadway to the North of the project site that intersects with McCandless.

Regional and Local Roadway Access
Regional access is provided to the project via Interstates 880 and 680, Montague Expressway, and State Route 237. Local access is provided by Main Street, Milpitas Boulevard and Great Mall Parkway.

Existing Transit Service
Bus routs are available along Montague Expressway and the project is within the vicinity of the Great Mall Transit center that includes bus and light rail service.

Bus Service
AC Transit, with service to Fremont and VTA, with service throughout Santa Clara County and express routes to Fremont service the area.

Existing Pedestrian and Bicycle Facilities
The area includes sidewalks along streets and Class I and Class II facilities are accessible in the area. No Class I facilities are present within the vicinity.

Project Setting
The project includes two components, a rezone and development. The project requires a General Plan, Zoning, and Specific Plan Amendment to rezone 13.16 acres from Mixed Use Very High Density (MXD3) to Multi-Family High Density (R3), update the Parks Master Plan Area Map for location of the park, and rezone 10.87 acres from Multi-Family High Density (R3) to Parks and Open Space (POS) relocating to be consistent with the Transit Area Specific Plan, and update some preliminary street locations within the Specific Plan. The project development for 276 residential units is located at 1765 McCandless Drive, APN's 086-41-019, 020, 021, and 022.

XVI. TRANSPORTATION/TRAFFIC					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒	

XVI. TRANSPORTATION/TRAFFIC					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
2) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒	
3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒	
4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☐	☒	
5) Result in inadequate emergency access?	☐	☐	☐	☒	
7) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒	

Comment:
The Transit Area Specific Plan EIR anticipated the specific plan area to generate a large amount of trips due to the high density and mixture of uses within the Transit Area. The EIR estimates the trip generations based on the expected buildout of the Transit Area. Rezoning portions of the Transit Area changes the anticipated trip generations. See the summary of changes below and the estimated trip generations on the following page.

Current Zone	Existing Acres	Estimated Density	Rezoned To	Acres	Estimated Density
Mixed Use Very High Density (MXD3) / Very High Density Transit Oriented Residential	13.16	561	Multi-Family Residential High Density (R3) / High Density Transit Oriented Residential	13.6	175
Multi-Family Residential High Density (R3) / High Density Transit Oriented Residential	10.87	157	Parks and Open Space, Schools / Parks Plazas/ Community Facilities	10.87	*

Estimated Trip Generations
for
Rezone of Mixed Use to Multi-Family Residential

			Rates			Total Trips							New Trips						
Land Use Description	**Independent Variable**	**No. of Units**	**Daily Rate**	**AM Rate**	**PM Rate**	**Daily Trips**	**AM Trips**	**PM Trips**	**AM Trips In**	**AM Trips Out**	**PM Trips In**	**PM Trips Out**	**Daily Trips**	**AM Trips**	**PM Trips**	**AM Trips In**	**AM Trips Out**	**PM Trips In**	**PM Trips Out**
Mixed Use Very High Density (MXD3) / Very High Density Transit Oriented Residential	Dwelling Unit(s)	561	4.18	0.34	0.38	2345	191	213	36	155	132	81	2345	191	213	36	155	132	81
Multi-Family Residential High Density (R3) / High Density Transit Oriented Residential	Dwelling Unit(s)	175	*	0.67	0.78		117	137	29	88	79	58		117	137	29	88	79	58
					Totals	2345	308	350	65	243	211	139	2345	308	350	65	243	211	139

Estimated Trip Generations
for
Rezone of Multi-Family Residential to Park

			Rates			Total Trips							New Trips						
Land Use Description	**Independent Variable**	**No. of Units**	**Daily Rate**	**AM Rate**	**PM Rate**	**Daily Trips**	**AM Trips**	**PM Trips**	**AM Trips In**	**AM Trips Out**	**PM Trips In**	**PM Trips Out**	**Daily Trips**	**AM Trips**	**PM Trips**	**AM Trips In**	**AM Trips Out**	**PM Trips In**	**PM Trips Out**
Multi-Family Residential High Density (R3) / High Density Transit Oriented Residential	Dwelling Unit(s)	157	*	0.67	0.78		105	122	26	79	71	51		105	122	26	79	71	51
City Park	Acre(s)	10.87	1.59	*	*	17							17						
					Totals	17	105	122	26	79	71	51	17	105	122	26	79	71	51

The new zoning requires a lower trip generation then what it was planned for and therefore there is no anticipated impact. **[No Impact]**
The Project Development for 276 units is below the expected trip generations estimates specified within the Transit Area Specific Plan EIR and therefore has no impact. **[No Impact]**

UTILITIES AND SERVICE SYSTEMS

Setting:

Water Service

Potable water supply for the Transit Area is provided by the City of Milpitas through its municipal water system. The City provides water service to homes, businesses, and industry within the City of Milpitas, meeting the demands of around 65,000 residents. The City of Milpitas buys domestic water from two sources: the San Francisco Public Utilities Commission (SFPUC), delivered through the Hetch Hetchy Water system, and Santa Clara Valley Water District (SCVWD), delivered through the South Bay Aqueduct. The City's emergency supply consists of one local groundwater wells—with a second one under construction—and three emergency interties, one with the San Jose Water Company and two with the Alameda County Water District.

The City currently has a supply assurance amount from the SFPUC of 9.23 million gallons per day (mgd) or 10,340 acre-feet per year (AFY). This allocation could be reduced in drought years by SFPUC. In addition, it is anticipated that the incremental cost of water supplied by the SFPUC will become more expensive for the City to purchase should the allocation be increased. For these reasons, the City of Milpitas does not anticipate increasing allocations of SFPUC water at this time. Water supplied by SCVWD is derived in part from executed contracts with the State of California Department of Water Resources and the United States Bureau of Reclamation. The City's contract with SCVWD allows for increases in purchased water to accommodate growth within the City. SCVWD bases its long-term water planning projections on employee and household projections provided by the Association of Bay Area Governments (ABAG). SCVWD responds to new land use plans by accommodating them in their projections for longterm water supply and demand. In accordance with the City's contract, SCVWD provides exact delivery commitments on a three-year delivery schedule based, in part, on projections made by the City. The City has previously anticipated that demand will exceed 6,500 AFY by 2005-2006. Recycled water is also currently available in Milpitas through the South Bay Water Recycling Program (SBWRP).

Wastewater

The San Jose/Santa Clara Water Pollution Control Plant (WPCP) provides wastewater treatment for the Transit Area as well as the rest of Milpitas and for several other cities and sanitary districts in the region. The WPCP is a regional facility located in San Jose. The cities of San Jose and Santa Clara jointly own the facility while San Jose operates and maintains the facilities. The WPCP first began operations in 1956 as a primary treatment facility and was upgraded to a tertiary treatment plant in 1964 and again in 1979. The WPCP currently provides primary, secondary and tertiary wastewater treatment (filtration, disinfectant and disinfectant removal).

Currently, the City is discharging wastewater to the WPCP at a rate of between 8 and 9 mgd. The City's most current wet weather (December 2006) discharge rate was 8.232 mgd2, down from a December 2005 peak week flow of 9.358 mgd.3 This current flow level is well below the City's 13.5 mgd inflow limit at the WPCP.

The WPCP discharges treated water to Artesian Slough, a tributary to Coyote Creek and the South San Francisco Bay. The WPCP must meet stringent regulatory disposal requirements, including heavy metal limits and maximum dry weather disposal levels intended to protect sensitive salt marshes. In the dry weather period of May through October, the WPCP is required by the San Francisco Regional Water Quality Control Board to limit discharge flows from the WPCP to 120 mgd ADWF (average dry weather flows), or to flows that would not further impact rare and endangered species habitat.5 The WPCP has had programs in place since 1991 to reduce and maintain flows below 120 mgd, and has maintained compliance with this requirement. The average dry weather effluent flow in the last year for which

records are available is approximately 100 mgd.6 Long term plans to remain in compliance with the 120-mgd requirement include on-going water conservation and water recycling.

Storm Drainage
The City of Milpitas owns and maintains a system of underground pipes and a network of street gutters that convey flows from urban runoff to the San Francisco Bay. Within the Transit Area, the majority of stormwater runoff is conveyed to Berryessa Creek and Lower Penitencia Creek, with portions of the area draining into Wrigley-Ford Creek. Most major drainage facilities within the city, such as creeks and channels, are owned and maintained by SCVWD, although within the Transit Area, the City owns and maintains Wrigley-Ford Creek.

Solid Waste
The City of Milpitas disposes of all solid waste at the Permitted Class III, Subtitle D facility, the Newby Island Sanitary Landfill (NISL), administered by BFI. The Newby Island facility accepts solid waste, recyclables, and compostable materials. The NISL does not accept hazardous waste. The facility is 342 acres, of which waste has been placed on approximately 270 acres, and has over 30 feet of 120 feet total depth available. The City's contract with the NISL runs through 2017.

XVII. UTILITIES AND SERVICE SYSTEMS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒	
2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒	
3) 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?	☐	☐	☐	☒	
4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒	
5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒	

XVII. UTILITIES AND SERVICE SYSTEMS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒	
7) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒	

Comment:
The Transit Area Specific Plan has built in policies to provide the needed infrastructure for new development. A potential future school site has been designated at the new park location directly across from the project site. The project developer will be working with the City's Public Works Department insuring the infrastructure will allow for high-density development on this site.

Conclusion:
The proposed project would not exceed the capacity of existing utilities and service systems.
[Less Than Significant Impact]

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
1) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐	
2) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐	
3) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☒	☐	
4) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐	

Conclusion:
With the implementation of the Mitigation Measures included in the project and described int the specific sections of this report, the proposed rezone and development project would not result in a significant environmental impact. **[Less Than Significant cumulative Impact]**

SOURCES
General Sources:

1. CEQA Guidelines - Environmental Thresholds (Professional judgment and expertise and review of project plans).
2. City of Milpitas General Plan (Land Use Chapter)
3. City of Milpitas General Plan (Circulation Chapter)
4. City of Milpitas General Plan (Open Space & Environmental Conservation Chapter)
5. City of Milpitas General Plan (Seismic and Safety Chapter)
6. City of Milpitas General Plan (Noise Chapter)
7. City of Milpitas General Plan (Housing Chapter)
8. City of Milpitas Zoning (Title XI)
9. California Department of Conservation, *Santa Clara County Important Farmland 2006,* Map. June 2005.
10. Bay Area Air Quality Management District, CEQA Guidelines, June 2010.
11. County of Santa Clara Department of Public Works, *Soil Map Sheet 19,* 1964.
12. United States Department of Agriculture, Soil Conservation Service, *Soils of Santa Clara County*, 1968.
13. California Department of Conservation, *Geologic Map of the San Francisco-San José Quadrangle*, 1990.
14. Federal Emergency Management Agency, *Flood Insurance Rate Map, Community Panel Nos. 06085CIND0A, 06085C0058H, 06085C0059H, 06085C0066H, 06085C0067H, 06085C0068H, 06085C0069H.06085C0080H, 06085C0086H, and 06085C0087H.*
15. Transit Area Specific Plan Final Environmental Impact Report, June 2008.

Project Related Sources:

A. Project application and plans.

Note: Authority cited: Sections 21083, 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080, 21083.05, 21095, Pub. Resources Code; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

ENVIRON

October 19, 2011

Mr. Dean K. Mills
Director of Forward Planning
D.R. Horton, Northern California Division
6630 Owens Drive
Pleasanton, CA 94588

Re: Cancer Risk Analysis for the Proposed Harmony Development in Milpitas, California

Dear Mr. Mills:

At the request of D.R. Horton, ENVIRON International Corporation (ENVIRON) conducted an evaluation of excess lifetime cancer risks associated with nearby roadways and single railway line for the proposed Harmony development (referred to as "project" or "site") in Milpitas, California.

From this analysis, we determined that the combined impacts from these sources results in an exceedance of the applicable risk threshold (i.e., cancer risk of 10 in a million) without mitigation. However, with the implementation of mitigation measures including vegetative barriers on project perimeters and building filtration system requirements for certain portions of the project site, the impacts can be mitigated to levels below the risk threshold.

The project understanding, approach for evaluating roadway and railway emissions on project receptors, risk results, and proposed mitigation options are described in the following sections.

Project Understanding and Regulatory Framework

The proposed Harmony development in Milpitas is a residential housing project located in the City of Milpitas, situated on the northwest corner of Montague Expressway and McCandless Drive and east of a Union Pacific Railroad (UPRR) right of way. This analysis is being conducted for the proposed development to meet the requirements put forth in Policy 5.25 of the 2008 City of Milpitas Transit Area Specific Plan, which requires the following:

> *For new residential development that is proposed within 500 feet of active rail lines where vehicles emit diesel exhaust, or roadways where total daily traffic volumes from all roadways within 500 feet of such location exceed 100,000 vehicles per day, will, as part of its CEQA review, include an analysis of toxic air contaminants (which includes primarily diesel particulate matter [DPM]). If the results show that the carcinogenic human health risk ["cancer risk"] exceeds the 10 people in a million standard for carcinogenic human health impacts established by the Bay Area Air Quality Management District (BAAQMD), the City may require upgraded ventilation systems with high efficiency filters, or other equivalent mechanisms, to minimize exposure of future residents.*

This analysis evaluates the cumulative carcinogenic human health risk to future residents from exposure to DPM emissions from all roadways and active railways within 500 feet of the project site.

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Roadway and Railway Analysis and Results

The health risk impacts from roadways and railways within 500 feet of the project site were evaluated as discussed in the sections below. A layout of the project site with the evaluated roadways and railways is shown in **Figure 1**.

Roadway Analysis

As stated above, Policy 5.25 of the 2008 City of Milpitas Transit Area Specific Plan requires an analysis of the impact of roadways within 500 feet of new receptors if traffic on the roadways exceeds 100,000 vehicles per day. The roadways within 500 feet of the proposed project are Montague Expressway, McCandless Drive, Snell Place, Bettencourt Way, and Ede Lane. Total traffic on these roads is less than 100,000 vehicles per day, but the traffic on Montague Expressway and its proximity to the proposed project suggest that the impacts of these roads should be analyzed.

The impacts of these roadways were analyzed consistent with the guidance described by BAAQMD in their 2011 California Environmental Quality Act (CEQA) guidelines.[1] As a supplement to the guidelines, BAAQMD provides screening tools to assess the impact of roadways on nearby receptors.[2] The estimated cancer risk from the roadways obtained using the screening tool for surface streets depends on the distance between the receptor and the nearest travel lane of the roadway, the average number of vehicles that travel on the roadway in a day, and the orientation of the roadway. The distance between the receptor and the roadway was determined using geographical information software and the average daily traffic (ADT) was obtained from data reported by the City of Milpitas.[3] The ADT on Snell Place, Ede Lane, and Bettencourt Way were unknown at the time of this report, so were conservatively assumed to be 2,000 vehicles per day. This volume is determined to be conservative because these are small residential roadways that would likely not have higher volume than the nearby McCandless Drive.

When a roadway's ADT or distance between a receptor and a roadway is between two values in the screening tables, linear interpolation was performed to obtain the cancer risk at the reported distance and ADT, as per BAAQMD guidance.[4] If a traffic volume is below or above the values used in the tables, the risk is found by linearly extrapolating the risks from the next highest or lowest traffic volumes reported on the screening table. When a distance from the roadway is higher than the values reported in the tables, the risk at 1,000 feet, the largest distance reported in the screening tables, was conservatively used.[5] When a distance from the roadway is less than the distances reported in the tables, the risk at 10 feet, the smallest distance reported in the tables, is used. This results from a limitation in the model used to create these tables; USEPA's CAL3QHCR does not reliably calculate concentrations from pollutants from the roadways at a distance closer than 3 meters from the roadway. This is because the model guidance instructs the user to assume the roadway source includes 3 meters on either side of the roadway to account for the turbulent mixing of air behind the vehicles. The model does not reliably calculate

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[1] BAAQMD. 2011. CEQA Air Quality Guidelines. May 3.
[2] BAAQMD. 2011 Roadway Screening Analysis Tables. April 29.
[3] http://www.ci.milpitas.ca.gov/_pdfs/trans_traffic_volume_map.pdf
[4] BAAQMD. 2011. CEQA Air Quality Guidelines. May 3.
[5] Though only roadways within 500 feet of the Project were evaluated, in many cases the distance from the roadway to portions of the Site were greater than 500 feet.

concentrations at receptors within sources, so assumptions to extrapolate risks closer than 10 feet, which is roughly equal to 3 meters, could not be made.

The receptor locations and risks from each roadway can be found in **Appendix A**.

Railway Analysis

ENVIRON conducted a screening level evaluation of health risks due to railway emissions from the Union Pacific Railroad (UPRR) right of way to the west of the project site. The analysis included estimating DPM emissions from locomotives operating on the railway line, air dispersion modeling of annual average air concentrations, and the estimation of cancer risks.

Modeled Emissions

Railway emissions were estimated consistent with methodology provided in BAAQMD's Air Emissions Inventory for the Port of Redwood City.[6] This approach is based on engine mode emission rates and an average time in notch profile for locomotives operating on the track. The locomotive fleet mix and DPM emission factors were assumed to be similar to the UPRR locomotive data reported by the BAAQMD in the Port of Redwood City inventory. The average time in mode profile, or duty cycle, for locomotives operating on the railway was assumed to be similar to the United States Environmental Protection Agency's (USEPA's) reported duty cycle profile for current locomotive line haul operations.[7] The portion of railway evaluated in this analysis is approximately 0.5 miles in length and includes track running the entire length of the project site and an additional 500 ft of track on each end. Train activity was assumed to occur two times per day on weekdays with no activity on the weekends, consistent with rail activity reported in the Environmental Noise and Vibration Feasibility Study for the Project.[8] When passing the site, trains were assumed to be traveling at a speed of 10 miles per hour, which is consistent with the speed evaluated in the Port of Redwood City emissions inventory and the Federal Railroad Administration (FRA) rail speed limit for Class 1 track (the lowest track classification and speed limit). Based on these assumptions, the DPM emissions from the railway are estimated to be approximately 12.9 pounds per year. Further information on the emissions calculations is provided in **Table 1**.

Air Dispersion Modeling Methodology

Air dispersion modeling of rail activity was conducted using USEPA's Industrial Source Complex Short Term Model (ISCST3)[9] air dispersion model. For each receptor location, the model generates air concentrations resulting from estimated emissions. Air dispersion models such as ISCST3 require a variety of inputs such as source parameters, meteorological parameters, topography information, and receptor parameters. The following discussion outlines the data and assumptions used to model air concentrations from the railway.

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[6] SF Bay Area Seaports Air Emissions Inventory Port of Redwood City 2005 Emissions Inventory. Prepared for the by Planning Coalition. Dated June 2010.

[7] USEPA. 1998. Locomotive Emissions Standards Regulatory Support Document. April.

[8] Charles M Salter Associates Inc. 2011. McCandless Drive Milpitas, California Environmental Noise and Vibration Feasibility Study. May 11.

[9] In their 2011 Guidance, the BAAQMD recommends two USEPA Gaussian air dispersion models for CEQA analyses: ISCST3 or AERMOD.

Source Parameters and Setup: The locomotive source setup and emission release parameters were modeled consistent with the methods used in Health Risk Assessments conducted in accordance with the 2005 California Air Resources Board/Railroad Statewide Agreement (MOU) with Union Pacific Railroad and BNSF Railways. Further information regarding the source release parameters is provided in **Table 2**.

Meteorological data: As site specific meteorological data is not available, ENVIRON used ISCST3 ready metrological data reported by BAAQMD at their Alviso station in Santa Clara County.[10] Five years of data, from 1996 to 2000, inclusive, were evaluated.

Dispersion Parameters: Rural dispersion parameters were used as they are the most conservative.

Terrain: Terrain elevations were obtained from the USGS National Elevation Dataset (NED).

Receptors: A 10 meter grid receptor spacing across the project site was evaluated. As the potential breathing heights of receptors and the locations of building air intake systems are unknown, each receptor location was evaluated at receptors heights representative of ground level, first floor, second floor, third floor, fourth floor, and roof top locations (i.e., heights ranging from ground level up to 48.4 feet, the maximum building height reported in the Harmony Building Design Plans provided to ENVIRON).

Cancer Risk Assessment Methodology

Assessment of cancer risk is based on a number of factors including the toxicity of chemicals being evaluated, the receptor exposure parameters, and exposure concentration. This assessment was performed using methods similar to those used in the 2005 California Air Resources Board/Railroad Statewide Agreement (MOU) with UPRR and BNSF Railways. The following discussion outlines the data and assumptions used to evaluate cancer risk.

Toxicity: The cancer potency factor used for DPM in this analysis was 1.1 $(mg/kg\text{-}day)^{-1}$ as reported by the California Environmental Protection Agency (Cal/EPA).[11]

Exposure Parameters: The parameters used to estimate excess lifetime cancer risks for a 70 year resident were obtained using risk assessment guidelines from Cal/EPA and BAAQMD. These parameters are presented in **Table 3.**

Age Sensitivity Factor: In order to compare the calculated risk to a life time cancer threshold, the estimated excess lifetime cancer risk for the 70 year resident was adjusted using an age sensitivity factor (ASF) of 1.7 as recommended by BAAQMD.[12]

Using the air concentrations modeled according to the methodology discussed above, cancer risks were calculated at each receptor and can be found in **Appendix B**.

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[10] BAAQMD meteorological data is available online at: http://hank.baaqmd.gov/tec/data/#

[11] Cal/EPA. 2011. OEHHA/ARB Consolidated Table of Approved Risk Assessment Health Values. February 14.

[12] Bay Area Air Quality Management District (BAAQMD). 2010. Air Toxics NSR Program Health Risk Screening Analysis (HRSA) Guidelines. January.

Cumulative Health Risk Results

To evaluate the combined health risks from roadways and the railways, the cancer risk from each source at each evaluated receptor location was combined. For the railway risks, to be conservative for all receptors, this analysis used the risk from the receptor height with the maximum impact to characterize the risk at each receptor location. The combined cancer risks at each receptor were then evaluated against the 10 in a million cancer risk outlined in Policy 5.25 of the 2008 City of Milpitas Transit Area Specific Plan. The maximum onsite cancer risk was found to be approximately 23.3 in a million.

Recommended Mitigation Measures

Vegetative Barrier

As discussed in the previous section, the estimated excess lifetime cancer risk estimates for the Project due to roadway and railway impacts exceed the threshold of 10 in a million for portions of the project site.

Recent scientific literature has detailed investigations conducted at the University of California at Davis on the effect of vegetative barriers in reducing air pollutant concentrations from roadway traffic exhaust. Fujii et al. (2008)[13] evaluated the efficacy of three tree species (deoder, redwood and live oak) in removal of fine particulate matter at a variety of wind speeds. In general, deoder (a type of cedar) and redwood were the most effective over a range of wind speeds, with removal efficiencies of up to 50% at wind speeds in the 1 to 2 meters per second (m/s) range, decreasing to virtually zero removal at a wind speed of 3.5 m/s.

ENVIRON evaluated the potential particulate matter removal and risk reduction that may be achieved by implementing a vegetative barrier to mitigate the impacts of the railway. To estimate the reduction, ENVIRON assumed that a vegetative barrier with a mature height 30 feet would be installed along the entire western boundary of the project site adjacent to the railway. Thus emissions from the railway passing through the barrier would be mitigated. To estimate the reduction in concentration and risk, the average concentration for each hour at the second floor receptor height was modeled using ISCST3, as discussed earlier. These hourly concentrations were adjusted based on the corresponding hourly wind speed at the Alviso meteorological station for the year 2000.

The particle removal efficiency at each hour was estimated based on the wind speed using removal efficiency versus wind speed data presented by Fujii et al (2008). If the wind speed for a given hour exceeded 3.5 m/s, no reduction was assumed for that hour. The annual average concentration and risk was then calculated from the adjusted hourly estimates. Based on this approach, the estimated annual particle removal efficiency and risk reduction was found to be approximately 26 percent for rail impacts at the approximate second floor receptors, which represents the maximum impacted height for rail emissions. For receptors at receptor heights above the second floor, no mitigation for the rail impacts has been assumed as these heights

[13] Fujii, E., J. Lawton, T. A. Cahill, D. E. Barnes, C. Hayes, and N. Spada (2008). Removal Rates of Particulate Matter onto Vegetation as a Function of Particle Size. Final Report to Breathe California of Sacramento-Emigrant Trails' Health Effects Task Force (HETF) and Sacramento Metropolitan Air Quality Management District, April 30.

may be above the tree line, at least before trees reach maturation. The reduction for roadway impacts to the west of the project site is expected to be similar to the railway.

As the traffic screening analysis is based on BAAQMD screening tables, an hourly analysis of the reduction based on wind speed could not be conducted. To evaluate the effectiveness of a vegetative barrier along roadways to the south and east of the project site (i.e., Montague Expressway and McCandless Drive respectively), the annual average wind speed was considered for wind directions blowing across the roadway and onto the project site. At the San Jose Airport meteorological station, which was used by the BAAQMD for development of the Santa Clara County roadway screening tables, the annual average wind speeds for winds blowing from the south and east were calculated to be 1.6 and 1.8 m/s for year 1997 (the year used by the BAAQMD)[14]. Using the removal efficiency versus wind speed data presented above, the removal efficiency of vegetative barriers along Montague Expressway and McCandless Drive were calculated to be 35 percent and 31 percent, respectively.

Based on the estimated removal efficiencies discussed above, ENVIRON conservatively estimates that a 20 percent particle removal efficiency and risk reduction could be achieved by implementing vegetative barriers along the eastern, western, and southern perimeters of the site. The portion of the site exceeding the 10 in a million risk threshold under this mitigated scenario is depicted in **Figure 2**.

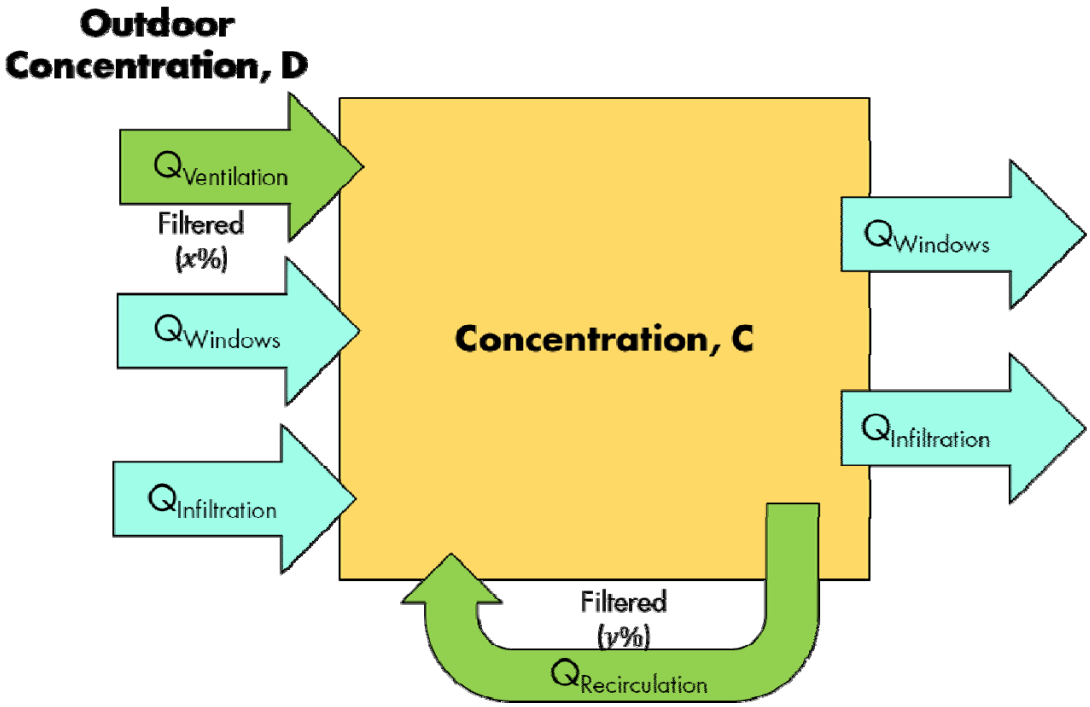
Building Filtration

The conservative analysis of the impact of the roadways shows that the health risk is above thresholds for an outdoor concentration with unobstructed air flows from the roadways. However, the conservative analysis would not necessarily be characteristic of actual impacts on residents of the proposed project due to the effect of buildings obstructing air flow and filtration on air intakes on the residential units. The effect of buildings obstructing air flow was not included in this analysis, but could be an area of refinement which could show lower concentrations and therefore less of a need for filtration. This memo evaluates the effect of the filtration on the air intake and the recirculation mechanical systems.

The impact of the filtration on the cancer risk depends on the flows of air in and out of the building. These flows were identified as the flow of air through the forced ventilation, through recirculation, through open windows and doors, and through infiltration[15] through cracks and permeable surfaces facing outdoors. The impacts of the filtration were quantified assuming the residence is a completely mixed box. Excess cancer risk from roadways is mostly attributable to particulate matter emissions from diesel vehicles (diesel particulate matter or DPM). The DPM can be filtered out of air traveling through the ventilation and recirculation using particulate filters and hence the resident's cancer risk is reduced when inside their residence. However, unfiltered air can still enter the building through open windows or doors and through infiltration. A schematic of the system is shown below.

[14] The meteorological data are available online through the BAAQMD at: http://hank.baaqmd.gov/tec/data/#

[15] Infiltration is defined as "Uncontrolled inward leakage of air through cracks and interstices in any building element and around windows and doors of a building" in ASHRAE Standard 62.2.



The concentration of DPM in the residence was evaluated by solving the differential equation describing the mass balance shown above.

Differential:

$$\frac{dCV}{dt} = D\left(Q_{Ventilation}(1-x) + Q_{Windows} + Q_{Infiltration}\right) - C\left(Q_{Windows} + Q_{Infiltration} + Q_{Recirculation} - Q_{Recirculation}(1-y)\right)$$

Solution:

$$C(t) = C_o \exp\left[-\left(Q_{Windows} + Q_{Infiltration} + Q_{Recirculation} - Q_{Recirculation}(1-y)\right)/V * (t - t_o)\right] + \frac{D\left(Q_{Ventilation}(1-x) + Q_{Windows} + Q_{Infiltration}\right)}{\left(Q_{Windows} + Q_{Infiltration} + Q_{Recirculation} - Q_{Recirculation}(1-y)\right)} * \left(1 - \exp\left[-\left(Q_{Windows} + Q_{Infiltration} + Q_{Recirculation} - Q_{Recirculation}(1-y)\right)/V * (t - t_o)\right]\right)$$

Where:

&1#	= Concentration of DPM at ¬1 [ug/m3]
4 : H1 .1Ö 1	= Flow rate through open windows [volume/time]
4 ,1-H?-ß˚-H1	= Flow rate through infiltration [volume/time]
4 5˘˝H8˝°°˚-H1	= Flow rate through recirculation [volume/time]
4 9˘1-H?˚-H1	= Flow rate through forced ventilation of outdoor air [volume/time]
9# #	= Volume of unit [volume]
–	= Time elapsed since t_o
¬1	= Initial time
Ê	= Fractional removal of DPM through filter on recirculation
Ö	= Fractional removal of DPM through filter on ventilation

Because window operation is controlled by the user and windows are not always open, the flows are not continuous throughout the day. Therefore, for this analysis the impact of the filtration was evaluated in hourly increments and an average throughout the day was calculated. Residents are not always indoors, so their exposure when outside at the proposed site must be considered. The time spent outside by age group was obtained from EPA's Exposure Factor Handbook[16] and weighted by years in each age bin and the age sensitivity factor. This equates to approximately 3 hours outside per day, which is conservative as all this time will not be spent at the proposed site. The ventilation parameters used for the equations above are shown in **Table 4**.

Summary of Mitigation

With the assumptions described above, all residences will be below the cancer risk standard of 10 in a million described in Policy 5.25 provided the following:

- implementing vegetative barriers along the eastern, western, and southern perimeters of the site, and
- installing MERV-13 or equivalent filters on both the air intake and recirculation for the residences shown in the "green zone" of **Figure 2**.

Summary

As discussed earlier, this analysis determined that the combined impacts from these sources results in an exceedance of the applicable risk threshold (i.e., cancer risk of 10 in a million). However, with the implementation of mitigation measures including vegetative barriers on project perimeters and building filtration system requirements for certain portions of the project site, the impacts can be mitigated to levels below the risk threshold. Additionally, this analysis is subject to the limitations of the BAAQMD screening tables for roadways which assume occupancy as early as 2014. If occupancy occurs later than 2014, emissions of diesel exhaust will be lower than estimated here due to continued implementation of California Air Resources Board (CARB) and USEPA regulations which mandate increasing strict emissions requirements for diesel engines. Also, as noted earlier, this analysis may not necessarily be characteristic of actual impacts on residents of the proposed project due to the effect of buildings obstructing air flow from the roadways and railway; however, a more refined analysis of this effect could show lower concentrations and therefore less of a need for filtration.

If you have any questions or need further information, please contact Michael (510.420.2539) at your convenience. Thank you for the opportunity to assist you with this matter.

Sincerely,

Michael Keinath, PE
Senior Manager

Elizabeth A. Miesner, MS
Principal

[16] EPA. 2011. Exposure Factors Handbook. EPA/600/R-09/052F. September.

Attachments:

Tables:

Table 1. Railway Emissions Calculations
Table 2. Railway Model Setup and Source Parameters
Table 3. Exposure Parameters for Rail Modeling
Table 4. Air Filtration Parameters

Figures:

Figure 1. Site Layout and Sources
Figure 2. Exceedances Mitigated by a Vegetative Barrier

Appendices:

Appendix A. Roadway Risk Screening Results
Appendix B. Railway Risk Screening Results

Tables

Table 1
Railway Emissions Calculations
Harmony
DR Horton
Milpitas, California

Railway Activity Data

Parameter	Value	Comment
Trains per day	2	Based on the Environmental Noise and Vibration Feasibility Study conducted for the project by Charles M Salter Associates Inc. Dated May 11, 2011.
Weeks per year	52	
Days per week	5	
Trains per year	520	
Track distance (ft)	2400	Track distance along the project site including a 500 ft buffer on each end.
Travel Speed (mph)	10	Assumed average travel speed.
Annual hours of travel	23.6	Estimated annual hours of travel on the track adjacent to project based on track distance and travel speed.
Locomotives per train	2	Number of locomotives per train assumed in BAAQMD emission factors.

Locomotive Emission Factors Data[1]

Locomotive Model Group	Fleet Mix Percentage	PM Emissions by Notch Setting (g/hr)									
		Idle	Dynamic Braking	1	2	3	4	5	6	7	8
GP-4x	23%	47.9	80	35.7	134.3	211.9	228.6	289.7	488.5	584.2	749.9
SD-7x	56%	14.8	15.1	36.8	61.1	215.7	335.9	388.6	766.8	932.1	1009.6
Dash 9	21%	16.9	88.4	62.1	140.2	259.5	342.2	380.4	443.5	402.7	570

Locomotive PM Emissions Calculation

Locomotive Notch Setting	Idle	Dynamic brake	1	2	3	4	5	6	7	8
Locomotive Fleet Weighted PM Emissions Factors	22.9	45.4	41.9	94.5	224.0	312.5	364.1	634.9	740.9	857.6
Duty Cycle: Line-Haul % Time in notch[2]	38	12.5	6.5	6.5	5.2	4.4	3.8	3.9	3	16.2
Annual PM Emissions (lb/year)[3]	12.94									
Annualized PM Rate (g/s)	1.86E-04									

Notes:

1. Emission factors are based on data provided by the BAAQMD for the Port of Redwood City air emissions inventory. The assumed fleet mix is based on a characterization study of the Union Pacific fleet at the Union Pacific Oakland rail yard.

2. EPA reported duty cycle for line haul locomotive operations representing the average amount of time freight locomotives operate in each notch (USEPA 1998).

3. Annual estimated PM emissions from the rail way is calculated based on the locomotive fleet weighted PM emission factors, locomotive duty cycle, and annual hours of travel on the track adjacent to the project.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
ft - feet
g - gram
hr - hour
lb - pound
mph - miles per hour
PM - particulate matter
s - second

Sources:

1. Moffatt & Nichol and ENVIRON. 2010. SF Bay Area Seaports Air Emissions Inventory Port of Redwood City 2005 Emissions Inventory. Prepared for the Bay Planning Coalition. June.

2. United States Environmental Protection Agency (USEPA). 1998. Locomotive Emission Standards Regulatory Support Document. April.

Table 2
Rail Model Setup and Source Parameters
Harmony
DR Horton
Milpitas, California

Source	**Source Type[1]**	**Source Dimension[2]** [meter]	**Number of Sources[3]**	**Release Height[1]** [meter]	**Initial Vertical Dimension[1]** [meter]	**Initial Lateral Dimension[1]** [meter]
Rail	Volume	3 x 3	242	5.0	1.2	1.4

Notes:
1. The source setup and release parameters for rail locomotives are consistent with the methodology used in Health Risk Assessments performed in accordance with the 2005 ARB/Railroad Statewide Agreement (MOU) with Union Pacific Railroad and BNSF Railways.
2. Source dimensions were determined based on the width of the track.
3. The number of sources was determined by the length of track and source dimensions used.

Abbreviations:
m - meter

Table 3

Exposure Parameters for Rail Modeling

Harmony

DR Horton

Milpitas, California

Exposure Parameter	Units	70 Year Resident
Daily Breathing Rate (DBR) [1]	[L/kg-day]	302
Exposure Time (ET) [2]	[hours/24 hours]	24
Exposure Frequency (EF) [3]	[days/year]	350
Exposure Duration (ED)	[years]	70
Averaging Time (AT)	[days]	25550
Intake Factor, Inhalation (IF_{inh})	[m^3/kg-day]	**0.290**

Notes:

1. Daily breathing rate for residents reflects the default breathing rate from BAAQMD 2010.
2. Exposure time for residents reflects the default exposure time from BAAQMD 2010.
3. Exposure frequency for residents reflects default exposure time from BAAQMD 2010.

Abbreviations:

BAAQMD = Bay Area Air Quality Management District

OEHHA = Office of Environmental Health Hazard Assessment

L = liter

kg = kilogram

m^3 = cubic meter

Sources:

Bay Area Air Quality Management District (BAAQMD). 2010. Air Toxics NSR Program Health Risk Screening Analysis (HRSA) Guidelines. January.

Table 4
Air Filtration Parameters
Harmony
DR Horton
Milpitas, California

Mechanical System Considerations:

Flow	Air Origin	Percent of DPM Filtered[5]	Flow Rate
			m^3/hr
Ventilation[1], $Q_{ventilation}$	Outdoors	80%	78
Windows[2], $Q_{Windows}$	Outdoors	--	477
Infiltration[3], $Q_{infiltration}$	Outdoors	--	11
Recirculation[4], $Q_{recirculation}$	Indoors	80%	195

Site Information:

Parameter	Value	Unit
Height of Ceiling[6]	9	ft
Time Outdoors[7]	3	hrs/day
Outdoor Cancer Risk at Residence[8]	19	in a million
Percent Cancer Risk from DPM[9]	0.93	%
Cancer Risk from DPM	17	in a million
Cancer Risk in Outside Area[10]	19	in a million

Ventilation Assumptions:

Parameter	Value	Units
Vented Flow Rate	160	cfm
Home size	1,560	ft^2
Bedrooms	3	
Time Venting	17	min/hr
Flow Rate of Ventilation	78	m^3/hr

Outdoor Time:

Age bin	Time outdoors	ASF	Time
	minutes/day		years
Birth to <1 month	0	10	0.08
1 to <3 months	8	10	0.17
3 to <6 months	26	10	0.25
6 to <12 months	139	10	0.5
1 to <2 years	36	10	1
2 to <3 years	76	3	1
3 to <6 years	107	3	3
6 to <11 years	132	3	5
11 to <16 years	100	3	5
16 to <21 years	102	1	5
18 to <65 years	281	1	47
>= 65 years	298	1	5
Time weighted average		177	minutes/day
Approximate Average Daily Outdoors Time		3	hours/day

Notes:

1. Ventilation flow rate found using Ventilation Assumptions. The flow rate of ventilation is calculated assuming compliance with ASHRAE 62.2 Standard. Section 4.1 of ASHRAE 62.2 states that the flow rate of outdoor air at each hour must be no less than the rate specified in the equation below. The flow rate per minute is fixed, so the ventilation only operates for part of the hour to achieve compliance with this standard, as shown in the Ventilation Assumptions. The flow rate per minute is based on the design of the ducts.

$$Q_{Ventilation} = 0.01A_{floor} + 7.5(N_{br} + 1)$$

Where:

A_{floor} = floor area, ft^2
N_{br} = number of bedrooms

2. Flow rate through windows is found assuming an air exchange rate through windows of 1.2 air changes per hour, which is the 90th percentile air exchange rate for buildings in the west region from EPA's Exposure Handbook.

3. Infiltration rate is based on an infiltration rate of 0.4 cfm/ft^2 of occupiable area, as mentioned in ASHRAE 62.1 User's Manual as the permeability of most energy efficiency codes.

4. Recirculation rate assumes the same flow rate per minute as the ventilation flow rate. This calculation assumes recirculation occurs when ventilation does not.

5. Filtration percentages consistent with minimum removal of DPM with a MERV-13 rated filter.

6. Approximate height of residential ceilings.

7. Time spent outdoors calculated by weighing time spent outdoors by age bin found in EPA's Exposure Factors Handbook by the time in that age bin and the age sensitivity factor associated with each age bin as shown in the Outdoor Time section.

8. Outdoor Cancer Risk at Residence is the maximum cancer risk estimated at residences at the proposed project from roadways and railways on the project side of the vegetative barrier. This value is found using methods described in the report.

9. Approximate cancer risk contribution from DPM from roadways and railways calculated using by comparing emissions of DPM from diesel vehicles and TOG from gasoline vehicles.

10. Cancer Risk in Outside Area is the cancer risk applied the resident is assumed to be exposed to when outside. To be conservative, this is equal to the maximum cancer risk on the proposed project even if this is not an area residents would spend time.

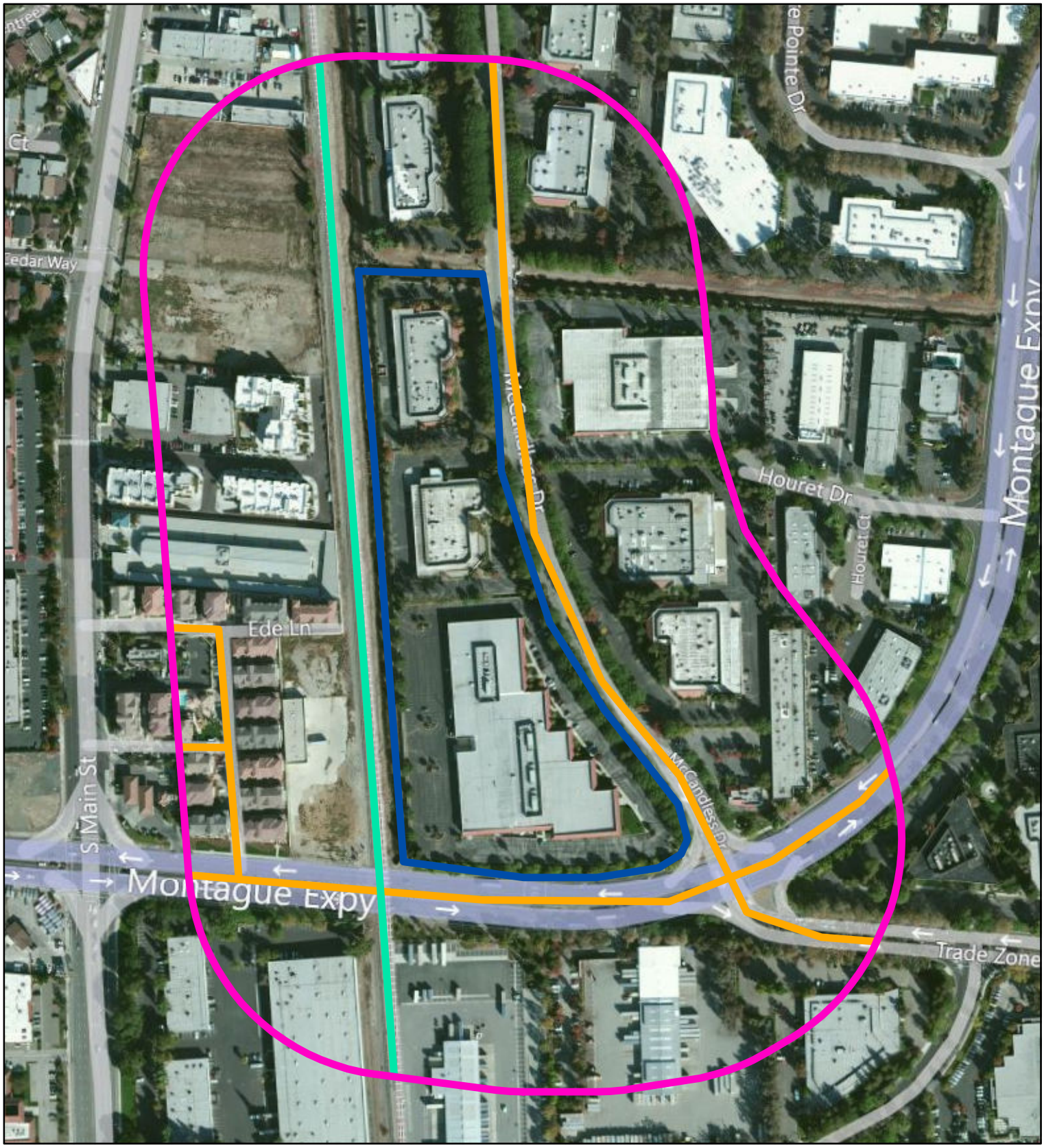
Abbreviations:

ASF - age sensitivity factor
cfm - cubic feet per minute
DPM - diesel particulate matter
ft - feet
hr - hour
m - meters
min - minutes

Sources:

EPA. 2011. Exposure Factors Handbook. EPA/600/R-09/052F. September.
EPA. 2009. Residential Air Cleaners, A Summary of Available Information. EPA 402-F-09-002. August.
ANSI/ASHRAE. 2011 62.1 User's Manual. ANSI/AHSRAE Standard 62.1-2010. Ventilation for Acceptable Indoor Air Quality.

Figures



Legend

- Project Boundary
- Project Boundary 500ft Buffer
- Railway
- Roadways

N

0 250 500 Feet

Figure 1
Site Layout and Source Locations

ENVIRON

Legend

Exceedances with Vegetative Barrier Mitigated

N

0 250 500 Feet

Figure 2
Risk Threshold Exceedance Areas with Vegetative Barrier Mitigation (20% Removal Efficiency)

ENVIRON

Appendix A

Roadway Risk Screening Results

Appendix A
Cancer Risk from Roadways
Harmony
DR Horton
Milpitas, California

Receptor Location		Cancer Risk at each Receptor					
UTMx	UTMy	Montague Expressway	McCandless Drive	Snell Place	Ede Lane	Bettencourt Way	Total
m		in a million					
597,350	4,140,290	17	0.27	0.22	0.45	0.43	**18**
597,360	4,140,290	16	0.27	0.24	0.45	0.43	**18**
597,370	4,140,290	16	0.26	0.25	0.46	0.44	**18**
597,380	4,140,290	16	0.25	0.26	0.46	0.44	**18**
597,390	4,140,290	16	0.24	0.28	0.46	0.44	**18**
597,400	4,140,290	16	0.23	0.29	0.47	0.45	**18**
597,410	4,140,290	16	0.22	0.30	0.47	0.45	**18**
597,420	4,140,290	16	0.21	0.31	0.48	0.46	**17**
597,430	4,140,290	16	0.20	0.30	0.48	0.46	**17**
597,440	4,140,290	16	0.19	0.29	0.49	0.47	**17**
597,450	4,140,290	16	0.18	0.29	0.49	0.47	**18**
597,460	4,140,290	16	0.17	0.28	0.49	0.48	**18**
597,470	4,140,290	16	0.23	0.27	0.49	0.48	**18**
597,480	4,140,290	17	0.76	0.26	0.49	0.49	**19**
597,490	4,140,290	17	1.3	0.25	0.49	0.49	**20**
597,500	4,140,290	17	1.8	0.25	0.49	0.49	**20**
597,330	4,140,300	15	0.28	0.17	0.44	0.42	**16**
597,340	4,140,300	15	0.28	0.19	0.44	0.43	**16**
597,350	4,140,300	15	0.27	0.21	0.44	0.43	**16**
597,360	4,140,300	15	0.26	0.23	0.45	0.43	**16**
597,370	4,140,300	15	0.25	0.25	0.45	0.43	**16**
597,380	4,140,300	15	0.24	0.26	0.46	0.44	**16**
597,390	4,140,300	15	0.23	0.27	0.46	0.44	**16**
597,400	4,140,300	15	0.22	0.29	0.47	0.45	**16**
597,410	4,140,300	15	0.21	0.30	0.47	0.45	**16**
597,420	4,140,300	15	0.20	0.31	0.47	0.46	**16**
597,430	4,140,300	14	0.19	0.30	0.48	0.46	**16**
597,440	4,140,300	15	0.18	0.30	0.48	0.47	**16**
597,450	4,140,300	15	0.17	0.29	0.49	0.47	**16**
597,460	4,140,300	15	0.16	0.28	0.49	0.48	**16**
597,470	4,140,300	15	0.36	0.27	0.49	0.48	**16**
597,480	4,140,300	15	0.89	0.26	0.49	0.49	**17**
597,490	4,140,300	15	1.4	0.25	0.49	0.49	**18**
597,500	4,140,300	16	2.1	0.25	0.49	0.49	**19**
597,510	4,140,300	16	3.2	0.24	0.49	0.49	**20**
597,330	4,140,310	14	0.28	0.17	0.44	0.42	**15**
597,340	4,140,310	14	0.27	0.19	0.44	0.43	**15**
597,350	4,140,310	14	0.26	0.21	0.44	0.43	**15**
597,360	4,140,310	14	0.25	0.23	0.45	0.43	**15**
597,370	4,140,310	13	0.24	0.25	0.45	0.43	**15**
597,380	4,140,310	13	0.23	0.26	0.45	0.44	**15**
597,390	4,140,310	13	0.22	0.27	0.46	0.44	**15**
597,400	4,140,310	13	0.21	0.29	0.46	0.44	**15**
597,410	4,140,310	13	0.20	0.30	0.47	0.45	**15**
597,420	4,140,310	13	0.19	0.31	0.47	0.45	**15**
597,430	4,140,310	13	0.18	0.30	0.48	0.46	**15**
597,440	4,140,310	13	0.18	0.30	0.48	0.46	**15**
597,450	4,140,310	13	0.17	0.29	0.48	0.47	**15**
597,460	4,140,310	13	0.16	0.28	0.49	0.48	**15**
597,470	4,140,310	13	0.62	0.27	0.49	0.48	**15**
597,480	4,140,310	14	1.1	0.26	0.49	0.49	**16**

Appendix A
Cancer Risk from Roadways
Harmony
DR Horton
Milpitas, California

Receptor Location		Cancer Risk at each Receptor					
UTMx	UTMy	Montague Expressway	McCandless Drive	Snell Place	Ede Lane	Bettencourt Way	Total
m		in a million					
597,490	4,140,310	14	1.6	0.26	0.49	0.49	**17**
597,500	4,140,310	14	2.3	0.25	0.49	0.49	**18**
597,510	4,140,310	15	3.4	0.24	0.49	0.49	**19**
597,520	4,140,310	15	3.6	0.24	0.49	0.49	**20**
597,320	4,140,320	12	0.28	0.14	0.43	0.48	**14**
597,330	4,140,320	12	0.27	0.17	0.43	0.43	**13**
597,340	4,140,320	12	0.26	0.19	0.44	0.42	**13**
597,350	4,140,320	12	0.25	0.21	0.44	0.43	**13**
597,360	4,140,320	11	0.24	0.23	0.44	0.43	**13**
597,370	4,140,320	11	0.23	0.24	0.45	0.43	**13**
597,380	4,140,320	11	0.22	0.26	0.45	0.44	**12**
597,390	4,140,320	11	0.21	0.27	0.45	0.44	**12**
597,400	4,140,320	11	0.21	0.29	0.46	0.44	**12**
597,410	4,140,320	11	0.20	0.30	0.46	0.45	**12**
597,420	4,140,320	11	0.19	0.31	0.47	0.45	**12**
597,430	4,140,320	11	0.18	0.31	0.47	0.46	**12**
597,440	4,140,320	11	0.17	0.30	0.48	0.46	**12**
597,450	4,140,320	11	0.16	0.29	0.48	0.47	**12**
597,460	4,140,320	11	0.47	0.28	0.49	0.47	**13**
597,470	4,140,320	11	0.90	0.27	0.49	0.48	**13**
597,480	4,140,320	12	1.4	0.26	0.49	0.49	**14**
597,490	4,140,320	12	1.9	0.26	0.49	0.49	**15**
597,500	4,140,320	13	2.9	0.25	0.49	0.49	**17**
597,510	4,140,320	13	3.6	0.24	0.49	0.49	**18**
597,520	4,140,320	14	3.6	0.24	0.49	0.49	**19**
597,320	4,140,330	9.9	0.27	0.14	0.43	0.49	**11**
597,330	4,140,330	9.6	0.27	0.17	0.43	0.45	**11**
597,340	4,140,330	9.4	0.25	0.19	0.43	0.42	**11**
597,350	4,140,330	9.3	0.24	0.21	0.44	0.43	**11**
597,360	4,140,330	9.1	0.23	0.23	0.44	0.43	**10**
597,370	4,140,330	8.9	0.23	0.24	0.44	0.43	**10**
597,380	4,140,330	8.8	0.22	0.26	0.45	0.43	**10**
597,390	4,140,330	8.7	0.21	0.27	0.45	0.44	**10**
597,400	4,140,330	8.6	0.20	0.29	0.46	0.44	**10**
597,410	4,140,330	8.6	0.19	0.30	0.46	0.45	**10**
597,420	4,140,330	8.5	0.18	0.31	0.46	0.45	**9.9**
597,430	4,140,330	8.4	0.17	0.31	0.47	0.46	**9.8**
597,440	4,140,330	8.5	0.16	0.30	0.47	0.46	**9.9**
597,450	4,140,330	8.6	0.40	0.29	0.48	0.47	**10**
597,460	4,140,330	8.7	0.83	0.28	0.48	0.47	**11**
597,470	4,140,330	9.0	1.3	0.27	0.49	0.48	**12**
597,480	4,140,330	9.5	1.7	0.26	0.49	0.48	**12**
597,490	4,140,330	10	2.4	0.26	0.49	0.49	**14**
597,500	4,140,330	10	3.4	0.25	0.49	0.49	**15**
597,510	4,140,330	11	3.6	0.24	0.49	0.49	**16**
597,320	4,140,340	7.5	0.27	0.14	0.43	0.51	**8.9**
597,330	4,140,340	7.3	0.26	0.17	0.43	0.46	**8.6**
597,340	4,140,340	7.1	0.25	0.19	0.43	0.42	**8.4**
597,350	4,140,340	6.9	0.24	0.21	0.43	0.43	**8.2**
597,360	4,140,340	6.8	0.23	0.23	0.44	0.43	**8.1**
597,370	4,140,340	6.6	0.22	0.25	0.44	0.43	**7.9**

Appendix A
Cancer Risk from Roadways
Harmony
DR Horton
Milpitas, California

Receptor Location		Cancer Risk at each Receptor					
UTMx	UTMy	Montague Expressway	McCandless Drive	Snell Place	Ede Lane	Bettencourt Way	Total
m		in a million					
597,380	4,140,340	6.4	0.21	0.26	0.44	0.43	**7.8**
597,390	4,140,340	6.4	0.20	0.27	0.45	0.44	**7.7**
597,400	4,140,340	6.3	0.19	0.29	0.45	0.44	**7.7**
597,410	4,140,340	6.2	0.18	0.30	0.46	0.45	**7.6**
597,420	4,140,340	6.2	0.17	0.31	0.46	0.45	**7.6**
597,430	4,140,340	6.2	0.16	0.30	0.47	0.46	**7.6**
597,440	4,140,340	6.2	0.33	0.30	0.47	0.46	**7.7**
597,450	4,140,340	6.3	0.76	0.29	0.48	0.47	**8.3**
597,460	4,140,340	6.4	1.2	0.28	0.48	0.47	**8.8**
597,470	4,140,340	6.7	1.6	0.27	0.49	0.48	**9.6**
597,480	4,140,340	7.2	2.2	0.26	0.49	0.48	**11**
597,490	4,140,340	7.7	3.1	0.26	0.49	0.49	**12**
597,500	4,140,340	8.2	3.6	0.25	0.49	0.49	**13**
597,510	4,140,340	8.9	3.6	0.24	0.49	0.49	**14**
597,320	4,140,350	6.0	0.26	0.15	0.43	0.52	**7.4**
597,330	4,140,350	6.0	0.25	0.17	0.43	0.47	**7.3**
597,340	4,140,350	6.0	0.24	0.19	0.43	0.42	**7.3**
597,350	4,140,350	5.9	0.23	0.21	0.43	0.43	**7.2**
597,360	4,140,350	5.9	0.22	0.23	0.44	0.43	**7.2**
597,370	4,140,350	5.9	0.21	0.25	0.44	0.43	**7.2**
597,380	4,140,350	5.9	0.20	0.26	0.44	0.43	**7.2**
597,390	4,140,350	5.9	0.19	0.27	0.45	0.44	**7.2**
597,400	4,140,350	5.8	0.18	0.29	0.45	0.44	**7.2**
597,410	4,140,350	5.8	0.17	0.30	0.45	0.45	**7.2**
597,420	4,140,350	5.8	0.16	0.31	0.46	0.45	**7.2**
597,430	4,140,350	5.8	0.25	0.30	0.46	0.46	**7.3**
597,440	4,140,350	5.8	0.68	0.30	0.47	0.46	**7.7**
597,450	4,140,350	5.8	1.1	0.29	0.47	0.47	**8.2**
597,460	4,140,350	5.9	1.5	0.28	0.48	0.47	**8.6**
597,470	4,140,350	5.9	2.1	0.27	0.48	0.48	**9.2**
597,480	4,140,350	6.0	2.9	0.26	0.49	0.48	**10**
597,490	4,140,350	6.1	3.6	0.25	0.49	0.49	**11**
597,500	4,140,350	6.2	3.6	0.25	0.49	0.49	**11**
597,320	4,140,360	5.7	0.26	0.15	0.42	0.52	**7.0**
597,330	4,140,360	5.6	0.25	0.17	0.43	0.47	**7.0**
597,340	4,140,360	5.6	0.24	0.19	0.43	0.42	**6.9**
597,350	4,140,360	5.6	0.23	0.21	0.43	0.42	**6.9**
597,360	4,140,360	5.5	0.22	0.23	0.43	0.43	**6.9**
597,370	4,140,360	5.5	0.20	0.25	0.44	0.43	**6.8**
597,380	4,140,360	5.5	0.19	0.26	0.44	0.43	**6.8**
597,390	4,140,360	5.5	0.18	0.28	0.44	0.44	**6.8**
597,400	4,140,360	5.5	0.17	0.29	0.45	0.44	**6.8**
597,410	4,140,360	5.5	0.17	0.30	0.45	0.44	**6.8**
597,420	4,140,360	5.4	0.18	0.31	0.46	0.45	**6.8**
597,430	4,140,360	5.4	0.60	0.30	0.46	0.46	**7.3**
597,440	4,140,360	5.4	1.0	0.30	0.47	0.46	**7.7**
597,450	4,140,360	5.5	1.5	0.29	0.47	0.47	**8.2**
597,460	4,140,360	5.5	1.9	0.28	0.48	0.47	**8.7**
597,470	4,140,360	5.6	2.8	0.27	0.48	0.48	**9.6**
597,480	4,140,360	5.6	3.6	0.26	0.49	0.48	**10**
597,490	4,140,360	5.7	3.6	0.25	0.49	0.49	**11**

Appendix A
Cancer Risk from Roadways
Harmony
DR Horton
Milpitas, California

Receptor Location		Cancer Risk at each Receptor					
UTMx	UTMy	Montague Expressway	McCandless Drive	Snell Place	Ede Lane	Bettencourt Way	Total
m		in a million					
597,320	4,140,370	5.3	0.25	0.15	0.42	0.53	**6.7**
597,330	4,140,370	5.3	0.24	0.17	0.42	0.48	**6.6**
597,340	4,140,370	5.2	0.23	0.19	0.43	0.43	**6.5**
597,350	4,140,370	5.2	0.22	0.22	0.43	0.42	**6.5**
597,360	4,140,370	5.2	0.21	0.23	0.43	0.43	**6.5**
597,370	4,140,370	5.2	0.20	0.25	0.43	0.43	**6.5**
597,380	4,140,370	5.1	0.19	0.26	0.44	0.43	**6.4**
597,390	4,140,370	5.1	0.18	0.28	0.44	0.44	**6.4**
597,400	4,140,370	5.1	0.17	0.29	0.45	0.44	**6.4**
597,410	4,140,370	5.1	0.16	0.30	0.45	0.44	**6.5**
597,420	4,140,370	5.1	0.52	0.31	0.46	0.45	**6.8**
597,430	4,140,370	5.1	0.95	0.30	0.46	0.46	**7.2**
597,440	4,140,370	5.1	1.4	0.29	0.47	0.46	**7.7**
597,450	4,140,370	5.1	1.8	0.29	0.47	0.47	**8.1**
597,460	4,140,370	5.1	2.6	0.28	0.48	0.47	**9.0**
597,470	4,140,370	5.2	3.5	0.27	0.48	0.48	**10.0**
597,480	4,140,370	5.3	3.6	0.26	0.49	0.48	**10**
597,320	4,140,380	4.9	0.24	0.15	0.45	0.53	**6.3**
597,330	4,140,380	4.9	0.23	0.17	0.42	0.48	**6.2**
597,340	4,140,380	4.9	0.22	0.19	0.43	0.42	**6.1**
597,350	4,140,380	4.8	0.21	0.22	0.43	0.42	**6.1**
597,360	4,140,380	4.8	0.20	0.23	0.43	0.43	**6.1**
597,370	4,140,380	4.8	0.19	0.25	0.43	0.43	**6.1**
597,380	4,140,380	4.8	0.18	0.26	0.44	0.43	**6.1**
597,390	4,140,380	4.7	0.17	0.28	0.44	0.44	**6.1**
597,400	4,140,380	4.7	0.16	0.29	0.44	0.44	**6.1**
597,410	4,140,380	4.7	0.39	0.31	0.45	0.44	**6.3**
597,420	4,140,380	4.7	0.86	0.31	0.45	0.45	**6.8**
597,430	4,140,380	4.7	1.3	0.30	0.46	0.46	**7.2**
597,440	4,140,380	4.7	1.7	0.29	0.46	0.46	**7.7**
597,450	4,140,380	4.7	2.5	0.29	0.47	0.47	**8.4**
597,460	4,140,380	4.8	3.4	0.28	0.47	0.47	**9.4**
597,470	4,140,380	4.8	3.6	0.27	0.48	0.48	**9.6**
597,480	4,140,380	4.9	3.6	0.26	0.48	0.48	**9.7**
597,320	4,140,390	4.6	0.24	0.15	0.47	0.52	**6.0**
597,330	4,140,390	4.5	0.23	0.17	0.43	0.47	**5.8**
597,340	4,140,390	4.5	0.22	0.20	0.42	0.42	**5.8**
597,350	4,140,390	4.5	0.21	0.22	0.43	0.43	**5.8**
597,360	4,140,390	4.4	0.20	0.24	0.43	0.43	**5.7**
597,370	4,140,390	4.4	0.19	0.25	0.43	0.43	**5.7**
597,380	4,140,390	4.4	0.18	0.26	0.44	0.43	**5.7**
597,390	4,140,390	4.4	0.17	0.28	0.44	0.44	**5.7**
597,400	4,140,390	4.4	0.21	0.29	0.44	0.44	**5.8**
597,410	4,140,390	4.4	0.68	0.31	0.45	0.44	**6.2**
597,420	4,140,390	4.3	1.2	0.31	0.45	0.45	**6.7**
597,430	4,140,390	4.3	1.6	0.30	0.46	0.46	**7.2**
597,440	4,140,390	4.3	2.3	0.29	0.46	0.46	**7.9**
597,450	4,140,390	4.4	3.2	0.29	0.47	0.47	**8.8**
597,460	4,140,390	4.4	3.6	0.28	0.47	0.47	**9.2**
597,470	4,140,390	4.5	3.6	0.27	0.48	0.48	**9.3**
597,320	4,140,400	4.2	0.23	0.15	0.50	0.51	**5.6**

Appendix A
Cancer Risk from Roadways
Harmony
DR Horton
Milpitas, California

Receptor Location		Cancer Risk at each Receptor					
UTMx	UTMy	Montague Expressway	McCandless Drive	Snell Place	Ede Lane	Bettencourt Way	Total
m		in a million					
597,330	4,140,400	4.2	0.22	0.18	0.45	0.46	**5.5**
597,340	4,140,400	4.1	0.21	0.20	0.42	0.42	**5.4**
597,350	4,140,400	4.1	0.20	0.22	0.43	0.43	**5.4**
597,360	4,140,400	4.1	0.19	0.24	0.43	0.43	**5.4**
597,370	4,140,400	4.1	0.18	0.25	0.43	0.43	**5.3**
597,380	4,140,400	4.0	0.17	0.26	0.43	0.43	**5.3**
597,390	4,140,400	4.0	0.16	0.28	0.44	0.44	**5.3**
597,400	4,140,400	4.0	0.50	0.29	0.44	0.44	**5.7**
597,410	4,140,400	4.0	0.97	0.31	0.44	0.45	**6.2**
597,420	4,140,400	4.0	1.4	0.31	0.45	0.45	**6.6**
597,430	4,140,400	4.0	2.0	0.30	0.46	0.46	**7.2**
597,440	4,140,400	4.0	2.9	0.29	0.46	0.46	**8.1**
597,450	4,140,400	4.0	3.6	0.28	0.47	0.47	**8.8**
597,460	4,140,400	4.0	3.6	0.28	0.47	0.47	**8.8**
597,320	4,140,410	3.8	0.23	0.15	0.52	0.50	**5.3**
597,330	4,140,410	3.8	0.22	0.18	0.47	0.45	**5.1**
597,340	4,140,410	3.8	0.21	0.20	0.42	0.42	**5.0**
597,350	4,140,410	3.7	0.20	0.22	0.42	0.43	**5.0**
597,360	4,140,410	3.7	0.18	0.24	0.43	0.43	**5.0**
597,370	4,140,410	3.7	0.17	0.25	0.43	0.43	**5.0**
597,380	4,140,410	3.7	0.16	0.27	0.43	0.43	**5.0**
597,390	4,140,410	3.6	0.32	0.28	0.44	0.44	**5.1**
597,400	4,140,410	3.6	0.79	0.29	0.44	0.44	**5.6**
597,410	4,140,410	3.6	1.3	0.31	0.44	0.45	**6.1**
597,420	4,140,410	3.6	1.7	0.31	0.45	0.45	**6.6**
597,430	4,140,410	3.6	2.6	0.30	0.45	0.46	**7.4**
597,440	4,140,410	3.6	3.5	0.29	0.46	0.46	**8.4**
597,450	4,140,410	3.6	3.6	0.28	0.46	0.47	**8.4**
597,320	4,140,420	3.5	0.22	0.16	0.54	0.49	**4.9**
597,330	4,140,420	3.4	0.21	0.18	0.49	0.44	**4.8**
597,340	4,140,420	3.4	0.20	0.20	0.44	0.42	**4.7**
597,350	4,140,420	3.4	0.19	0.22	0.42	0.43	**4.6**
597,360	4,140,420	3.3	0.18	0.24	0.43	0.43	**4.6**
597,370	4,140,420	3.3	0.17	0.25	0.43	0.43	**4.6**
597,380	4,140,420	3.3	0.16	0.27	0.43	0.44	**4.6**
597,390	4,140,420	3.3	0.61	0.28	0.44	0.44	**5.0**
597,400	4,140,420	3.3	1.1	0.29	0.44	0.44	**5.5**
597,410	4,140,420	3.3	1.6	0.31	0.44	0.45	**6.0**
597,420	4,140,420	3.2	2.2	0.31	0.45	0.45	**6.7**
597,430	4,140,420	3.2	3.2	0.30	0.45	0.46	**7.6**
597,440	4,140,420	3.2	3.6	0.29	0.46	0.46	**8.0**
597,450	4,140,420	3.3	3.6	0.28	0.46	0.47	**8.1**
597,320	4,140,430	3.1	0.22	0.16	0.55	0.47	**4.5**
597,330	4,140,430	3.1	0.21	0.18	0.50	0.43	**4.4**
597,340	4,140,430	3.0	0.20	0.20	0.45	0.42	**4.3**
597,350	4,140,430	3.0	0.19	0.22	0.42	0.43	**4.3**
597,360	4,140,430	3.0	0.17	0.24	0.43	0.43	**4.3**
597,370	4,140,430	3.0	0.16	0.25	0.43	0.43	**4.2**
597,380	4,140,430	2.9	0.33	0.27	0.43	0.44	**4.4**
597,390	4,140,430	2.9	0.84	0.28	0.43	0.44	**4.9**
597,400	4,140,430	2.9	1.3	0.30	0.44	0.44	**5.4**

Appendix A
Cancer Risk from Roadways
Harmony
DR Horton
Milpitas, California

Receptor Location		Cancer Risk at each Receptor					
UTMx	UTMy	Montague Expressway	McCandless Drive	Snell Place	Ede Lane	Bettencourt Way	Total
m		in a million					
597,410	4,140,430	2.9	1.8	0.31	0.44	0.45	**5.9**
597,420	4,140,430	2.9	2.8	0.31	0.45	0.45	**6.9**
597,430	4,140,430	2.9	3.6	0.30	0.45	0.46	**7.6**
597,440	4,140,430	2.9	3.6	0.29	0.46	0.46	**7.7**
597,320	4,140,440	2.8	0.21	0.16	0.56	0.45	**4.2**
597,330	4,140,440	2.8	0.20	0.18	0.51	0.42	**4.1**
597,340	4,140,440	2.8	0.19	0.20	0.46	0.43	**4.1**
597,350	4,140,440	2.8	0.18	0.23	0.42	0.43	**4.0**
597,360	4,140,440	2.8	0.17	0.24	0.43	0.43	**4.0**
597,370	4,140,440	2.8	0.16	0.25	0.43	0.43	**4.0**
597,380	4,140,440	2.7	0.55	0.27	0.43	0.44	**4.4**
597,390	4,140,440	2.7	1.1	0.28	0.43	0.44	**5.0**
597,400	4,140,440	2.7	1.6	0.30	0.44	0.44	**5.5**
597,410	4,140,440	2.7	2.3	0.31	0.44	0.45	**6.3**
597,420	4,140,440	2.7	3.4	0.31	0.45	0.45	**7.3**
597,430	4,140,440	2.7	3.6	0.30	0.45	0.46	**7.5**
597,310	4,140,450	2.7	0.22	0.14	0.62	0.47	**4.2**
597,320	4,140,450	2.7	0.21	0.16	0.57	0.43	**4.1**
597,330	4,140,450	2.7	0.20	0.18	0.52	0.42	**4.0**
597,340	4,140,450	2.7	0.19	0.21	0.47	0.43	**4.0**
597,350	4,140,450	2.7	0.18	0.23	0.42	0.43	**3.9**
597,360	4,140,450	2.6	0.17	0.24	0.43	0.43	**3.9**
597,370	4,140,450	2.6	0.25	0.26	0.43	0.43	**4.0**
597,380	4,140,450	2.6	0.76	0.27	0.43	0.44	**4.5**
597,390	4,140,450	2.6	1.3	0.28	0.43	0.44	**5.1**
597,400	4,140,450	2.6	1.8	0.30	0.44	0.45	**5.6**
597,410	4,140,450	2.6	2.8	0.31	0.44	0.45	**6.6**
597,420	4,140,450	2.6	3.6	0.31	0.45	0.46	**7.4**
597,430	4,140,450	2.6	3.6	0.30	0.45	0.46	**7.4**
597,310	4,140,460	2.6	0.22	0.14	0.62	0.45	**4.0**
597,320	4,140,460	2.6	0.21	0.16	0.57	0.42	**3.9**
597,330	4,140,460	2.6	0.20	0.18	0.52	0.43	**3.9**
597,340	4,140,460	2.5	0.18	0.21	0.47	0.43	**3.8**
597,350	4,140,460	2.5	0.17	0.23	0.42	0.43	**3.8**
597,360	4,140,460	2.5	0.16	0.24	0.43	0.43	**3.8**
597,370	4,140,460	2.5	0.46	0.26	0.43	0.44	**4.1**
597,380	4,140,460	2.5	0.98	0.27	0.43	0.44	**4.6**
597,390	4,140,460	2.5	1.5	0.28	0.43	0.44	**5.2**
597,400	4,140,460	2.5	2.2	0.30	0.44	0.45	**5.8**
597,410	4,140,460	2.5	3.2	0.31	0.44	0.45	**6.9**
597,420	4,140,460	2.5	3.6	0.31	0.45	0.46	**7.3**
597,310	4,140,470	2.5	0.22	0.14	0.62	0.42	**3.9**
597,320	4,140,470	2.5	0.20	0.16	0.57	0.42	**3.8**
597,330	4,140,470	2.4	0.19	0.19	0.52	0.43	**3.8**
597,340	4,140,470	2.4	0.18	0.21	0.47	0.43	**3.7**
597,350	4,140,470	2.4	0.17	0.23	0.42	0.43	**3.7**
597,360	4,140,470	2.4	0.16	0.24	0.43	0.43	**3.7**
597,370	4,140,470	2.4	0.61	0.26	0.43	0.44	**4.1**
597,380	4,140,470	2.4	1.1	0.27	0.43	0.44	**4.7**
597,390	4,140,470	2.4	1.7	0.29	0.43	0.44	**5.2**
597,400	4,140,470	2.4	2.6	0.30	0.44	0.45	**6.2**

Appendix A
Cancer Risk from Roadways
Harmony
DR Horton
Milpitas, California

Receptor Location		Cancer Risk at each Receptor					
UTMx	UTMy	Montague Expressway	McCandless Drive	Snell Place	Ede Lane	Bettencourt Way	Total
m		in a million					
597,410	4,140,470	2.4	3.6	0.31	0.44	0.46	**7.2**
597,420	4,140,470	2.4	3.6	0.31	0.45	0.46	**7.2**
597,310	4,140,480	2.4	0.21	0.14	0.61	0.42	**3.7**
597,320	4,140,480	2.3	0.20	0.17	0.56	0.43	**3.7**
597,330	4,140,480	2.3	0.19	0.19	0.51	0.43	**3.6**
597,340	4,140,480	2.3	0.18	0.21	0.46	0.43	**3.6**
597,350	4,140,480	2.3	0.17	0.23	0.42	0.43	**3.6**
597,360	4,140,480	2.3	0.23	0.24	0.43	0.44	**3.6**
597,370	4,140,480	2.3	0.76	0.26	0.43	0.44	**4.2**
597,380	4,140,480	2.3	1.3	0.27	0.43	0.44	**4.7**
597,390	4,140,480	2.3	1.8	0.29	0.43	0.45	**5.3**
597,400	4,140,480	2.3	2.9	0.30	0.44	0.45	**6.3**
597,410	4,140,480	2.3	3.6	0.31	0.44	0.46	**7.0**
597,310	4,140,490	2.2	0.21	0.15	0.60	0.43	**3.6**
597,320	4,140,490	2.2	0.20	0.17	0.55	0.43	**3.6**
597,330	4,140,490	2.2	0.19	0.19	0.50	0.43	**3.5**
597,340	4,140,490	2.2	0.17	0.21	0.45	0.43	**3.5**
597,350	4,140,490	2.2	0.16	0.23	0.42	0.44	**3.4**
597,360	4,140,490	2.2	0.37	0.25	0.43	0.44	**3.7**
597,370	4,140,490	2.2	0.91	0.26	0.43	0.44	**4.2**
597,380	4,140,490	2.2	1.4	0.27	0.43	0.45	**4.7**
597,390	4,140,490	2.2	2.1	0.29	0.43	0.45	**5.4**
597,400	4,140,490	2.2	3.2	0.30	0.44	0.45	**6.5**
597,410	4,140,490	2.1	3.6	0.31	0.44	0.46	**6.9**
597,310	4,140,500	2.1	0.21	0.16	0.59	0.43	**3.5**
597,320	4,140,500	2.1	0.19	0.18	0.54	0.43	**3.5**
597,330	4,140,500	2.1	0.18	0.20	0.49	0.43	**3.4**
597,340	4,140,500	2.1	0.17	0.22	0.44	0.43	**3.4**
597,350	4,140,500	2.1	0.16	0.24	0.42	0.44	**3.4**
597,360	4,140,500	2.1	0.52	0.25	0.43	0.44	**3.7**
597,370	4,140,500	2.1	1.1	0.26	0.43	0.44	**4.3**
597,380	4,140,500	2.1	1.6	0.28	0.43	0.45	**4.8**
597,390	4,140,500	2.1	2.4	0.29	0.44	0.45	**5.7**
597,400	4,140,500	2.1	3.5	0.30	0.44	0.46	**6.8**
597,410	4,140,500	2.1	3.6	0.31	0.44	0.46	**6.9**
597,310	4,140,510	2.1	0.20	0.16	0.57	0.43	**3.4**
597,320	4,140,510	2.1	0.19	0.18	0.52	0.43	**3.4**
597,330	4,140,510	2.1	0.18	0.20	0.48	0.43	**3.3**
597,340	4,140,510	2.0	0.17	0.23	0.43	0.44	**3.3**
597,350	4,140,510	2.0	0.16	0.24	0.42	0.44	**3.3**
597,360	4,140,510	2.0	0.67	0.25	0.43	0.44	**3.8**
597,370	4,140,510	2.0	1.2	0.27	0.43	0.45	**4.4**
597,380	4,140,510	2.0	1.7	0.28	0.43	0.45	**4.9**
597,390	4,140,510	2.0	2.7	0.29	0.44	0.46	**5.9**
597,400	4,140,510	2.0	3.6	0.31	0.44	0.46	**6.8**
597,310	4,140,520	2.0	0.20	0.17	0.55	0.43	**3.4**
597,320	4,140,520	2.0	0.19	0.19	0.50	0.43	**3.3**
597,330	4,140,520	2.0	0.18	0.21	0.46	0.44	**3.3**
597,340	4,140,520	2.0	0.17	0.23	0.42	0.44	**3.3**
597,350	4,140,520	2.0	0.29	0.24	0.43	0.44	**3.4**
597,360	4,140,520	2.0	0.82	0.26	0.43	0.45	**3.9**

Appendix A
Cancer Risk from Roadways
Harmony
DR Horton
Milpitas, California

Receptor Location		Cancer Risk at each Receptor					
UTMx	UTMy	Montague Expressway	McCandless Drive	Snell Place	Ede Lane	Bettencourt Way	Total
m		in a million					
597,370	4,140,520	2.0	1.4	0.27	0.43	0.45	**4.5**
597,380	4,140,520	2.0	1.9	0.28	0.43	0.45	**5.1**
597,390	4,140,520	2.0	3.0	0.30	0.44	0.46	**6.2**
597,400	4,140,520	2.0	3.6	0.31	0.44	0.46	**6.8**
597,310	4,140,530	2.0	0.20	0.18	0.52	0.43	**3.3**
597,320	4,140,530	2.0	0.19	0.20	0.48	0.44	**3.3**
597,330	4,140,530	2.0	0.17	0.22	0.44	0.44	**3.2**
597,340	4,140,530	1.9	0.16	0.24	0.42	0.44	**3.2**
597,350	4,140,530	1.9	0.44	0.25	0.43	0.44	**3.5**
597,360	4,140,530	1.9	0.97	0.26	0.43	0.45	**4.0**
597,370	4,140,530	1.9	1.5	0.28	0.43	0.45	**4.6**
597,380	4,140,530	1.9	2.2	0.29	0.43	0.46	**5.3**
597,390	4,140,530	1.9	3.3	0.30	0.44	0.46	**6.4**
597,400	4,140,530	1.9	3.6	0.31	0.44	0.47	**6.7**
597,310	4,140,540	1.9	0.19	0.20	0.50	0.44	**3.2**
597,320	4,140,540	1.9	0.18	0.21	0.45	0.44	**3.2**
597,330	4,140,540	1.9	0.17	0.23	0.42	0.44	**3.2**
597,340	4,140,540	1.9	0.16	0.24	0.43	0.44	**3.2**
597,350	4,140,540	1.9	0.57	0.26	0.43	0.45	**3.6**
597,360	4,140,540	1.9	1.1	0.27	0.43	0.45	**4.1**
597,370	4,140,540	1.9	1.6	0.28	0.43	0.46	**4.7**
597,380	4,140,540	1.9	2.5	0.29	0.44	0.46	**5.6**
597,390	4,140,540	1.9	3.6	0.31	0.44	0.47	**6.6**
597,400	4,140,540	1.9	3.6	0.31	0.44	0.47	**6.7**
597,310	4,140,550	1.9	0.19	0.21	0.47	0.44	**3.2**
597,320	4,140,550	1.9	0.18	0.23	0.43	0.44	**3.1**
597,330	4,140,550	1.8	0.17	0.24	0.42	0.45	**3.1**
597,340	4,140,550	1.8	0.16	0.25	0.43	0.45	**3.1**
597,350	4,140,550	1.8	0.67	0.26	0.43	0.45	**3.6**
597,360	4,140,550	1.8	1.2	0.27	0.43	0.46	**4.2**
597,370	4,140,550	1.8	1.8	0.29	0.43	0.46	**4.8**
597,380	4,140,550	1.8	2.8	0.30	0.44	0.46	**5.8**
597,390	4,140,550	1.8	3.6	0.31	0.44	0.47	**6.6**
597,310	4,140,560	1.8	0.19	0.22	0.43	0.44	**3.1**
597,320	4,140,560	1.8	0.18	0.24	0.42	0.45	**3.1**
597,330	4,140,560	1.8	0.17	0.25	0.43	0.45	**3.1**
597,340	4,140,560	1.8	0.22	0.26	0.43	0.45	**3.2**
597,350	4,140,560	1.8	0.77	0.27	0.43	0.46	**3.7**
597,360	4,140,560	1.8	1.3	0.28	0.43	0.46	**4.3**
597,370	4,140,560	1.8	1.9	0.29	0.44	0.46	**4.8**
597,380	4,140,560	1.8	3.0	0.31	0.44	0.47	**6.0**
597,390	4,140,560	1.8	3.6	0.31	0.44	0.47	**6.6**
597,310	4,140,570	1.8	0.19	0.23	0.42	0.45	**3.0**
597,320	4,140,570	1.7	0.18	0.24	0.43	0.45	**3.0**
597,330	4,140,570	1.7	0.16	0.26	0.43	0.45	**3.0**
597,340	4,140,570	1.7	0.32	0.27	0.43	0.46	**3.2**
597,350	4,140,570	1.7	0.87	0.28	0.43	0.46	**3.8**
597,360	4,140,570	1.7	1.4	0.29	0.43	0.46	**4.3**
597,370	4,140,570	1.7	2.1	0.30	0.44	0.47	**5.0**
597,380	4,140,570	1.7	3.2	0.31	0.44	0.47	**6.1**
597,390	4,140,570	1.7	3.6	0.31	0.44	0.48	**6.5**

Appendix A
Cancer Risk from Roadways
Harmony
DR Horton
Milpitas, California

Receptor Location		Cancer Risk at each Receptor					
UTMx	UTMy	Montague Expressway	McCandless Drive	Snell Place	Ede Lane	Bettencourt Way	Total
m		in a million					
597,310	4,140,580	1.7	0.19	0.24	0.43	0.45	**3.0**
597,320	4,140,580	1.7	0.17	0.25	0.43	0.46	**3.0**
597,330	4,140,580	1.7	0.16	0.26	0.43	0.46	**3.0**
597,340	4,140,580	1.7	0.42	0.28	0.43	0.46	**3.3**
597,350	4,140,580	1.7	0.96	0.29	0.43	0.46	**3.8**
597,360	4,140,580	1.7	1.5	0.30	0.44	0.47	**4.4**
597,370	4,140,580	1.7	2.3	0.31	0.44	0.47	**5.2**
597,380	4,140,580	1.7	3.4	0.31	0.44	0.48	**6.3**
597,390	4,140,580	1.7	3.6	0.30	0.45	0.48	**6.5**
597,300	4,140,590	1.7	0.20	0.25	0.43	0.45	**3.0**
597,310	4,140,590	1.6	0.18	0.25	0.43	0.46	**3.0**
597,320	4,140,590	1.6	0.17	0.26	0.43	0.46	**3.0**
597,330	4,140,590	1.6	0.16	0.27	0.43	0.46	**3.0**
597,340	4,140,590	1.6	0.50	0.28	0.43	0.47	**3.3**
597,350	4,140,590	1.6	1.0	0.30	0.44	0.47	**3.9**
597,360	4,140,590	1.6	1.6	0.31	0.44	0.47	**4.5**
597,370	4,140,590	1.6	2.5	0.31	0.44	0.48	**5.3**
597,380	4,140,590	1.6	3.6	0.31	0.45	0.48	**6.4**
597,300	4,140,600	1.6	0.20	0.26	0.43	0.46	**3.0**
597,310	4,140,600	1.6	0.18	0.27	0.43	0.46	**3.0**
597,320	4,140,600	1.6	0.17	0.27	0.43	0.46	**3.0**
597,330	4,140,600	1.6	0.16	0.28	0.43	0.47	**3.0**
597,340	4,140,600	1.6	0.56	0.29	0.44	0.47	**3.4**
597,350	4,140,600	1.6	1.1	0.30	0.44	0.47	**4.0**
597,360	4,140,600	1.6	1.7	0.31	0.44	0.48	**4.5**
597,370	4,140,600	1.6	2.6	0.31	0.44	0.48	**5.5**
597,380	4,140,600	1.6	3.6	0.30	0.45	0.48	**6.4**
597,300	4,140,610	1.6	0.19	0.27	0.43	0.46	**3.0**
597,310	4,140,610	1.6	0.18	0.28	0.43	0.47	**3.0**
597,320	4,140,610	1.6	0.17	0.29	0.43	0.47	**3.0**
597,330	4,140,610	1.6	0.16	0.29	0.44	0.47	**3.0**
597,340	4,140,610	1.6	0.61	0.30	0.44	0.47	**3.5**
597,350	4,140,610	1.6	1.2	0.31	0.44	0.48	**4.0**
597,360	4,140,610	1.6	1.7	0.31	0.44	0.48	**4.6**
597,370	4,140,610	1.6	2.7	0.30	0.45	0.48	**5.6**
597,380	4,140,610	1.6	3.6	0.30	0.45	0.49	**6.4**
597,300	4,140,620	1.6	0.19	0.28	0.43	0.47	**3.0**
597,310	4,140,620	1.6	0.18	0.29	0.43	0.47	**3.0**
597,320	4,140,620	1.6	0.17	0.30	0.44	0.47	**3.0**
597,330	4,140,620	1.6	0.16	0.31	0.44	0.48	**3.0**
597,340	4,140,620	1.6	0.67	0.31	0.44	0.48	**3.5**
597,350	4,140,620	1.6	1.2	0.31	0.44	0.48	**4.1**
597,360	4,140,620	1.6	1.8	0.30	0.45	0.49	**4.6**
597,370	4,140,620	1.6	2.8	0.30	0.45	0.49	**5.7**
597,380	4,140,620	1.6	3.6	0.29	0.46	0.49	**6.4**
597,300	4,140,630	1.6	0.19	0.29	0.44	0.47	**3.0**
597,310	4,140,630	1.6	0.18	0.30	0.44	0.48	**3.0**
597,320	4,140,630	1.6	0.17	0.31	0.44	0.48	**3.0**
597,330	4,140,630	1.6	0.18	0.31	0.44	0.48	**3.1**
597,340	4,140,630	1.6	0.73	0.31	0.44	0.48	**3.6**
597,350	4,140,630	1.6	1.3	0.30	0.45	0.49	**4.2**

Appendix A
Cancer Risk from Roadways
Harmony
DR Horton
Milpitas, California

Receptor Location		Cancer Risk at each Receptor					
UTMx	UTMy	Montague Expressway	McCandless Drive	Snell Place	Ede Lane	Bettencourt Way	Total
m		in a million					
597,360	4,140,630	1.6	1.8	0.30	0.45	0.49	**4.7**
597,370	4,140,630	1.6	2.9	0.29	0.46	0.49	**5.8**
597,380	4,140,630	1.6	3.6	0.28	0.46	0.49	**6.4**
597,300	4,140,640	1.6	0.19	0.30	0.44	0.48	**3.0**
597,310	4,140,640	1.6	0.18	0.31	0.44	0.48	**3.0**
597,320	4,140,640	1.6	0.17	0.31	0.44	0.48	**3.0**
597,330	4,140,640	1.6	0.23	0.31	0.45	0.49	**3.1**
597,340	4,140,640	1.6	0.78	0.30	0.45	0.49	**3.7**
597,350	4,140,640	1.6	1.3	0.30	0.45	0.49	**4.2**
597,360	4,140,640	1.6	1.9	0.29	0.46	0.49	**4.8**
597,370	4,140,640	1.6	3.0	0.28	0.46	0.49	**5.9**
597,380	4,140,640	1.6	3.6	0.28	0.46	0.49	**6.4**
597,300	4,140,650	1.6	0.19	0.31	0.44	0.48	**3.1**
597,310	4,140,650	1.6	0.18	0.31	0.44	0.49	**3.1**
597,320	4,140,650	1.6	0.17	0.30	0.45	0.49	**3.0**
597,330	4,140,650	1.6	0.28	0.30	0.45	0.49	**3.2**
597,340	4,140,650	1.6	0.83	0.29	0.45	0.49	**3.7**
597,350	4,140,650	1.6	1.4	0.29	0.46	0.49	**4.3**
597,360	4,140,650	1.6	2.0	0.28	0.46	0.49	**4.9**
597,370	4,140,650	1.6	3.1	0.28	0.46	0.49	**6.0**
597,380	4,140,650	1.6	3.6	0.27	0.47	0.49	**6.4**
597,300	4,140,660	1.6	0.19	0.31	0.45	0.49	**3.1**
597,310	4,140,660	1.6	0.18	0.30	0.45	0.49	**3.1**
597,320	4,140,660	1.6	0.16	0.30	0.45	0.49	**3.0**
597,330	4,140,660	1.6	0.33	0.29	0.45	0.49	**3.2**
597,340	4,140,660	1.6	0.88	0.29	0.46	0.49	**3.8**
597,350	4,140,660	1.6	1.4	0.28	0.46	0.49	**4.3**
597,360	4,140,660	1.6	2.1	0.28	0.46	0.49	**5.0**
597,370	4,140,660	1.6	3.2	0.27	0.47	0.49	**6.1**
597,380	4,140,660	1.6	3.6	0.27	0.47	0.49	**6.4**
597,300	4,140,670	1.6	0.19	0.30	0.45	0.49	**3.1**
597,310	4,140,670	1.6	0.18	0.29	0.45	0.49	**3.1**
597,320	4,140,670	1.6	0.16	0.29	0.46	0.49	**3.0**
597,330	4,140,670	1.6	0.38	0.29	0.46	0.49	**3.2**
597,340	4,140,670	1.6	0.93	0.28	0.46	0.49	**3.8**
597,350	4,140,670	1.6	1.5	0.28	0.46	0.49	**4.3**
597,360	4,140,670	1.6	2.2	0.27	0.47	0.49	**5.1**
597,370	4,140,670	1.6	3.3	0.27	0.47	0.49	**6.2**
597,380	4,140,670	1.6	3.6	0.26	0.48	0.49	**6.4**
597,300	4,140,680	1.6	0.19	0.29	0.46	0.49	**3.1**
597,310	4,140,680	1.6	0.17	0.29	0.46	0.49	**3.0**
597,320	4,140,680	1.6	0.16	0.28	0.46	0.49	**3.0**
597,330	4,140,680	1.6	0.43	0.28	0.46	0.49	**3.3**
597,340	4,140,680	1.6	0.98	0.27	0.47	0.49	**3.8**
597,350	4,140,680	1.6	1.5	0.27	0.47	0.49	**4.4**
597,360	4,140,680	1.6	2.3	0.26	0.47	0.49	**5.2**
597,370	4,140,680	1.6	3.4	0.26	0.48	0.49	**6.3**
597,380	4,140,680	1.6	3.6	0.25	0.48	0.49	**6.4**
597,300	4,140,690	1.6	0.19	0.28	0.46	0.49	**3.1**
597,310	4,140,690	1.6	0.17	0.28	0.46	0.49	**3.0**
597,320	4,140,690	1.6	0.16	0.28	0.47	0.49	**3.0**

Appendix A
Cancer Risk from Roadways
Harmony
DR Horton
Milpitas, California

Receptor Location		Cancer Risk at each Receptor					
UTMx	**UTMy**	**Montague Expressway**	**McCandless Drive**	**Snell Place**	**Ede Lane**	**Bettencourt Way**	**Total**
m		in a million					
597,330	4,140,690	1.6	0.48	0.27	0.47	0.49	**3.3**
597,340	4,140,690	1.6	1.0	0.27	0.47	0.49	**3.9**
597,350	4,140,690	1.6	1.6	0.26	0.47	0.49	**4.4**
597,360	4,140,690	1.6	2.4	0.26	0.48	0.49	**5.3**
597,370	4,140,690	1.6	3.5	0.25	0.48	0.49	**6.4**
597,380	4,140,690	1.6	3.6	0.25	0.48	0.49	**6.4**
597,300	4,140,700	1.6	0.18	0.28	0.47	0.49	**3.1**
597,310	4,140,700	1.6	0.17	0.27	0.47	0.49	**3.0**
597,320	4,140,700	1.6	0.16	0.27	0.47	0.49	**3.0**
597,330	4,140,700	1.6	0.53	0.26	0.47	0.49	**3.4**
597,340	4,140,700	1.6	1.1	0.26	0.48	0.49	**3.9**
597,350	4,140,700	1.6	1.6	0.26	0.48	0.49	**4.5**
597,360	4,140,700	1.6	2.5	0.25	0.48	0.49	**5.4**
597,370	4,140,700	1.6	3.6	0.25	0.48	0.49	**6.4**
597,290	4,140,710	1.6	0.20	0.27	0.47	0.49	**3.1**
597,300	4,140,710	1.6	0.18	0.27	0.47	0.49	**3.0**
597,310	4,140,710	1.6	0.17	0.26	0.47	0.49	**3.0**
597,320	4,140,710	1.6	0.16	0.26	0.47	0.49	**3.0**
597,330	4,140,710	1.6	0.58	0.26	0.48	0.49	**3.4**
597,340	4,140,710	1.6	1.1	0.25	0.48	0.49	**4.0**
597,350	4,140,710	1.6	1.7	0.25	0.48	0.49	**4.5**
597,360	4,140,710	1.6	2.6	0.24	0.49	0.49	**5.5**
597,370	4,140,710	1.6	3.6	0.24	0.49	0.49	**6.4**

Appendix B

Railway Risk Screening Results

Appendix B
Cancer Risk from Rail
Harmony
DR Horton
Milpitas, California

Receptor Location		Max Cancer Risk 70-year Resident
UTMx	UTMy	
m		in a million
597,350	4,140,290	5.28
597,360	4,140,290	4.78
597,370	4,140,290	4.34
597,380	4,140,290	3.96
597,390	4,140,290	3.63
597,400	4,140,290	3.38
597,410	4,140,290	3.16
597,420	4,140,290	2.95
597,430	4,140,290	2.75
597,440	4,140,290	2.58
597,450	4,140,290	2.45
597,460	4,140,290	2.34
597,470	4,140,290	2.23
597,480	4,140,290	2.12
597,490	4,140,290	2.02
597,500	4,140,290	1.92
597,330	4,140,300	6.81
597,340	4,140,300	5.76
597,350	4,140,300	5.16
597,360	4,140,300	4.71
597,370	4,140,300	4.33
597,380	4,140,300	3.96
597,390	4,140,300	3.65
597,400	4,140,300	3.40
597,410	4,140,300	3.19
597,420	4,140,300	2.98
597,430	4,140,300	2.78
597,440	4,140,300	2.60
597,450	4,140,300	2.47
597,460	4,140,300	2.35
597,470	4,140,300	2.24
597,480	4,140,300	2.13
597,490	4,140,300	2.03
597,500	4,140,300	1.92
597,510	4,140,300	1.82
597,330	4,140,310	6.59
597,340	4,140,310	5.71
597,350	4,140,310	5.00
597,360	4,140,310	4.59
597,370	4,140,310	4.26
597,380	4,140,310	3.94
597,390	4,140,310	3.65
597,400	4,140,310	3.42
597,410	4,140,310	3.21
597,420	4,140,310	3.01
597,430	4,140,310	2.81
597,440	4,140,310	2.64
597,450	4,140,310	2.50
597,460	4,140,310	2.37
597,470	4,140,310	2.25

Appendix B
Cancer Risk from Rail
Harmony
DR Horton
Milpitas, California

Receptor Location		Max Cancer Risk 70-year Resident
UTMx	UTMy	
m		in a million
597,480	4,140,310	2.14
597,490	4,140,310	2.03
597,500	4,140,310	1.92
597,510	4,140,310	1.81
597,520	4,140,310	1.72
597,320	4,140,320	7.10
597,330	4,140,320	6.24
597,340	4,140,320	5.62
597,350	4,140,320	4.95
597,360	4,140,320	4.46
597,370	4,140,320	4.20
597,380	4,140,320	3.91
597,390	4,140,320	3.64
597,400	4,140,320	3.42
597,410	4,140,320	3.22
597,420	4,140,320	3.03
597,430	4,140,320	2.84
597,440	4,140,320	2.67
597,450	4,140,320	2.53
597,460	4,140,320	2.39
597,470	4,140,320	2.26
597,480	4,140,320	2.14
597,490	4,140,320	2.03
597,500	4,140,320	1.91
597,510	4,140,320	1.80
597,520	4,140,320	1.70
597,320	4,140,330	6.93
597,330	4,140,330	6.18
597,340	4,140,330	5.57
597,350	4,140,330	4.92
597,360	4,140,330	4.43
597,370	4,140,330	4.19
597,380	4,140,330	3.90
597,390	4,140,330	3.65
597,400	4,140,330	3.43
597,410	4,140,330	3.23
597,420	4,140,330	3.04
597,430	4,140,330	2.85
597,440	4,140,330	2.69
597,450	4,140,330	2.54
597,460	4,140,330	2.40
597,470	4,140,330	2.27
597,480	4,140,330	2.14
597,490	4,140,330	2.03
597,500	4,140,330	1.90
597,510	4,140,330	1.79
597,320	4,140,340	6.94
597,330	4,140,340	6.25
597,340	4,140,340	5.54
597,350	4,140,340	4.90

Appendix B
Cancer Risk from Rail
Harmony
DR Horton
Milpitas, California

Receptor Location		Max Cancer Risk 70-year Resident
UTMx	UTMy	
m		in a million
597,360	4,140,340	4.45
597,370	4,140,340	4.20
597,380	4,140,340	3.91
597,390	4,140,340	3.66
597,400	4,140,340	3.43
597,410	4,140,340	3.23
597,420	4,140,340	3.04
597,430	4,140,340	2.86
597,440	4,140,340	2.69
597,450	4,140,340	2.54
597,460	4,140,340	2.40
597,470	4,140,340	2.26
597,480	4,140,340	2.13
597,490	4,140,340	2.01
597,500	4,140,340	1.89
597,510	4,140,340	1.78
597,320	4,140,350	7.31
597,330	4,140,350	6.30
597,340	4,140,350	5.51
597,350	4,140,350	4.88
597,360	4,140,350	4.47
597,370	4,140,350	4.22
597,380	4,140,350	3.92
597,390	4,140,350	3.66
597,400	4,140,350	3.44
597,410	4,140,350	3.23
597,420	4,140,350	3.04
597,430	4,140,350	2.86
597,440	4,140,350	2.69
597,450	4,140,350	2.54
597,460	4,140,350	2.40
597,470	4,140,350	2.26
597,480	4,140,350	2.12
597,490	4,140,350	1.99
597,500	4,140,350	1.87
597,320	4,140,360	7.43
597,330	4,140,360	6.30
597,340	4,140,360	5.48
597,350	4,140,360	4.85
597,360	4,140,360	4.48
597,370	4,140,360	4.22
597,380	4,140,360	3.92
597,390	4,140,360	3.67
597,400	4,140,360	3.44
597,410	4,140,360	3.23
597,420	4,140,360	3.04
597,430	4,140,360	2.86
597,440	4,140,360	2.69
597,450	4,140,360	2.53
597,460	4,140,360	2.39

Appendix B
Cancer Risk from Rail
Harmony
DR Horton
Milpitas, California

Receptor Location		Max Cancer Risk 70-year Resident
UTMx	**UTMy**	
m		in a million
597,470	4,140,360	2.24
597,480	4,140,360	2.10
597,490	4,140,360	1.98
597,320	4,140,370	7.44
597,330	4,140,370	6.27
597,340	4,140,370	5.45
597,350	4,140,370	4.83
597,360	4,140,370	4.49
597,370	4,140,370	4.23
597,380	4,140,370	3.92
597,390	4,140,370	3.67
597,400	4,140,370	3.44
597,410	4,140,370	3.23
597,420	4,140,370	3.03
597,430	4,140,370	2.85
597,440	4,140,370	2.68
597,450	4,140,370	2.51
597,460	4,140,370	2.35
597,470	4,140,370	2.21
597,480	4,140,370	2.08
597,320	4,140,380	7.45
597,330	4,140,380	6.24
597,340	4,140,380	5.41
597,350	4,140,380	4.81
597,360	4,140,380	4.50
597,370	4,140,380	4.23
597,380	4,140,380	3.93
597,390	4,140,380	3.67
597,400	4,140,380	3.44
597,410	4,140,380	3.23
597,420	4,140,380	3.03
597,430	4,140,380	2.83
597,440	4,140,380	2.66
597,450	4,140,380	2.48
597,460	4,140,380	2.32
597,470	4,140,380	2.18
597,480	4,140,380	2.06
597,320	4,140,390	7.41
597,330	4,140,390	6.20
597,340	4,140,390	5.38
597,350	4,140,390	4.78
597,360	4,140,390	4.51
597,370	4,140,390	4.24
597,380	4,140,390	3.94
597,390	4,140,390	3.68
597,400	4,140,390	3.45
597,410	4,140,390	3.23
597,420	4,140,390	3.02
597,430	4,140,390	2.82
597,440	4,140,390	2.64

Appendix B
Cancer Risk from Rail
Harmony
DR Horton
Milpitas, California

Receptor Location		Max Cancer Risk 70-year Resident
UTMx	UTMy	
m		in a million
597,450	4,140,390	2.45
597,460	4,140,390	2.29
597,470	4,140,390	2.15
597,320	4,140,400	7.34
597,330	4,140,400	6.16
597,340	4,140,400	5.35
597,350	4,140,400	4.79
597,360	4,140,400	4.54
597,370	4,140,400	4.25
597,380	4,140,400	3.96
597,390	4,140,400	3.69
597,400	4,140,400	3.46
597,410	4,140,400	3.24
597,420	4,140,400	3.02
597,430	4,140,400	2.80
597,440	4,140,400	2.61
597,450	4,140,400	2.43
597,460	4,140,400	2.28
597,320	4,140,410	7.27
597,330	4,140,410	6.11
597,340	4,140,410	5.32
597,350	4,140,410	4.84
597,360	4,140,410	4.57
597,370	4,140,410	4.27
597,380	4,140,410	3.97
597,390	4,140,410	3.70
597,400	4,140,410	3.46
597,410	4,140,410	3.24
597,420	4,140,410	3.01
597,430	4,140,410	2.78
597,440	4,140,410	2.58
597,450	4,140,410	2.42
597,320	4,140,420	7.19
597,330	4,140,420	6.05
597,340	4,140,420	5.28
597,350	4,140,420	4.86
597,360	4,140,420	4.58
597,370	4,140,420	4.27
597,380	4,140,420	3.97
597,390	4,140,420	3.70
597,400	4,140,420	3.45
597,410	4,140,420	3.23
597,420	4,140,420	2.99
597,430	4,140,420	2.76
597,440	4,140,420	2.55
597,450	4,140,420	2.40
597,320	4,140,430	7.10
597,330	4,140,430	5.99
597,340	4,140,430	5.24
597,350	4,140,430	4.86

Appendix B
Cancer Risk from Rail
Harmony
DR Horton
Milpitas, California

Receptor Location		Max Cancer Risk 70-year Resident
UTMx	**UTMy**	
m		in a million
597,360	4,140,430	4.56
597,370	4,140,430	4.25
597,380	4,140,430	3.95
597,390	4,140,430	3.67
597,400	4,140,430	3.41
597,410	4,140,430	3.18
597,420	4,140,430	2.95
597,430	4,140,430	2.73
597,440	4,140,430	2.53
597,320	4,140,440	7.01
597,330	4,140,440	5.93
597,340	4,140,440	5.20
597,350	4,140,440	4.85
597,360	4,140,440	4.55
597,370	4,140,440	4.23
597,380	4,140,440	3.92
597,390	4,140,440	3.64
597,400	4,140,440	3.37
597,410	4,140,440	3.13
597,420	4,140,440	2.91
597,430	4,140,440	2.70
597,310	4,140,450	8.64
597,320	4,140,450	6.92
597,330	4,140,450	5.87
597,340	4,140,450	5.15
597,350	4,140,450	4.81
597,360	4,140,450	4.49
597,370	4,140,450	4.18
597,380	4,140,450	3.87
597,390	4,140,450	3.60
597,400	4,140,450	3.33
597,410	4,140,450	3.08
597,420	4,140,450	2.87
597,430	4,140,450	2.67
597,310	4,140,460	8.49
597,320	4,140,460	6.83
597,330	4,140,460	5.80
597,340	4,140,460	5.09
597,350	4,140,460	4.68
597,360	4,140,460	4.36
597,370	4,140,460	4.05
597,380	4,140,460	3.76
597,390	4,140,460	3.51
597,400	4,140,460	3.27
597,410	4,140,460	3.05
597,420	4,140,460	2.84
597,310	4,140,470	8.33
597,320	4,140,470	6.74
597,330	4,140,470	5.73
597,340	4,140,470	5.03

Appendix B
Cancer Risk from Rail
Harmony
DR Horton
Milpitas, California

Receptor Location		Max Cancer Risk 70-year Resident
UTMx	UTMy	
m		in a million
597,350	4,140,470	4.56
597,360	4,140,470	4.23
597,370	4,140,470	3.93
597,380	4,140,470	3.66
597,390	4,140,470	3.42
597,400	4,140,470	3.21
597,410	4,140,470	3.01
597,420	4,140,470	2.81
597,310	4,140,480	8.19
597,320	4,140,480	6.65
597,330	4,140,480	5.67
597,340	4,140,480	4.98
597,350	4,140,480	4.47
597,360	4,140,480	4.14
597,370	4,140,480	3.84
597,380	4,140,480	3.58
597,390	4,140,480	3.35
597,400	4,140,480	3.16
597,410	4,140,480	2.97
597,310	4,140,490	8.05
597,320	4,140,490	6.56
597,330	4,140,490	5.61
597,340	4,140,490	4.94
597,350	4,140,490	4.49
597,360	4,140,490	4.16
597,370	4,140,490	3.85
597,380	4,140,490	3.57
597,390	4,140,490	3.32
597,400	4,140,490	3.13
597,410	4,140,490	2.95
597,310	4,140,500	7.90
597,320	4,140,500	6.47
597,330	4,140,500	5.55
597,340	4,140,500	4.89
597,350	4,140,500	4.51
597,360	4,140,500	4.17
597,370	4,140,500	3.86
597,380	4,140,500	3.56
597,390	4,140,500	3.30
597,400	4,140,500	3.10
597,410	4,140,500	2.92
597,310	4,140,510	7.76
597,320	4,140,510	6.38
597,330	4,140,510	5.49
597,340	4,140,510	4.87
597,350	4,140,510	4.52
597,360	4,140,510	4.19
597,370	4,140,510	3.86
597,380	4,140,510	3.55
597,390	4,140,510	3.28

Appendix B
Cancer Risk from Rail
Harmony
DR Horton
Milpitas, California

Receptor Location		Max Cancer Risk 70-year Resident
UTMx	**UTMy**	
m		in a million
597,400	4,140,510	3.08
597,310	4,140,520	7.63
597,320	4,140,520	6.30
597,330	4,140,520	5.43
597,340	4,140,520	4.88
597,350	4,140,520	4.51
597,360	4,140,520	4.18
597,370	4,140,520	3.86
597,380	4,140,520	3.56
597,390	4,140,520	3.30
597,400	4,140,520	3.07
597,310	4,140,530	7.51
597,320	4,140,530	6.22
597,330	4,140,530	5.37
597,340	4,140,530	4.88
597,350	4,140,530	4.51
597,360	4,140,530	4.17
597,370	4,140,530	3.86
597,380	4,140,530	3.58
597,390	4,140,530	3.32
597,400	4,140,530	3.05
597,310	4,140,540	7.39
597,320	4,140,540	6.15
597,330	4,140,540	5.32
597,340	4,140,540	4.89
597,350	4,140,540	4.50
597,360	4,140,540	4.16
597,370	4,140,540	3.86
597,380	4,140,540	3.59
597,390	4,140,540	3.33
597,400	4,140,540	3.03
597,310	4,140,550	7.27
597,320	4,140,550	6.07
597,330	4,140,550	5.26
597,340	4,140,550	4.87
597,350	4,140,550	4.48
597,360	4,140,550	4.12
597,370	4,140,550	3.83
597,380	4,140,550	3.56
597,390	4,140,550	3.30
597,310	4,140,560	7.15
597,320	4,140,560	5.99
597,330	4,140,560	5.20
597,340	4,140,560	4.85
597,350	4,140,560	4.45
597,360	4,140,560	4.09
597,370	4,140,560	3.79
597,380	4,140,560	3.53
597,390	4,140,560	3.27
597,310	4,140,570	7.04

Appendix B
Cancer Risk from Rail
Harmony
DR Horton
Milpitas, California

Receptor Location		Max Cancer Risk 70-year Resident
UTMx	UTMy	
m		in a million
597,320	4,140,570	5.91
597,330	4,140,570	5.15
597,340	4,140,570	4.84
597,350	4,140,570	4.41
597,360	4,140,570	4.04
597,370	4,140,570	3.75
597,380	4,140,570	3.50
597,390	4,140,570	3.24
597,310	4,140,580	6.93
597,320	4,140,580	5.83
597,330	4,140,580	5.13
597,340	4,140,580	4.79
597,350	4,140,580	4.37
597,360	4,140,580	3.99
597,370	4,140,580	3.69
597,380	4,140,580	3.42
597,390	4,140,580	3.16
597,300	4,140,590	8.53
597,310	4,140,590	6.81
597,320	4,140,590	5.74
597,330	4,140,590	5.11
597,340	4,140,590	4.75
597,350	4,140,590	4.32
597,360	4,140,590	3.94
597,370	4,140,590	3.62
597,380	4,140,590	3.34
597,300	4,140,600	8.34
597,310	4,140,600	6.69
597,320	4,140,600	5.66
597,330	4,140,600	5.08
597,340	4,140,600	4.71
597,350	4,140,600	4.26
597,360	4,140,600	3.88
597,370	4,140,600	3.55
597,380	4,140,600	3.25
597,300	4,140,610	8.15
597,310	4,140,610	6.57
597,320	4,140,610	5.57
597,330	4,140,610	5.13
597,340	4,140,610	4.72
597,350	4,140,610	4.26
597,360	4,140,610	3.87
597,370	4,140,610	3.52
597,380	4,140,610	3.22
597,300	4,140,620	7.96
597,310	4,140,620	6.44
597,320	4,140,620	5.64
597,330	4,140,620	5.17
597,340	4,140,620	4.72
597,350	4,140,620	4.25

Appendix B
Cancer Risk from Rail
Harmony
DR Horton
Milpitas, California

Receptor Location		Max Cancer Risk 70-year Resident
UTMx	**UTMy**	
m		in a million
597,360	4,140,620	3.85
597,370	4,140,620	3.50
597,380	4,140,620	3.20
597,300	4,140,630	7.78
597,310	4,140,630	6.31
597,320	4,140,630	5.72
597,330	4,140,630	5.20
597,340	4,140,630	4.72
597,350	4,140,630	4.24
597,360	4,140,630	3.83
597,370	4,140,630	3.48
597,380	4,140,630	3.17
597,300	4,140,640	7.58
597,310	4,140,640	6.18
597,320	4,140,640	5.70
597,330	4,140,640	5.17
597,340	4,140,640	4.70
597,350	4,140,640	4.23
597,360	4,140,640	3.83
597,370	4,140,640	3.45
597,380	4,140,640	3.13
597,300	4,140,650	7.38
597,310	4,140,650	6.07
597,320	4,140,650	5.65
597,330	4,140,650	5.12
597,340	4,140,650	4.66
597,350	4,140,650	4.21
597,360	4,140,650	3.82
597,370	4,140,650	3.43
597,380	4,140,650	3.08
597,300	4,140,660	7.16
597,310	4,140,660	5.95
597,320	4,140,660	5.58
597,330	4,140,660	5.06
597,340	4,140,660	4.61
597,350	4,140,660	4.18
597,360	4,140,660	3.80
597,370	4,140,660	3.40
597,380	4,140,660	3.03
597,300	4,140,670	6.94
597,310	4,140,670	5.84
597,320	4,140,670	5.44
597,330	4,140,670	4.92
597,340	4,140,670	4.47
597,350	4,140,670	4.05
597,360	4,140,670	3.67
597,370	4,140,670	3.30
597,380	4,140,670	2.95
597,300	4,140,680	6.72
597,310	4,140,680	5.72

Appendix B
Cancer Risk from Rail
Harmony
DR Horton
Milpitas, California

Receptor Location		Max Cancer Risk 70-year Resident
UTMx	**UTMy**	
m		in a million
597,320	4,140,680	5.27
597,330	4,140,680	4.76
597,340	4,140,680	4.30
597,350	4,140,680	3.88
597,360	4,140,680	3.51
597,370	4,140,680	3.17
597,380	4,140,680	2.86
597,300	4,140,690	6.45
597,310	4,140,690	5.60
597,320	4,140,690	5.08
597,330	4,140,690	4.58
597,340	4,140,690	4.14
597,350	4,140,690	3.70
597,360	4,140,690	3.34
597,370	4,140,690	3.04
597,380	4,140,690	2.77
597,300	4,140,700	6.24
597,310	4,140,700	5.48
597,320	4,140,700	4.82
597,330	4,140,700	4.36
597,340	4,140,700	3.95
597,350	4,140,700	3.54
597,360	4,140,700	3.21
597,370	4,140,700	2.93
597,290	4,140,710	7.45
597,300	4,140,710	6.04
597,310	4,140,710	5.35
597,320	4,140,710	4.57
597,330	4,140,710	4.12
597,340	4,140,710	3.75
597,350	4,140,710	3.40
597,360	4,140,710	3.09
597,370	4,140,710	2.82