

First Amendment to the Draft Subsequent Environmental Impact Report

America Center Phase III Project

File Numbers: PDC15-058 and PD15-053
State Clearinghouse Number: 2016092066

Prepared for



In Consultation with



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SECTION 1.0 OVERVIEW AND PURPOSE

This document, together with the Draft Subsequent Environmental Impact Report (DSEIR), constitutes the Final Subsequent Environmental Impact Report (FSEIR) for the America Center Phase III Project. The DSEIR was circulated to affected public agencies and interested parties for a 45-day review period from June 12, 2017 through July 27, 2017.

The City undertook the following actions to inform the public of the availability of the DSEIR:

- The DSEIR and a “Notice of Availability of a Draft Subsequent Environmental Impact Report and Public Comment Period” was published on the City of San José’s website,
- The DSEIR was delivered to the State Clearinghouse on June 12, 2017, as well as sent to various government agencies, organizations, businesses, and individuals (see Section 2.0), and
- Copies of the SEIR were made available at the City of San José’s website, the Dr. MLK Jr. Main Library, Alviso Branch Library, and the City of San José Department of Planning, Building, and Code Enforcement.

This FSEIR consists of comments received by the Lead Agency on the DSEIR during the public review period, responses to those comments, and revisions to the text of the DSEIR.

In conformance with the California Environmental Quality Act (CEQA) and CEQA Guidelines, this FSEIR provides objective information regarding the environmental consequences of the proposed project. The FSEIR is intended to be used by the City of San José and any Responsible Agencies in making decisions regarding the project. The CEQA Guidelines advise that, while the information in the FSEIR does not control the agency’s ultimate discretion on the project, the agency must respond to each significant effect identified in the Draft Subsequent EIR by making written findings for each of those significant effects.

According to the State Public Resources Code (Section 21081), no public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless both of the following occur:

- (a) The public agency makes one or more of the following findings with respect to each significant effect:
 - (1) Changes or alterations have been required in, or incorporated into, the project which will mitigate or avoid the significant effect on the environment.
 - (2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
 - (3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities of highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

(b) With respect to significant effects which were subject to a finding under paragraph (3) of subdivision (a), the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.

CONTENTS OF THE FINAL SEIR

The contents of a Final EIR are specified in CEQA Guidelines Section 15132, which states that the Final EIR shall consist of:

- a) The Draft EIR or a revision of the Draft;
- b) Comments and recommendations received on the Draft EIR either verbatim or in summary;
- c) A list of persons, organizations, and public agencies commenting on the Draft EIR;
- d) The Lead Agency's responses to significant environmental points raised in the review and consultation process; and
- e) Any other information added by the Lead Agency.

PUBLIC REVIEW

In accordance with CEQA and the CEQA Guidelines, the FSEIR will be made available to the public and commenting agencies a minimum of ten days prior to the Subsequent Environmental Impact Report certification hearing. Documents referenced in this FSEIR are available for public review at the City of San José's "Active EIRs" website at <http://www.sanjoseca.gov/index.aspx?nid=5230> and are also available at the Department of Planning, Building, and Code Enforcement office at 200 East Santa Clara Street, 3rd Floor, San José, CA 95113.

SECTION 2.0 AGENCIES THAT RECEIVED THE DRAFT SEIR

CEQA Guidelines Section 15086 requires that a local Lead Agency consult with and request comments on the Draft EIR prepared for a project of this type from Responsible Agencies (government agencies that must approve or permit some aspect of the project), trustee agencies for resources affected by the project, adjacent cities and counties, and transportation planning agencies. The DSEIR for the project was submitted to the following agencies by the State Clearinghouse (SCH # 2016092066):

- California Department of Fish and Wildlife, Region 3
- California Department of Housing and Community Development
- California Department of Parks and Recreation
- California Department of Water Resources
- California Department of Resources Recycling and Recovery
- California Highway Patrol
- Caltrans, District 4
- California Office of Emergency Services
- Native American Heritage Commission;
- California Public Utilities Commission
- Regional Water Quality Control Board, Region 2
- California Department of Conservation
- California Natural Resources Agency

In addition, the City of San José provided a copy of the DSEIR or Notice of Availability to the following agencies, organizations and individuals:

State Agencies

- California Energy Commission (email)
- CalEPA (e-mail)
- Air Resources Board (email)

Regional Agencies

- Association of Bay Area Governments
- Bay Area Air Quality Management District
- Santa Clara Valley Transportation Authority
- Santa Clara Valley Water District
- Metropolitan Transportation Commission

Local, Public, and Quasi-Public Agencies

- City of Campbell
- City of Cupertino

- City of Milpitas
- City of Morgan Hill
- City of Saratoga
- City of Santa Clara
- City of Sunnyvale
- City of Fremont
- City of Mountain View (email)
- City of Palo Alto (email)
- Santa Clara County Planning Department
- Santa Clara County Roads & Airports Department
- Town of Los Gatos
- San José Unified School District
- San José Water Company
- Pacific Gas and Electric Company
- Airport Land Use Commission (email)

Organizations

- Adams, Broadwell, Joseph & Cardoza (email)
- Amah Mutsun Tribal Band (email)
- Brooks & Hess (email)
- California Native Plant Society – Santa Clara Valley Chapter
- Coastanoan Rumsen Carmel Tribe (email)
- Greenbelt Alliance
- Guadalupe-Coyote Resource Conservation District
- Indian Canyon Mutsun Band of Coastanoan (email)
- Muwekma Ohlone Tribe (email)
- North Valley Yokuts Tribe (email)
- Ohlone Indian Tribe (email)
- Open Space Authority (email)
- Preservation Action Council of San José (email)
- Santa Clara Valley Audubon Society
- Sierra Club – Loma Prieta Chapter
- SPUR (email)
- Trina Marine Ruano Family, Ramona Garibay – Representative (email)

Individuals

- Ada Marquez (email)
- Erik Schoennauer (email)

- Jean Dresden (email)
- Jeffrey B. Hare (email)
- Kathy Sutherland (email)
- Kevin Johnston
- Lawrence Ames (email)

Individuals who attended the DSEIR scoping meeting and/or expressed interested in the project also received a copy of the Notice of Availability

CEQA Guidelines Section 15086(c) require that:

A Responsible Agency or other public agency shall only make substantive comments regarding those activities involved in the project that are within an area of expertise of the agency or which are required to be carried out or approved by the Responsible Agency. Those comments shall be supported by specific documentation.

Regarding mitigation measures identified by commenting public agencies, the CEQA Guidelines Section 15086(d) state that:

Prior to the close of the public review period, a Responsible Agency or trustee agency which has identified what the agency considers to be significant environmental effects shall advise the Lead Agency of those effects. As to those effects relevant to its decisions, if any, on the project, the responsible or trustee agency shall either submit to the Lead Agency complete and detailed performance objectives for mitigation measures addressing those effects or refer the Lead Agency to appropriate, readily available guidelines or reference documents concerning mitigation measures. If the responsible or trustee agency is not aware of mitigation measures that address identified effects, the responsible or trustee agency shall so state.

SECTION 3.0 RESPONSES TO DRAFT SEIR COMMENTS

This section addresses comments on the Draft Subsequent Environmental Impact Report (DSEIR) that were received by the City of San José in letters and emails during the 45-day review period. Comments are organized under headings containing the source of the letter and the date it was submitted. The specific comments from each of the letters and emails are presented with each response to that specific comment directly following. Each of the letters and emails submitted to the City of San José are attached in their entirety in Section 5.0 of this document. A list of written comments received on the DSEIR is provided below in Table 1.

Table 1: Comments Received on the DSEIR			
Comment	Commenter	Date	Page
<i>Agency Comments</i>			
A	California Department of Transportation (Caltrans)	7/26/17	6
B	Santa Clara Valley Transportation Authority (VTA)		15
<i>Comments from Organizations and Individuals</i>			
C	Santa Clara Valley Audubon Society	7/26/17	20
D	MR Wolfe & Associates, P.C., Organizacion Comunidad de Alviso		21
E	Steve Dunn, Steelwave	7/27/17	41

DSEIR COMMENTS AND RESPONSES

A. Caltrans, July 26, 2017.

Comment A-1: Caltrans commends the inclusion of a fair share fee payment towards improvements to the Great America Parkway/State Route (SR 237 intersection, to be paid to the City of San José Public Works Depositors Fund. The DEIR states the Director of Public Works shall determine the fair share based on the cost of the improvement at the time the payment is due and the project's contribution to the impact (typically based on a 25 percent contribution of traffic or more to the cumulative impact). However, in a VTA Board Memorandum dated February 4, 2014, subject "Update on Voluntary Contributions to Transportation Improvements" this project was committed to contribute \$1,000,000 to the SR 237 Express Lanes Project Phase II or improvements to SR 237/Great America interchange through the VTA's Voluntary Contribution Program. Please clarify whether:

- These are two separate fair share commitments to the SR 237/Great America interchange improvements; and
- The City is still committed to the \$1,000,000 contribution amount referred to in the VTA memo.

Response A-1: Improvements to the Great America Parkway/ State Route (SR) 237 intersection include the addition of a third left-turn lane and second right-turn lane to the westbound approach to the intersection (SR 237 off-ramp). The Great America/SR 237 intersection improvements are fully funded and will be constructed by the City of Santa Clara's development (see Section 4.0, text revisions to Section 4.1.5.13). Therefore, the project will not be contributing a cumulative fair share contribution. The \$1,000,000 contribution was a condition of the initial phases of the project and was paid by the applicant to the City's Depositors Fund on January 28, 2014 and transferred to Caltrans.

Comment A-2: The proposed mitigation measure to add a third left-turn lane to the intersections at the westbound approach of the SR 237 off-ramp requires an additional receiving lane at the southbound Great America Parkway undercrossing which should be included with this mitigation. Caltrans encourages a sufficient allocation of fair share contributions toward multimodal and regional transit improvements to fully mitigate cumulative impacts to regional transportation. Also, Caltrans strongly supports measures to increase sustainable mode shares, thereby reducing VMT.

Response A-2: See Response A-1.

Comment A-3: Please submit a travel demand analysis that provides VMT resulting from the proposed project. With the enactment of Senate Bill (SB) 743, Caltrans is focusing on transportation infrastructure that supports smart growth and efficient development to ensure alignment with State policies through the use of efficient development patterns, innovative travel demand reduction strategies, multimodal improvements, and VMT as the primary transportation impact metric. For projects reviewed under the California Environmental Quality Act (CEQA), Caltrans uses VMT as the metric for evaluating transportation impacts and mitigation. Additionally, the CEQA Guidelines Section 15206(b) requires the SEIR for this project be circulated to the Metropolitan Planning Organization (MPO) because of the project's regional and areawide significance. Please ensure that the travel demand analysis includes:

- 1) A vicinity map, regional location map, and site plan clearly showing project access in relation to nearby State roadways. Ingress and egress for all project components should be clearly identified. Clearly identify the State right-of-way (ROW). Project driveways, local roads and intersections, car/bike parking, and transit facilities should be mapped.
- 2) A VMT analysis pursuant to the City's guidelines or, if the City has no guidelines, the Office of Planning and Research's Draft Guidelines. Projects that result in automobile VMT per capita greater than 15% below existing (i.e. baseline) city-wide or regional values for similar land use types may indicate a significant impact.
- 3) Mitigation for increasing VMT, which should be identified and mitigated in a manner that does not further raise VMT. Mitigation may include contributions to the Santa Clara Valley Transportation Authority's (VTA) latest Valley Transportation Plan (VTP) and should support the use of transit and active transportation modes. Potential mitigation measures that include the requirements of other agencies such as Caltrans are fully enforceable through permit conditions, agreements, or other legally-binding instruments under the control of the City.

- 4) Schematic illustrations of walking, biking and auto traffic conditions at the project site and study area roadways, trip distribution percentages and volumes as well as intersection geometrics (i.e., lane configurations for AM and PM peak periods). Operational concerns for all road users that may increase the potential for future collisions should be identified and fully mitigated in a manner that does not further raise VMT.

Response A-3: As stated in this comment, SB 743 removes Level of Service (LOS) as the common metric of traffic analyses under CEQA and replaces it with the metric Vehicle Miles Travelled (VMT). The State Office of Planning and Research (OPR) has not yet submitted new CEQA Transportation Guidelines to the Natural Resources Agency to begin the formal rulemaking process.

Currently, the City of San José measures the Level of Service (LOS) at signalized intersections to determine a project's impact under CEQA as part of Council Policy 5-3, Transportation Impact Policy. The City is not currently required by SB 743 to prepare a travel demand analysis consistent with this comment. OPR does not expect to have completed the formal rulemaking process that will amend the state's CEQA Guidelines until mid-2019. San José expects to be in full compliance with SB 743, potentially, prior to mid-2019. For this reason, the project's TIA did not include a VMT analysis, nor was it required. For these reasons, the project's Transportation Impact Analysis (TIA) and DSEIR did not include a travel demand analysis, nor was it required.

Comment A-4: Caltrans commends the City on this project's Transportation Demand Management (TDM) program, thereby reducing VMT. Transportation Demand Management programs should be documented with annual monitoring reports by an onsite TDM coordinator to demonstrate effectiveness. If the project does not achieve the VMT reduction goals, the reports should also include next steps to take in order to achieve those targets. Caltrans also recommends membership in a transportation management association (TMA) for this project.

Response A-4: Consistent with the City's Greenhouse Gas Reduction Strategy and General Plan Policy TR-7.1, which requires large employers to develop and maintain TDM programs to reduce the vehicle trips generated by their employees, the project applicant shall be required to prepare a TDM program and submit it to the City for review and approval prior to issuance of a Planned Development (PD) Permit and building permits. The text of mitigation measure MM AIR-1.1 has been revised to clarify that approval and annual monitoring of a TDM program is required. This revision has been added to Section 3.2.2.5 as part of the SEIR text changes contained within Section 4.0 of this document.

Transportation Management Associations (TMAs) are non-profit, member-controlled organizations that provide transportation services in a particular area, such as a commercial district, mall, medical center or industrial park. They are generally public-private partnerships, consisting primarily of area businesses with local government support. TMAs provide an institutional framework for TDM Programs and services, and they are usually more cost effective than programs managed by individual businesses. TMAs allow small employers to provide Commute Trip Reduction services comparable to those offered by large

companies. A TMA is not currently available for the project site, but could conceivably be utilized in the future as a part of implementation of a TDM program.

Comment A-5: Improvements to Pedestrian and Bicycle Access: The SEIR states on page 159, "It is assumed that only a small number of employees of Building 5 would utilize existing transit services due the long walking distance and lack of pedestrian facilities linking the project site to transit facilities. In addition, the ACE shuttle provides only four scheduled runs during the morning and evening commute hours." This statement necessitates:

- Project improvements to pedestrian and bicycle access to and from the project site, to encourage active transportation modes and reduce VMT. This includes closing gaps in the pedestrian and bicycle networks, such as missing crosswalks on the east side of the intersections for both the eastbound (EB) and westbound on- and off-ramps of SR 237 and Great American Parkway as part of the improvements to pedestrian access of the site, as well as providing continuous bike lanes along Great American Parkway across SR 237 to connect to the existing bike lanes further south. There is currently no way for pedestrians to cross the on- and off-ramps of SR 237 on the northbound side of Great American Parkway.
- Analysis of secondary impacts on pedestrians and bicyclists that may result from any traffic impact mitigation measures and describe any pedestrian and bicycle mitigation measures and safety countermeasures that would therefore be needed as a means of maintaining and improving access to transit facilities and reducing traffic impacts to state highways.
- Reduction in the number of the proposed 3,610 parking spaces, which is more than is required by the City. Caltrans supports reductions in parking supply to encourage active transportation and transit use, thereby reducing regional VMT and lessen future traffic impacts on SR 237 and the STN. Please consider instead using, if available, the parking facilities at the Santa Clara Convention Center, Levi's Stadium, and other such special event venues. For sample parking ratios and strategies that support compact growth, please refer to "Reforming Parking Policies to Support Smart Growth," an MTC study funded by Caltrans.
- Decreased headway times and improved way-finding on bus lines by working closely with the VTA and ACE to provide a better connection between the project, the Great America Station, and regional destinations.

These smart growth approaches are consistent with the MTC's RTP/SCS goals and would meet Caltrans Strategic Management Plan sustainability goals.

Response A-5: This comment addresses the impact discussions and analysis of both Transit Facilities (page 159 of the DSEIR) and impacts to Pedestrian and Bicycle Facilities (page 161 of the DSEIR). It also notes smart growth approaches and goals of the Metropolitan Transportation Commission and Caltrans.

As noted on page 161 of the DSEIR, the San José Bike Plan 2020 and General Plan identify planned improvements to the bicycle network within the City and provide policies and goals that are intended to promote and encourage the use of multi-modal travel options. There are no planned on-road bicycle facilities shown on the Great America Parkway northbound side

at SR 237. There are, however, off-road bicycle facilities (i.e., San Tomas Aquino Trail, Highway 237 Bikeway, San Francisco Bay Trail) that provide connectivity in the area. Access to the trails is provided at the SR 237 and Great America Parkway westbound ramps intersection. Refer to Response D-6 for a discussion of pedestrian connections to the project site.

The intersections for both the eastbound and westbound on- and off-ramps of SR 237 and Great American Parkway, as well as Great American Parkway itself, are located within the City of Santa Clara. The City of San José does not have jurisdiction to solely make improvements or propose mitigation to these roadway segments. During the preparation of this DSEIR and associated traffic impact analysis, the City of San José coordinated with the City of Santa Clara regarding these transportation improvements. Both the cities jointly agreed on how to manage the required mitigation for the project-level and cumulative impacts of this project.

MM TRA-1.1 requires the project applicant to pay a fair share amount to the City of Santa Clara towards improvements, specifically for the construction of a second northbound left-turn lane, at the Lafayette Street and Gold Street Connector intersection. Temporary impacts on pedestrians and bicyclists could result from the implementation of MM TRA-1.1; however, during construction of the Lafayette Street and Gold Street Connector intersection improvement, a trail detour will be provided and/or the Highway 237 Bikeway would be relocated prior to widening of the road to ensure impacts would be less than significant. The project applicant would also be required to submit a Traffic Control Plan to the City of San José Public Works Department, consistent with City requirements, to accommodate pedestrian and bicycle access and safety during construction. Safety protocols for construction workers and the public traveling through the work zone in vehicles, bicycles, or as pedestrians will be included in the project Traffic Control Plan. This additional analysis has been added to Section 3.13.2.4 as part of the SEIR text changes contained within Section 4.0 of this document.

Comments regarding parking supply, decreased transit headway times of the VTA/ACE buses, improved way-finding, and multi-modal connectivity to off-site transit facilities would require coordination with other agencies and are noted and included in the public record for consideration by the decision makers. These comments do not identify new project impacts or required mitigation measures for the project evaluated in the SEIR.

Comment A-6: Reducing VMT to Reduce Queuing: Please remove from the SEIR and the Transportation Impact Analysis (TIA) the following statement, " ... such as shutting off the ramp meters when vehicular queues extend back onto the arterials" (see SEIR p. 164, second paragraph, and TIA p. 51, sixth paragraph) as this statement is incorrect and is not Caltrans' standard practice nor is it based on technical analysis. Also, Caltrans is concerned with the ability to contain left-turning vehicles within the available storage. A spillover of vehicles has the potential to create significant speed differentials and increase the number of conflicts. Another concern is the potential for queuing vehicles to encroach up on the upstream intersection, again creating the potential for significant conflict. CEQA does not exempt these types of operational concerns from evaluation. Reduction of VMT is a means to reduce queuing and queuing concerns.

Response A-6: The City agrees with the comment that the described shutting-off of ramp meters is not a feasible measure. Vehicular queues at freeway ramps and associated queues onto local arterials are a direct effect of the ramp metering rate. Therefore, the evaluation and projection of delay and queues at the ramps are based on the ramp metering rate. The ability to increase the metering rate and reduce delays and queues on the ramps is dependent on the freeway mainline operations and is set by Caltrans.

Thus, the text of the TIA should read: *The City should work cooperatively with VTA and Caltrans to implement measures to minimize the effects of vehicular queues at freeway ramps, such as ~~shutting off the ramp meters~~ using queue detector loops to cause the ramp meters to operate on-demand when vehicular queues extend back onto the arterials.* This revision to the text of the TIA has been made as part of the SEIR text changes contained within Section 4.0 of this document. The change in text will have no effect on the ramp queues projected within the TIA.

The comment regarding the reduction in VMT as a means to reduce projected vehicular queuing is noted. As stated in mitigation measure MM AIR-1.1, the project applicant shall be required to implement a TDM plan that will encourage the use of multi-modal travel options and reduce the use of single-occupant automobile travel. It is expected that the auto trips ultimately generated by the project would be less than those estimated within this study and the identified operational deficiencies (queues at ramps and intersections) reduced with the implementation of TDM measures.

Comment A-7: TIA, Table 14: Please correct the calculations for the study freeway on-ramp locations and update the assessment in the TIA and the SEIR accordingly, as the freeway ramp queue length information for the Project Conditions in Table 14 of the TIA appears flawed. For example, the EB SR 237 Great America Parkway diagonal on-ramp, the queuing effect of the additional PM peak hour trips of 93 vehicles will need to be added to the wait time of the Existing Conditions of 9 minutes, 16 seconds. The table shows Project Condition wait time to be 10 minutes, 23 seconds, which does not seem to account for the existing conditions.

Response A-7: The comment suggests that the projected ramp wait times and queues do not account for existing queues and wait times. The methodology utilized to determine what vehicular ramp queues would be described on pages 51 and 52 of the TIA. Per Note 2 of Table 14, the projected queues under project conditions are estimated based on ratios of projected traffic, including that of the 87 PM peak hour trips at the referenced ramp, against that of existing conditions. The table provides incremental increases in queues and wait times for existing, background, and project conditions. The analysis indicates that project traffic will result in an increase of the projected queue by five vehicles and wait times would increase by 34 seconds when compared to background conditions at the referenced ramp.

Comment A-8: Concerning Section 3.6.1.2 Existing Conditions (pp. 83-84), Caltrans recommends the following be included in the SEIR:

- The depth of the groundwater below the ground surface.
- The thickness of the non-liquefiable materials in the landfill.

- Bay mud, which is most likely encountered in subsurface materials, is one of the main causes of settlement and subsidence.

Response A-8: The requested information is located on page 83, page 105, and page 68 of the DSEIR, respectively. The depth to groundwater at the site is three to six feet below mean sea level. The average depth of landfill material across the site is approximately 30 to 60 feet above mean sea level (amsl). Augering for the Phase III building support piles will extend to depths of 50 to 60 feet and into the Bay Mud at some locations. The properties of the Bay Mud, along with the landfilled material, was considered in estimates of settlement and subsidence for the site overall. It is located below the landfill materials historically placed at the site. The presence of Bay Mud underlying the site is noted on page 68 and 83 of the DSEIR.

Comment A-9: As noted in Section 3.4.1.2 of the SEIR on page 68, the project area is extremely sensitive for archaeological sites. To demonstrate that the project has no potential to cause a significant impact to submerged or buried historical resources, Caltrans recommends that Section 3.4.1.2 provide a detailed analysis comparing the depth of proposed impacts to the known depth of the artificial fill. Additionally, Caltrans recommends that the City conduct a records search at the Northwest Information Center of the California Historical Resources Information System (CHRIS). It is the general professional standard to include such background research to identify cultural resources and to update the CHRIS records search at least of every five years.

Response A-9: The project structures would be constructed at a grade of approximately 30 feet above mean amsl for the parking garage expansion to 50 feet amsl for Building 5. Adjacent grades surrounding the site at adjacent roadways are at approximately 15 feet amsl. As shown in the DSEIR in Figure 2.2-3, a small portion of the parking garage extension would be located in an area that was not occupied by the Highway 237 Landfill. This area is, however, located on top of non-native fill soils that compose the landfill cap. The building pads would be located on surface parking lot areas over the landfill cap that were previously graded to the approximate elevations necessary for the proposed structures. This additional information has been added to Section 3.4.1.2 as part of the SEIR text changes contained within Section 4.0 of this document. Caltrans recommendation for an update to previous records search is noted; however, as the project would involve work in non-native fill soils, an updated records search was not requested.

Comment A-10: There is no Native American consultation referenced in the SEIR. Pursuant to CEQA and Assembly Bill (AB) 52, Caltrans recommends that the City conduct Native American consultation with tribes, groups, and individuals who are interested in the project area and may have knowledge of Tribal Cultural Resources or other sacred sites.

Response A-10: As described in Section 3.4.1.2 of the DSEIR, the project site is elevated above the surrounding landscape because it is underlain by landfill materials and engineered fill. Native soils are located approximately 50 feet or more below Building 5, though native soils could be shallower below the proposed parking garage extension. Disturbance of tribal cultural resources would be unlikely based on these modifications to the site.

The Notice of Preparation and Notice of Availability of the DSEIR was sent to the Native American Heritage Commission (NAHC) by the State Clearinghouse. The City also directly notified the following parties, based on a tribal contacts list provided by the NAHC; however, no response was received:

- Amah Mutsun Tribal Band (email)
- Coastanoan Rumsen Carmel Tribe (email)
- Indian Canyon Mutsun Band of Coastanoan (email)
- Muwekma Ohlone Tribe (email)
- North Valley Yokuts Tribe (email)
- Ohlone Indian Tribe (email)

In addition, a sacred lands request was sent to the NAHC by David J. Powers & Associates, Inc. on July 10, 2017. A response was received on August 22, 2017, which is included as Appendix G of this First Amendment to the SEIR. No known sacred lands have been identified by the NAHC in the project vicinity. No tribes have requested notice under AB 52 of projects within the geographic area of the proposed project and no tribal cultural resources have been identified by geographically related tribes at the project site following the distribution of the Notice of Availability of the DSEIR. For these reasons, there is no evidence that there would be an impact to tribal cultural resources identified as having cultural value to a Native American tribe. Additional discussion and analysis regarding sacred lands or tribal cultural resources at the project site has been added to Section 3.4.2.6 as part of the DSEIR text changes contained within Section 4.0 of this document.

Comment A-11: If an encroachment permit is needed for work within Caltrans ROW, we may require that cultural resource technical studies be prepared in compliance with CEQA, Public Resources Code (PRC) 5024, and the Caltrans Standard Environmental Reference (SER) Chapter 2 (www.dot.ca.gov/ser/vol2/vol2.htm). Should ground-disturbing activities take place within Caltrans ROW and there is an inadvertent archaeological or burial discovery, in compliance with CEQA, PRC 5024.5, and the SER, all construction within 60 feet of the find shall cease and the Caltrans District 4 Office of Cultural Resource Studies (O CRS) shall be immediately contacted at (510) 622-1673.

Response A-11: The Planned Development Permit will include a Public Works condition of approval that requires the project to be referred to Caltrans. If the project needs an encroachment permit the project applicant must be issued a permit consistent with Caltrans requirements. The statements of the commenter regarding future Caltrans permitting are noted and included in the public record for consideration by the decision makers.

Comment A-12: A Caltrans-approved Traffic Control Plan (TCP) is required to avoid project-related impacts to the State Transportation Network (STN), if it is anticipated that vehicular, bicycle, and pedestrian traffic will be impacted during the construction of the proposed project requiring traffic restrictions and detours. The TCP must also comply with the requirements of corresponding jurisdictions. In addition, pedestrian access through the construction zone must be in accordance with the Americans with Disabilities Act (ADA) regulations (see Caltrans *Temporary Pedestrian Facilities Handbook* for maintaining pedestrian access and meeting ADA requirements during

construction at: [www.dot.ca.gov/hq/construc/safety/Temporary Pedestrian Facilities Handbook. pdf](http://www.dot.ca.gov/hq/construc/safety/Temporary_Pedestrian_Facilities_Handbook.pdf)) (see also "Caltrans Traffic Operations Policy Directive 11-01 "Accommodating Bicyclists in Temporary Traffic Control Zones" at: www.dot.ca.gov/trafficops/policy/11-01.pdf). All curb ramps and pedestrian facilities located within the limits of the project are required to be brought up to current ADA standards as part of this project.

Response A-12: As outlined in Response A-5, the project applicant would be required to submit a Traffic Control Plan to the City of San José Public Works Department, consistent with City requirements, to accommodate pedestrian and bicycle access and safety during construction. Additionally, the Planned Development Permit will include a Public Works condition of approval that requires the project to be referred to Caltrans. If the project needs a Caltrans-approved Traffic Control Plan, the project applicant must prepare a plan consistent with Caltrans specifications. The statements of the commenter regarding future Caltrans permitting requirements are noted and included in the public record.

Comment A-13: The effects of sea level rise may have impacts on transportation facilities located in the project area. Executive Order (EO) S-13-08 directs State agencies to plan for potential impacts by considering a range of sea level rise scenarios for the years 2050 and 2100. Higher water levels may increase erosion rates, change environmental characteristics that affect material durability, lead to increased groundwater levels and change sediment movement along shores and at estuaries and river mouths, as well as affect soil pore pressure at dikes and levees on which transportation facilities are constructed. All these factors must be addressed through geotechnical and hydrological studies conducted in coordination with Caltrans.

Response A-13: The California Supreme Court in a December 2015 opinion (*California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 [No. S 213478]) confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA and the DSEIR focuses on impacts of the project on the environment.

The statements of the commenter regarding potential impacts to Caltrans transportation facilities as a result of sea level rise and the need to address these factors in geotechnical and hydrological studies for transportation facilities are noted and included in the public record. As mentioned in Response A-11 and Response A-12, the project will be referred to Caltrans and the project applicant will comply with Caltrans' requirements. No additional environmental analysis or studies are required as part of this FSEIR.

Comment A-14: Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. Please be advised that any ingress-egress, work (e.g., construction, vegetation management, drainage improvement, etc.), staging, storage, or traffic control that is conducted within or adjacent to or encroaches upon the State ROW requires an encroachment permit that is issued by Caltrans. Where construction related traffic restrictions and detours affect the STN, a TMP or construction TIA may be required. Traffic-related mitigation measures should be incorporated into the construction plans prior to the encroachment permit process.

Response A-14: The project may require the transport of oversized or excessive loads on SR 237 during construction. As mentioned in Response A-11 and Response A-12, the project will be referred to Caltrans and the project applicant will comply with Caltrans' requirements if a transportation permit is needed. No additional environmental analysis or studies are required as part of this FSEIR.

B. Santa Clara Valley Transportation Authority, Roy Molseed

Comment B-1: The Highway 237 Bikeway is a well-used bicycle commuter route that connects Milpitas and Alameda County to San José, Santa Clara, Sunnyvale, Mountain View, and Palo Alto. It serves numerous employment sites, including North San José, Moffett Park in Sunnyvale, and North Bayshore in Mountain View. Traffic counts provided in the TIA recorded 33 bicyclists using the Highway 237 Bikeway along the Gold Street Connector during a two-hour morning period in January 2015. VTA recommends that any modifications to the transportation network in the vicinity of the bikeway maintain or improve conditions for bicyclists.

The Draft SEIR and TIA note that the proposed mitigation measure at the Lafayette Street/Gold Street Connector intersection (TRA-1) would require the relocation of the Highway 237 Bikeway, south of the Gold Street Connector (Draft SEIR p. 158 and TIA p. 39). VTA notes that per Section 10.1 of the VTA Transportation Impact Analysis (TIA) Guidelines, "Mitigation measures for Auto Level of Service (LOS) shall not unreasonably degrade bicycle, pedestrian or transit access, and circulation. If a project proposes mitigation for Auto LOS involving a change to existing roadway or intersection geometry, or changes to signal operations, the TIA shall analyze and disclose secondary effects on other modes" (p. 50). In addition, VTA notes that the City of San José's Council Transportation Impact Policy 5-3 states that "an LOS Traffic Improvement has an unacceptable impact if the TIA demonstrates that the improvement would result in a physical reduction in the capacity and/or a substantial deterioration in the quality (aesthetic or otherwise) of any other planned or existing transportation facilities (such as pedestrian, bicycle, and transit systems and facilities)" (p. 4).

VTA notes that neither the TIA nor Draft SEIR contain an analysis of the secondary effects of proposed Mitigation Measure TRA-1, beyond stating that it would require the relocation of the Highway 237 Bikeway - for instance, whether the measure would result in increased crossing distances, longer signal cycles, removal of the grass/landscape buffer between the Highway 237 Bikeway and Gold Street Connector, or other effects. VTA requests that the City provide such an analysis in the Final SEIR, and design this mitigation measure in a way that that would maintain or enhance pedestrian and bicycle conditions at this location. VTA also requests that the City work with the applicant to correct the sub-standard bicycle/pedestrian crossing of the Union Pacific Railroad tracks along Gold Street Connector when pursuing this automobile mitigation measure. Additionally, VTA recommends that the City of San José work with the City of Santa Clara and Caltrans to explore other improvements to bicycle and pedestrian conditions on the stretch of Lafayette Street between Gold Street Connector and Great America Way, which is a critical connection between the project and the Highway 237 Bikeway.

VTA recommends fully disclosing the impacts of the temporary relocation the 237 Bikeway trail along the Gold Street Connector associated with Mitigation Measure TRA-1. VTA requests that a

proposed routing be provided in the Final SEIR. Relocating this trail, even if temporarily, may cause significant delays to pedestrians and bicycles.

Response B-1: With regard to construction-related temporary impacts, see Response A-5 for a discussion of the required Traffic Control Plan, which would accommodate pedestrian and bicycle access and safety during construction. As part of MM TRA-1.1, a trail detour is required be provided and/or the Highway 237 Bikeway relocated prior to widening of the Gold Street Connector. This would further decrease the potential for delays or inconvenience to cyclists and pedestrians during construction and any impact would be less than significant, as previously described within the DSEIR. Additional analysis on temporary construction impacts and discussion regarding a trail detour, bikeway relocation, and a Traffic Control Plan to clarify MM TRA-1.1 has been added to Section 3.13.2.4 as part of the SEIR text changes contained within Section 4.0 of this document.

With regard to permanent impacts, there is adequate space on the south side of the Gold Street Connector to widen the road and accommodate the movement of the Highway 237 Bikeway. The right-of-way extends approximately 12 feet between the edge of the curb along the Gold Street Connector and the Highway 237 Bikeway, and an additional 100 feet from the bikeway to Highway 237. It is not anticipated that the improvement would result in a physical reduction in the capacity and/or a substantial deterioration in the quality (aesthetic or otherwise) of any other planned or existing transportation facilities given the space available to make the improvements. Moving the Highway 237 Bikeway approximately 12 feet to the south would not cause substantially longer biking distances; rather, it would place the bikeway closer to the connection with the rest of the Highway 237 Bikeway at the south side of Highway 237. As a result, no additional environmental analysis or studies are required as part of this FSEIR.

Comment B-2: The Draft SEIR and TIA note in Mitigation Measure TRA (C)-1.2 that "Prior to Public Works Clearance, the project applicant shall pay a fair share amount towards improvements to the Great America Parkway/State Route 237 intersection. Improvements would include the addition of a third left-turn lane and second right-turn lane to the westbound approach to the intersection (SR 237 off-ramp)" (Draft SEIR p. 181 and TIA p. 46). While VTA recognizes that this was an identified mitigation measure in the City of Santa Clara's EIR for the approved City Place development, VTA is concerned about potential secondary impacts to pedestrian and bicycle safety of this mitigation measure for Auto LOS. VTA requests that the City of San José analyze the secondary effects of this mitigation measure per VTA TIA Guidelines Section 10 .1 and Council Policy 5-3, and work with the City of Santa Clara and Caltrans to explore alternative improvements that would maintain or enhance pedestrian and bicycle safety at this location.

Response B-2: Improvements to the Great America Parkway/ State Route 237 intersection include the addition of a third left-turn lane and second right-turn lane to the westbound approach to the intersection (SR 237 off-ramp). The Great America Parkway/State Route 237 intersection improvements are fully funded and will be constructed by the City of Santa Clara's development (see Section 4.0, text revisions to Section 4.1.5.13). Therefore, the project will not be contributing a cumulative fair share contribution. The final design of modifications to the Great America Parkway/State Route 237 intersection will be a collaborative process between agencies. Under City of San José, City of Santa Clara and

Caltrans policies and procedures, the design and construction of modifications at this location will need to address and consider the adequacy of pedestrian and bicycle safety.

The City does not expect that the conceptual plans for the identified mitigation measure would have an unacceptable impact on other transportation facilities, including pedestrian and bicycle facilities. As a result, no additional environmental analysis or studies are required as part of this FSEIR.

Comment B-3: In VTA's 2018 Transit Service Plan, a new Line 59 will be operating on Gold Street, between Great America Way and Taylor Street. The bus stops are expected to be located less than 0.25 mile from the project boundary, at the intersection of Gold Street and Sunrise Drive. The northbound stop will be located in front of the Alviso Outdoor Classroom and the southbound bus stop will be located directly across from the northbound bus stop. An additional pair of bus stops are expected to be located just south of the Extended Stay America hotel. VTA recommends convenient and accessible pathways between project facilities and the bus stops, including a marked pedestrian crossing on Gold Street.

Response B-3: Crosswalks are currently in place at the intersection of Gold Street/Lafayette Street and Gold Street Connector to the south of the Extended Stay America hotel. Per City of San José design standards, crosswalks will be included as part of the design for the intersection modifications under MM TRA-1.1 to connect pedestrians and the Highway 237 Bikeway to adjacent sidewalks in the vicinity. No additional pedestrian improvements are currently proposed or required on Gold Street as a part of the proposed project.

Comment B-4: The Draft SEIR discloses that the project will have Significant Impacts on mixed-flow lanes on four of the 12 directional freeway segments analyzed, and on HOV lanes on one of the segments analyzed. The Draft SEIR states that "There are no feasible mitigation measures available to reduce impacts on local freeway study segments to less than significant level as it is beyond the capacity of any one project to acquire right-of-way and add lanes to a state freeway. Furthermore, no comprehensive project to increase freeway capacity on SR 237 has been developed by Caltrans or VTA. Though VTA has Voluntary Mitigation Programs for impacts along 237, there are no specifically identified improvement projects to which to pay fair share fees." (DSEIR p. 159)

VTA notes that the implementation of certain projects in the latest Valley Transportation Plan (VTP), such as SR 237 Express Lanes Phase II and SR 237 Auxiliary Lanes east of Zanker, would provide operational and efficiency improvements to SR 237 that would help mitigate the identified impacts. VTA notes that certain cities in Santa Clara County have identified contributions to Express Lanes and other regional improvements as mitigation measures for significant freeway impacts. VTA also notes that voluntary contributions to regional transportation improvements can be included as mitigation measures in CEQA documents even in the absence of a comprehensive funding strategy as described. VTA recommends that the City work with the project sponsor to provide Voluntary Contributions based on the latest VTP projects in the project area, such as SR 237 Express Lanes Phase II and SR 237 Auxiliary Lanes east of Zanker Road.

Response B-4: As stated in section 3.13.2.3 of the DSEIR, mitigation of significant project impacts on the identified 12 directional freeway segments and one high-occupancy vehicle

(HOV) lane would require roadway widening to construct additional through lanes, thereby increasing freeway capacity. It is not feasible for an individual project to bear the responsibility for implementing such extensive transportation system improvements due to constraints in acquisition and cost of right-of-way. Furthermore, no comprehensive project to increase freeway capacity on the adjacent or nearby freeways (SR-237 and I-880) has been developed by Caltrans, so there are no identified improvement projects in which to pay fair share fees.

The project would be required to prepare and implement a TDM program, which will be reviewed prior to issuance of the Planned Development Permit. Because an improvement program has not been developed by Caltrans for the impacted freeway segments, contributing towards unknown improvements would not constitute feasible mitigation. A voluntary contribution to regional transportation improvements is also not considered feasible mitigation under CEQA. CEQA requires that mitigation measures be fully enforceable through permit conditions, agreements, or other legally binding instruments (Section 15126.4(2)). A voluntary contribution would not be legally binding and therefore, cannot be considered mitigation under CEQA.

Comment B-5: The Draft SEIR notes additional project-generated traffic in the Background Plus Project Conditions Table 3.13-2 at Great America Parkway/Tasman Drive. Upon reviewing both the TIA and the DSEIR, VTA noted an error in the DSEIR Background Plus Project Conditions Table 3.13-2. The LOS for Great America Parkway/Tasman Drive is displayed as F in the Draft SEIR; however with 76.5 second of average delay, this should correctly be displayed as LOS E-.

Response B-5: The comment correctly identifies an error in the referenced table of the DSEIR. The reported delay at the Great America Parkway/Tasman Drive intersection under background conditions should indicate LOS E with delay of 76.5 seconds. The TIA correctly identifies LOS E conditions at the intersection. Table 3.13-2 of the DSEIR has been revised as shown within Section 4.0 of this document. The typographic error in the table has no effect on results of the traffic analysis or conclusions in the DSEIR.

Comment B-6: The Draft SEIR documents existing transit routes as required by the VTA TIA Guidelines (Section 9.2), but neither the Draft SEIR nor TIA include any transit delay analysis for light rail, only bus routes serving the surrounding area. VTA requests that the City provide an appropriate Transit Delay Analysis in a revised TIA or in the Final SEIR, as required by VTA TIA Guidelines Section 9.2. Great America Parkway/Tasman Drive, Calle Del Sol/Tasman Drive and Lick Mill Boulevard/Tasman Drive are critical intersections for maintaining travel times and schedule reliability on the light rail system; therefore it is important for the lead Agency to analyze the effect of this congestion on light rail delay through these intersections, as well as any other study intersection through which light rail vehicles travel.

VTA recommends that the City work with VTA to identify appropriate measures to offset increased delay on transit vehicles (consistent with VTA TIA Guidelines Section 10.2). These measures may include improvements to transit signal priority or other measures to speed up light rail service, or improvements to transit stops and passenger amenities (such as those identified in VTA's Light Rail Enhancements project or Tasman Corridor Complete Streets Study).

Response B-6: Neither CEQA nor VTA have established policies or significance criteria related to transit vehicle delay; therefore, the following discussion is presented for informational purposes only. Light-rail vehicles, as described in Section 3.13.1.2 of the DSEIR on page 146, are provided transit priority at each of the study intersections along North First Street, in that light-rail trains are provided priority during the signal phasing. At most intersections, advance detectors provide a “green phase” for approaching light rail trains prior to reaching intersections. Thus, the light-rail trains incur little to no additional delay due to increases in traffic volumes.

VTA’s comments regarding measures to offset increased delay on transit vehicles are noted. As they do not address identified environmental effects of the project or the mitigation measures in the DSEIR, no further response is necessary.

Comment B-7: VTA commends the City for including a comprehensive TDM program to address the Significant Unavoidable Impacts identified as Mitigation Measure AIR-1.1 under Air Quality. However, the description of the project's TDM program are inconsistent between portions of the Draft SEIR. In Section 2.2.5 under Project Description, the text states that the proposed TDM program may include many implementation measures, including but not limited to EcoPass for all employees who ride VTA transit service, a 25% transit subsidy for other transit operators (such as ACE or Capitol Corridor) and a free "Last Mile" shuttle connecting the development to (Caltrain, Amtrak and ACE) (Draft SEIR p. 16). Elsewhere in the Draft SEIR, MM AIR 1-1 states that "the project applicant shall implement the following measures ... Provide shuttle bus service to the Tasman/Lafayette light rail and Altamont Corridor Express (ACE) rail system" (Draft SEIR p. 46). It is unclear whether the shuttle service documented in Draft SEIR will be required or merely an option, and whether it will include links to VTA's Light Rail corridor.

VTA recommends that the City require the developer to contribute to additional ACE Shuttle Service operations costs, or provides additional service to supplement the existing ACE Green Shuttle, in lieu of operating a stand-alone shuttle. Such service would provide connections to regional rail service (ACE, Capitol Corridor) and VTA Light Rail.

Response B-7: As required by MM AIR-1.1, a TDM program will be prepared by the project applicant and submitted to the City for review prior to approval of the Planned Development Permit for the project. Exact measures to be implemented from the suite of options listed in the DSEIR will be reviewed and approved at that time. As noted in the comment, the provision of free “Last Mile” shuttles to local train systems (e.g. Caltrain, Amtrak, ACE) are one of the options listed in the project description of the DSEIR that may be included in the TDM program. VTA recommendations regarding contributions to transit to supplement the existing ACE Green Shuttle are noted and included in the public record for consideration by the decision makers and the applicant.

Comment B-8: VTA recommends that the TDM program implementation measures be documented in the Draft SEIR and included as enforceable Conditions of Approval of the project. VTA notes that such programs can be more effective when they include a vehicle trip reduction target, third-party monitoring of trip generation upon Project completion and a Lead Agency enforcement/penalty structure.

Response B-8: The implementation of a TDM program is outlined in mitigation measure MM AIR-1.1. As noted in Response A-4, the text of mitigation measure MM AIR-1.1 has been revised to clarify that approval and annual monitoring of a TDM program is required. This revision has been added to Section 3.2.2.5 as part of the SEIR text changes contained within Section 4.0 of this document.

C. Shani Kleinhaus, Ph.D – Santa Clara Valley Audubon Society

Comment C-1: The project is within the Santa Clara Valley Habitat Plan (VHP) expanded study area for burrowing owl conservation. Please describe exactly how the project would comply with the VHP. Please describe in detail what fees are to be paid to the VHP, and how the fees are calculated. The Project should pay fees for Nitrogen Deposition since it is likely to contribute cumulatively to regional Nitrogen emissions (both through direct new trips and by contributing to traffic congestion on Hwy. 237 and beyond), as recognized by the SEIR as a significant, unavoidable impact.

Response C-1: The project site is outside of the VHP plan area, thus the applicant is not required to comply with VHP fees and conditions. However, the General Plan FPEIR discussed the impacts of atmospheric nitrogen deposition on serpentine habitats. The analysis determined development allowed under the proposed General Plan would result in emissions of nitrogen compounds that could affect the species composition and viability of sensitive serpentine grasslands. To address nitrogen deposition impacts from new development within the City, development projects will contribute to the VHP to offset new nitrogen deposition impacts from vehicular emissions. Due to the project’s contribution to citywide cumulative nitrogen deposition, the project will pay into the VHP nitrogen deposition fee program. This fee is based on the number of new daily vehicle trips generated by the project, or 2,141 daily trips. The project will be required to pay the VHP nitrogen deposition fee prior to issuance of a grading permit by the City of San José. Information regarding nitrogen deposition and a conditional of approval that requires payment of these fees has been added to Section 3.3.2.7 and Section 4.1.5.3 as part of the SEIR text changes contained within Section 4.0 of this document.

Comment C-2: The project analysis is segmented in time and space, as evident from the Project description “The project site is part of the approved America Center Project site for which a traffic study was completed in 1999. The America Center project included 900,000 square feet (s.f.) of office space, a 175- room hotel, and 25,000 s.f. of commercial/retail space. A total of 420,094 sf of office space and the 175- room hotel has been constructed on the site. Two more buildings containing 431,668 sf of office space, 16,000 sf of amenity space, and an 830-space parking garage are currently under construction. The 25,000 s.f. of commercial/retail space was planned adjacent to the Guadalupe River, just west of the Union Pacific Railroad line which is now a separate zoning district approved as part of PDC15-016 in March 2016. Once the four office buildings are completed, there is 32,238 s.f. of remaining office/R&D space entitlement provided on the project site that will be used by the proposed project.”

Response C-2: Under Section 15162(a) of the CEQA Guidelines, a Subsequent Environmental Impact Report (SEIR) shall be prepared if substantial changes are proposed in a project evaluated in a previously certified EIR, and new significant environmental effects, or a substantial increase in the severity of previously identified significant effects, would

result. An SEIR may also be required if substantial changes occur with respect to the circumstances under which the project is undertaken or if new information of substantial importance, which was not known and could not have been known, will have one or more new significant effects or significant effects previously examined will be substantial more severe. An SEIR is given the same kind of notice and public review as a Draft EIR and may be circulated by itself, without recirculating the previous Draft or Final EIR.

The project site has a remaining 32,238 square feet allowed under the existing Planned Development Zoning. The proposed project would allow for construction of a 192,350 square foot commercial office building and associated amenity space and expansion of the parking garage approved for the eastern portion of the site as part of the Planned Development Permit. Significant, unavoidable impacts identified in the Legacy Terrace FEIR that would be the same or similar under the proposed project (aesthetics, air quality, noise, transportation) and new significant environmental effects were identified (related to transportation); therefore, an SEIR was prepared in compliance with CEQA.

D. Mark R. Wolfe – MR Wolfe & Associates, P.C., Organizacion Comunidad de Alviso

Comment D-1: The air pollutant modeling in Appendix B (CalEEMod) assesses only the unmitigated impacts of 1,090,000 sq. ft. of commercial space. No basis is provided for determining the emissions breakdown in DSEIR Table 2.2-4. For example, the public has no way to determine how the DSEIR determined the emissions associated with the hotel use. The public cannot determine how impacts were allocated between the approved 900,000 sq. ft. of commercial space and the proposed additional 190,000 sq. ft. of commercial space. Furthermore, the modeling and the DSEIR fail to quantify the effect of proposed mitigation via Mitigation Measure AIR-1.1. The efficacy of mitigation should be demonstrated by quantifying it.

Response D-1: The commenter is correct in noting that the backup CalEEMod program data information for the hotel was inadvertently not included within Appendix B. This information within the CalEEMod program data as the Amended Appendix B within Section 4.0 of this document.

The DSEIR does not contain a Table 2.2-4; however, it does contain Table 3.2-4: 2019 Operational Emissions - America Center Site with Project. The emissions listed in the table were estimated using a multiple step process. First, the total office and total hotel emissions were calculated using the CalEEMod program. For informational purposes, a breakdown of emissions associated with existing allowed office uses and proposed allowed office uses was then estimated proportionally. The proposed additional 190,000 square feet of office uses represents approximately 21 percent of the total office area and the total office emissions. While this breakdown is included in the table, it is important to note that the determination of the significance of emissions from buildout of the project was made based on the comparison of total project emissions to the thresholds of significance.

The air quality analysis in the original Legacy Terrace EIR estimated that a 5.0 to 10.0 percent reduction in regional air emissions as a result of implementation of the TDM and physical improvements measures in mitigation measure MM AIR-1.1 would be feasible site-wide, which is consistent with the assumed California Air Pollution Control Officers

Association's guidance (within *Quantifying Greenhouse Gas Mitigation Measures*) of 5.0 to 6.2 percent assumed VMT reduction for implementation of a voluntary TDM program. Assuming a 10.0 percent reduction in emissions (at the upper end of the estimate) the project would still exceed the BAAQMD CEQA threshold of 54 pounds per day because the project would emit and estimated 77 pounds of nitrogen oxides (NOx) per day. It should be noted that these numbers also include emissions from daily energy use so that a straight 10.0 percent reduction would be less than 7.7 pounds per day; thus, the project would still exceed emissions thresholds for NOx. This information has been added to Section 3.2.2.5 as part of the SDEIR text changes contained within Section 4.0 of this document. This information does not affect the impact conclusions or mitigation measures described within the DSEIR.

Comment D-2: Construction of the Project will require numerous pieces of heavy diesel equipment, which are a substantial source of toxic air contaminants (TACs). The DSEIR dismisses TAC impacts from construction as less than significant without any actual analysis because it concludes that the nearest sensitive receptors are 950 feet away from the Project site. However, the BAAQMD CEQA Guidelines, which the DSEIR relies upon, recommend that the lead agency assess TAC risks to all receptors within 1,000 feet of a project. BAAQMD, CEQA Guidelines, 2017, p. 5-7. Furthermore, there appear to be sensitive receptors directly adjacent to the Project in the now separate development area identified as the River Commercial Area, including two hotels and the Alviso Youth Foundation Project. The DSEIR should provide a quantitative health risk assessment of construction TAC impacts following standard modeling protocols.

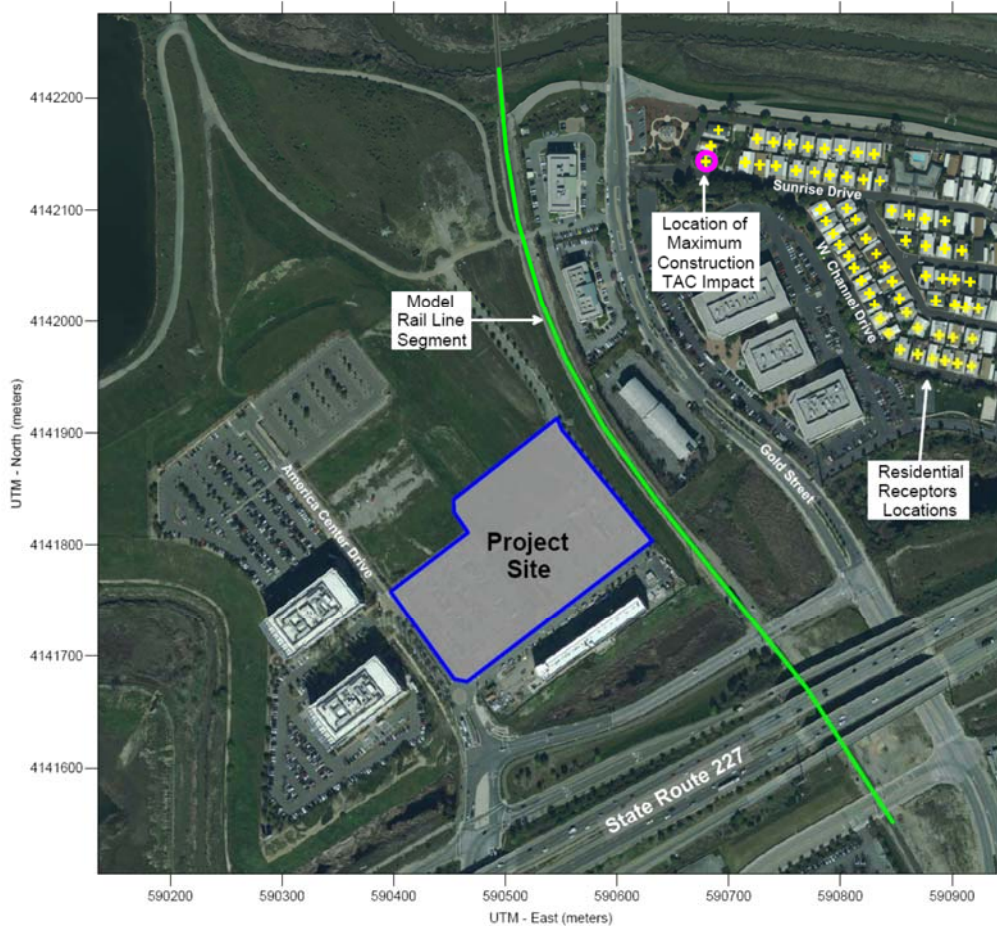
The DSEIR fails to evaluate cumulative health impacts from TAC emissions as required by CEQA. Instead, the DSEIR simply assumes that they will not be significant if other cumulative projects implement mitigation similar to what it calls "MM AQ-1.1." DSEIR, p. 176. There is no "MM-AQ-1.1" identified in the DSEIR. There is a Mitigation Measure AIR-1.1, but that measure is intended to address NOx impacts, not TAC impacts. Furthermore, the point of cumulative analysis is to identify situations in which individually minor impact may still result in significant cumulative impacts. Thus, mitigation by individual projects does not ensure that there would be no cumulatively significant impact.

Here, the DSEIR acknowledges that air quality at the southern end of the Bay is already degraded compared to the rest of the Bay Area due to natural barriers and prevailing winds. It also acknowledges that one goal of the BAAQMD Clean Air Plan is to address regional disparities in air quality impacts. The Alviso community in particular suffers comparatively worse air quality than other locations in the Bay Area. Finally, the DSEIR admits that a number of construction projects adjacent to the Project site are scheduled to occur in the same time frame. DSEIR, p. 174.

Response D-2: A construction period TAC impact analysis was prepared by Illingworth & Rodkin for the project to document quantitatively the conclusions in the DSEIR. The analysis is provided in this document as Appendix F: Construction TAC Analysis, dated August 18, 2017 in Section 4.0 of this document. In addition, the two adjacent hotels are not considered sensitive receptors per the definitions in the BAAQMD CEQA *Air Quality Guidelines*.

The primary community risk impact issues associated with construction emissions are increased cancer risk at nearby receptors and exposure to PM_{2.5}. The nearest sensitive

receptors to the project site are residences along West Channel Drive at the Summerset Mobile Estates, located approximately 900 from the project site (as shown in the figure below). Emissions and dispersion modeling was conducted to predict the off-site toxic air contaminant (TAC) and PM_{2.5} concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated. The analysis included a conservative estimate of impact as default construction assumptions from CalEEMod were used, as well as a conservative construction timeline.



As confirmed by the analysis within Appendix F of this document, and shown in Table 2, below, cancer risk from construction activities would be below the single-source significance threshold at the residence with the maximum impact. The project construction activities would also have annual PM_{2.5} concentrations below the single-source threshold. The supplemental quantitative analysis of construction emissions, therefore, does not change the impact conclusion on page 45 of the DSEIR.

Under cumulative conditions, the nearest development that could be under construction within the same timeframe as the proposed project would be the Residence Inn/Fairfield Inn and Suites America Center Court Project (File Number: PDC15-016), located north of the America Center campus. The Residence Inn/Fairfield Inn property was formerly known as the Alviso Youth Foundation site. Cumulative Construction TAC impacts could occur; however, as shown in the following Table 2 cumulative impacts for stationary and

construction sources would not result in cumulative impacts at the maximally exposed individual (MEI), even assuming simultaneous construction activities. Further reducing the potential for an impact is the fact that typical wind flow in the area (from the north to northwest) do not put sensitive receptors downwind of these construction activities. Therefore, there are low risk levels at the MEI. As a result, cumulative construction TAC impacts would be less than significant, as stated in the SEIR.

Table 2: Cumulative Construction TAC Levels at MEI			
Source	Cancer Risk (per million)	PM_{2.5} Concentration (µg/m³)	Acute and Chronic Hazard Index
Proposed Project Construction	Infant = 1.8 Adult = 0.03	0.01	<0.01
Residence Inn/Fairfield Inn and Suites America Center Court Project Construction	Infant = 5.9 Adult = 0.1	0.1	0.01
SR 237 Link 336, at over 1,000 feet north	<10.2	<0.05	<0.01
Plant #17239 City of Santa Clara Generator at 5601 Lafayette Street, at over 1,000 feet	<1.4	<0.01	<0.01
Plant #17393 City of Santa Clara Generator at 5611 Lafayette Street, at over 1,000 feet	<0.5	0.00	0.00
Union Pacific Railroad, at 550 feet west	12.1	0.04	<0.01
Uncontrolled Total	Infant = 31.9	<0.21	<0.05
<i>BAAQMD Thresholds Single Source</i>	<i>10.0</i>	<i>0.3</i>	<i>1.0</i>
<i>BAAQMD Thresholds Combined Source</i>	<i>100.0</i>	<i>0.8</i>	<i>10.0</i>
<i>Significant without mitigation?</i>	<i>No</i>	<i>No</i>	<i>No</i>
<i>Significant with mitigation?</i>	<i>No</i>	<i>No</i>	<i>No</i>
Sources: Illingworth & Rodkin, Inc. <i>America Center Phase III Rezone Project Construction TAC Assessment</i> . August 18, 2017. (included in Appendix F) Illingworth & Rodkin, Inc. <i>Residence Inn/Fairfield Inn and Suites, America Center Project Construction TAC Assessment</i> . March 16, 2016. (included in Appendix F)			

Another project in Alviso, the Top Golf project, is located more than 1,000 feet away from the project site, but could be constructed within the same timeframe. Consistent with industry-standard impact assessment practices and CEQA *Air Quality Guidelines*, however, sources of TACs over 1,000 feet from the project site are not quantitatively analyzed and would not result in a CEQA impact. From a qualitative and non-CEQA standpoint, the Top Golf project (with incorporated mitigation) would have a very low risk level at the MEI, and that project's MEI is different than the proposed project MEI. As a result, TAC and cumulative TAC impacts would be less than significant.

The results of the quantitative Construction TAC Assessment prepared by Illingworth & Rodkin has been added in Section 3.2.2.5 and Section 4.1.5.2 as part of the SEIR text changes contained within Section 4.0 of this document. This information does not change the impact conclusions for Construction TAC Health Risks in the DSEIR and no mitigation is required.

Comment D-3: The DSEIR concludes the Project's GHG impact is less than significant. This conclusion is based on the Project's supposed compliance with the applicable mandatory measures in the City's GHG Reduction Strategy, adopted in 2015. However, the DSEIR acknowledges that the GHG Reduction Strategy does not contain measures to ensure that the City attains necessary GHG emission reductions from 2020 to 2035. Because of this, the City has found cumulative GHG impacts from its General Plan, including its GHG Reduction Strategy, to be significant and unavoidable for the 2020-2035 timeframe.

Given that the Project is not expected to be occupied until late 2019 (DSEIR, p. 173), and that its operational period may last another 50 years, the conclusion that this Project's GHG impacts will be less than significant merely because it implements mitigation needed to meet 2020 targets is simply misleading.

The DSEIR must be revised and recirculated to acknowledge that GHG impacts will in fact be significant. As discussed below, there are in fact additional feasible mitigation measures for GHG emissions, which the Project should be required to implement.

Response D-3: It is correct that the City has found cumulative GHG impacts from its General Plan and GHG Reduction Strategy to be significant and unavoidable for the 2020 to 2035 timeframe. The *Envision San José 2040 Supplemental Final Program EIR* evaluated the GHG emissions from build-out of the entire General Plan. The proposed project is consistent with the General Plan and would meet the mandatory requirements of the City's GHG Strategy for development expected to be operational before 2020 and the project is anticipated to be complete prior to 2020. As a result, less than significant impacts would occur as described within the DSEIR and recirculation is not necessary.

The General Plan includes an implementation program for monitoring, reporting progress on, and updating the GHG Reduction Strategy over time as new technologies or practical measures are identified. These measures would apply to the project along with other development in the built environment of San José constructed prior to the end of 2020. Implementation of future updates is called for in General Plan Policies IP-3.7 and IP-17.2 and embodied in the GHG Reduction Strategy. The City of San José recognizes that additional

strategies, policies and programs, to supplement those currently identified, would ultimately be required to meet the mid-term 2035 reduction target of 40 percent below 1990 levels in the GHG Reduction Strategy and the target of 80 percent below 1990 emission levels by 2050.

The draft 2017 Climate Change Scoping Plan Update prepared by the California Air Resources Board has identified additional local actions beyond those in the currently adopted California Scoping Plan; however, these actions have not been adopted at the time of preparation of this document and the City of San José has not yet updated its GHG Reduction Strategy to address the interim, mid-term 2030 target. Other GHG reduction measures will occur outside of the project (e.g., vehicle emissions standards, renewable portfolio standards, energy efficiency improvements, etc.). Currently the project includes a number of features and measures to assist in GHG emission reductions. The project is implementing a TDM program and is proposing a high level of commercial office density (FAR of 0.37), which would facilitate transit shuttle ridership. The proposed structures would be constructed in compliance with Municipal Code Chapter 17.84 (Green Building Regulations for Private Development) and CALGreen, and would be LEED Silver certified (or equivalent). Additionally, the project site provides bicycle parking consistent with the Zoning Ordinance requirements.

As discussed in in Section 3.5.2.3 of the DSEIR, starting on page 96, and Response D-4 below, for development anticipated to be constructed prior to the end of 2020, conformance with the City's GHG Reduction Strategy would be consistent with policies to reduce GHG emissions impacts and impacts from the project would be less than significant in this timeframe. Therefore, there would be no new impact and recirculation of the DSEIR is not required.

Comment D-4: The DSEIR's discussion of GHG impacts fails to provide either a quantitative or qualitative assessment of GHG sources. Although some quantification of CO₂e is provided by the air pollutant modeling in Appendix B, the information is not discussed in the DSEIR. Furthermore, there is no assessment of other sources, such as the methane that will be released from disturbance of the landfill. Methane is a particularly potent GHG. The DSEIR must be revised to discuss all sources of GHG and to propose effective mitigation for them. The proposed mitigation for hazards addresses the dangers from explosions and fires caused by methane release, e.g., by venting methane to the atmosphere. However, it does not address mitigation for methane emissions caused by the Project as a GHG source.

Response D-4: For development anticipated to be constructed prior to the end of 2020, the City of San José has not required individual projects to quantify project GHG emissions if the project complies with the City's GHG Reduction Strategy and is consistent with the General Plan land use designation for the project site. Use of an adopted GHG Reduction Strategy to reduce GHG emission effects is consistent with the BAAQMD CEQA *Air Quality Guidelines* and CEQA Guidelines Section 15183.5.

As the commenter notes, GHG emissions were quantified as a part of the air pollutant modeling provided in Appendix B of the DSEIR. It should be noted, however, that these CO₂e emissions numbers would only reflect summer period.

As described in Section 3.7.2.3 of the DSEIR, projects that are consistent with the GHG Reduction Strategy would have a less than significant impact related to GHG emissions through 2020 and would not conflict with targets in the currently adopted State of California Climate Change Scoping Plan through 2020. The primary test for consistency with the City's GHG Reduction Strategy is conformance with the General Plan Land Use/Transportation Diagram and supporting policies. The uses included in the proposed project are consistent with the San José General Plan's Land Use Transportation Diagram and are therefore, consistent with the City's GHG Strategy and impacts are less than significant. The project is also consistent with the mandatory measures from the City's GHG Reduction Strategy. The DSEIR does include a qualitative assessment of GHG emissions as required under CEQA; therefore, no additional environmental analysis is required.

Regarding existing sources of methane at the project site, landfill gas is a byproduct of decomposition of organic material in landfills as bacteria decompose the waste under anaerobic (without oxygen) conditions. Landfill gas is composed of approximately 50 percent methane, 50 percent CO₂, and a small amount of non-methane organic compounds. Methane is a potent greenhouse gas that is 28 to 36 times more effective than CO₂ at trapping heat in the atmosphere.¹ With regard to methane release, it should be noted that the closed Highway 237 Landfill (where the project is located) contains waste materials composed of approximately 44 percent concrete and wood, 43 percent soil, and 13 percent refuse; therefore, the landfill produces a far lower amount of methane than a tradition municipal landfill containing primarily organic municipal waste.^{2,3} Landfill gas generation for 2017 was estimated at 11 to 16 standard cubic feet per minute, and it can be assumed that half of that was methane.⁴ For comparison purposes, the closed Santa Clara All Purpose Landfill (a former municipal landfill approximately 0.2 mile south of the site) produces over 400 cubic feet of landfill gas per minute.⁵

This landfill gas would be produced by the bacteria within the landfill and would be vented whether or not the project was constructed at the site. The project would not cause an increase in methane production at the site; therefore, it would not result in a new GHG-related impact with regard to methane production and no additional environmental analysis is required.

During construction, holes for the support piles would be predrilled and a bentonite grout cap would be inserted at the bottom of the hole. Corrugated metal pipe (CMP) would then be inserted into the opening and a pea gravel and concrete slurry would fill in the space between

¹ United States Environmental Protection Agency. "Basic Information about Landfill Gas". Site accessed June 21, 2017. <https://www.epa.gov/lmop/basic-information-about-landfill-gas>.

² Postclosure Land Use Proposal Highway 237 Disposal Site prepared by EMCON dated July 28, 1999 and revised October 1, 1999

³ Wheeler, Mark C. with Crawford Consulting, Inc. and Iwassa, Dean with Haley & Aldrich. Email correspondence with Ashton, Amie with David J. Powers & Associates, Inc. August 22, 2017.

⁴ Wheeler, Mark C. with Crawford Consulting, Inc. Email correspondence with Ashton, Amie with David J. Powers, Inc. August 9, 2017.

⁵ Source: Waste Advantage. *Santa Clara Converts Low Concentration Landfill Gas to Clean Energy*. Site accessed August 21, 2017. http://www.ameresco.com/wp-content/uploads/2017/03/lfg_management_case_study.pdf.

the landfill material and CMP. After the piles are installed within the CMP, the space between the CMP and the pile is filled with pea gravel, and an additional cap consisting of hydrated bentonite pellets covered by a 5-foot-thick reinforced concrete pile cap. The initial CMP, bentonite grout, and concrete slurry provide the primary barrier to prevent the movement of landfill gases, which effectively seals the penetration through the existing landfill cover. The addition of bentonite pellets and concrete pile caps and grade beams act as a supplemental barrier to prevent the migration of landfill gases.

Based on a review of construction field reports for Phase I and Phase II of America Center, drilling the hole for each pile takes approximately one to two hours and installation of the bentonite grout cap, placement of the CMP, and filling of the space between the landfill material and CMP with pea gravel and concrete slurry takes about 15 minutes. The installation of the foundation piles and the construction of the remaining foundation elements, including the pile caps and grade beams, are performed in accordance with the contractor's construction schedule but it can be assumed that construction of Building 5 and the parking garage expansion would follow a similar construction timeframe. Given that the overall rate of landfill gas production at the landfill is relatively low (because of the large inorganic material component) and the fact that the holes would only be open for up to two hours at a time, large amounts of methane are not anticipated to escape during construction; therefore, no significant impacts associated with implementation of the proposed project are anticipated to occur.

As discussed previously, landfill gas would be produced by the bacteria within the landfill and would vent whether or not the project was constructed at the site. Construction activities would not cause an increase in methane production at the site; therefore, it would not result in a new GHG-related impact that would require mitigation. This discussion and accompanying Figure 3.7-1: Pile Construction Detail have been added in Section 3.7.2.3 as part of the DSEIR text changes contained within Section 4.0 of this document. This information does not affect the impact conclusions in the DSEIR and new mitigation measures are not required.

Comment D-5: Mitigation for air quality, GHG, and congestion impacts due to Project traffic must be strengthened. The DSEIR admits that the Project's traffic will cause significant unmitigated impacts in the form of freeway congestion. The DSEIR also acknowledges that the air quality impact from NO_x, which would be generated almost entirely from traffic sources, is significant and unavoidable despite proposed Mitigation Measure AIR-1.1, which is supposed to reduce automobile trips. Furthermore, as discussed above, the DSEIR cannot conclude that the Project's GHG emissions after 2020 would be less than significant. In fact, the post-2020 GHG emissions, largely due to automobile traffic, are significant and unmitigated because the City's GHG Reduction Strategy admittedly fails to attain the needed GHG reductions in the 2020-2035 period. Thus, in order to provide necessary mitigation for these impacts, the Project should be required to implement all feasible mitigation for mobile sources unless and until the DSEIR can conclude that the impacts would become less than significant.

The only mitigation apparently considered by the DSEIR for traffic congestion is facilities improvements. For example, the DSEIR finds there is no feasible mitigation for freeway congestion because no one project can add capacity to a state freeway. DSEIR, p. 159. The transportation

analysis simply ignores the possibility of requiring additional transportation demand management measures. Thus, the only mitigation proposed and discussed that is intended to reduce automobile trips is Mitigation Measure AIR-1.1. DSEIR, p. 46. However, as explained below, MM AIR-1.1 is inadequate because it is not enforceable and it does not include all feasible mitigation even though impacts remain significant.

Response D-5: Please see Response D-4 for a discussion regarding the project’s consistency with the GHG Reduction Strategy and the level of significance of GHG impacts. As described, impacts would be less than significant because the project is consistent with the City’s GHG Reduction Strategy (for development through the end of 2020) and mitigation is not proposed or required.

Exceedance of BAAQMD emissions thresholds was identified as a significant and unavoidable impact in the Legacy Terrace EIR. A TDM program was required for the project, as identified per MM AIR-1.1. The commenter is correct that the traffic reduction was not calculated as part of the Legacy Terrace FEIR because the MM AIR-1.1 was related to a reduction in air emissions; it was assumed that a five to ten percent reduction in emissions could occur but this was not enough to reduce the impact to a less than significant level.

The applicant will be required to prepare a TDM plan for the project under the City’s current policies. It will be reviewed by the Department of Public Works staff prior to approval of the Planned Development Permit for the project. While the traffic report did not assume a reduction in traffic volumes due to TDM measures, a significant traffic and air quality impact would still occur even assuming up to a ten percent reduction in traffic.⁶ As noted in Response A-4, the text of mitigation measure MM AIR-1.1 has been revised to clarify that approval and annual monitoring of a TDM program is required. This revision has been added to Section 3.2.2.5 as part of the SEIR text changes contained within Section 4.0 of this document.

Comment D-6: First, the “physical pedestrian and bicycle improvements” that are supposed to “encourage pedestrian and bicycle modes of travel” in MM AIR-1.1 are not specified. Instead, a few examples are listed (“such as sidewalk improvements, landscaping and bicycle parking”), but without requiring any of these examples or specifying other needed facilities to accommodate pedestrian and bicycle travel instead of automobile trips.

Response D-6: The project involves modification of an existing development site that has previously established connections to the surrounding pedestrian and roadway network. As described within the DSEIR, several sidewalks, crossings, and bicycle paths have already been constructed as part of the previous phases of the America Center development or by the City in the immediate project vicinity. Sidewalks are provided along the east and west side of America Center Drive and grade differences make the pedestrian crossing of the Gold

⁶ Del Rio, Robert. Vice President & Principal Associate. Hexagon Transportation Consultants. Email correspondence. January 26, 2017. Intersection and freeway impacts are avoided with development of less than 50,000 square feet.

Street Connector on the west side more appropriate than adding an additional crosswalk at this intersection. Sidewalks are provided along both sides of America Center Drive north of the Building 5 frontage (on private property). The Highway 237 Bikeway is also located to the south of the site and access is provided from the west side of America Center Drive.

As a part of the implementation of MM AIR-1.1, and as included in the project description for the proposed modifications to the America Center campus, pedestrian connections and bicycle parking will be installed around Building 5 and in the parking structure extension to facilitate use of pedestrian and bicycle modes of travel. These features represent implementation of on-site measures for the America Center campus, as continued from the initial development of the America Center site.

Comment D-7: Second, there is no specification of what improvements are required and will be constructed under MM AIR-1.1 in order to “connect site with regional bicycle/pedestrian trails systems.” The DSEIR states that 178 bicycle parking spaces would be provided, but it admits that “new bicycle paths are not provided, as described in Policy TR-2.8.” DSEIR, p. 48. It also admits that number of bicycle parking spaces does not meet the requirements of the City’s General Plan. DSEIR, Appendix E, p. 53. The Project should be required to provide all of the bicycle parking spaces required under the City’s standards. It should also be required to provide a Class I bicycle path connection to the Bay Trail to ensure bicycle connectivity. The Project should be required to implement, or to pay a fair share toward implementation of, the planned Class I off-street trail planned to run around the perimeter of the America Center site with connection to the Bay Trail.

Response D-7: As noted in Response D-6, no new connections to regional bicycle/pedestrian trail systems are proposed beyond those previously constructed during earlier phases of the America Center project.

Bicycle parking would be provided consistent with San José requirements (the project will provide the required 222 bicycle parking spaces). These spaces will be accommodated in the future parking garage and surface areas adjacent to the building entries. The City calculates bicycle parking at one space per 4,000 square feet of floor area (which is defined to be 85 percent of the total gross floor area); therefore, $1,044,112 \text{ gross square feet} \times 85 \text{ percent} = 887,495 \text{ net square feet} / 4,000 = 222 \text{ required bike spaces}$. References to 178 bicycle spaces within the DSEIR were incorrect. Sections 2.2.2.5, 3.7.2.3, and 3.13.2.5 of the DSEIR and pages x and 53 of the TIA within Section 4.0 contain corrections to show the required 222 spaces. This information does not change the impact conclusions in the DSEIR and no additional mitigation for bicycle parking is required.

Refer to Response D-6 for a discussion of connectivity to bicycle trails in the project vicinity. No contribution to the Bay Trail is being required of the project as a mitigation measures under CEQA because there is no impact for which a nexus to require a fee exists.

Comment D-8: The Project should also be required to provide sidewalks on America Center Court, the east side of America Center Drive along the Building 5 frontage, and either side of America Center Drive between the Gold Street Connector and the Building 5 frontage, where sidewalks do not exist and are apparently not planned. See DSEIR, p. 162.

Response D-8: The City requires sidewalks on all public streets, including America Center Drive. For private streets (i.e., America Center Court), the project will provide an accessible path of travel from the hotel to the office buildings through the garage area, as well as an accessible path of travel from the new office building to the other office buildings. As noted in Response D-6 above, grade differences make the crossing on the west side of America Center Drive more appropriate than a pedestrian crossing on the east side.

Comment D-9: The discussion in the traffic section states that the Project will not “result in a measureable increase in pedestrians.” DSEIR, p. 162. This conclusion is an admission that the proposed Mitigation Measure AIR-1.1 will not be effective in its goal of accommodating pedestrian transportation. Effective mitigation requires that the Project implement a suite of synergistic measures including support measures, economic incentives, and actual transportation services, as discussed below.

Third, there are no performance specifications for the proposed shuttle bus service to the Tasman/Layette light rail and ACE rail systems. A casual reader might suppose that MM AIR-1.1 is proposing that the Project provide a shuttle service when it lists a requirement to “provide shuttle bus service to the Tasman/Lafayette light rail and Altamont Corridor Express (ACE) rail system.” DSEIR, p. 46. In fact, the transportation analysis makes it clear that there is no such intention to improve the shuttle service *or* to increase transit ridership.

It is assumed that only a small number of employees of Building 5 would utilize existing transit services due the long walking distance and lack of pedestrian facilities linking the project site to transit facilities. In addition, the ACE shuttle provides only four scheduled runs during the morning and evening commute hours. Assuming the existing transit service would remain unchanged, new riders associated with the proposed project can be accommodated by the current available capacity of the transit service in the project area and improvement of the existing transit service would not be necessary.

Response D-9: As stated in Section 2.2.2.5 Transportation and Demand Management of the DSEIR, the applicant will be required to prepare and implement a TDM program, which will be required as part of the Planned Development Permit. The TDM program will further outline and detail compliance with mitigation measure MM AIR-1.1 and the City’s requirements (General Plan Policy TR-7.1) for large employers to provide a suite of measures, economic incentives, and actual transportation services to lower the site’s mobile air emissions and related vehicle miles traveled. Providing for pedestrian modes of travel is one of the strategies to be applied. The DSEIR also acknowledges that existing transit services would require long walking distances and that there is a lack of pedestrian facilities linking the project site to transit facilities. As noted in Comment B-3, there are now additional transit services planned in the area on Gold Street (Line 59).

Mitigation measure MM AIR-1.1 states that transit mitigation identified in the Legacy Terrace FEIR apply to the America Center Project. There is an existing shuttle service to and from the ACE train at the Great America station (four shuttles in morning and four shuttles in the evening) that currently serves the site. The discussion in the TIA identifies at most nine new transit riders due to the proposed project. These new riders would not only be served by the 823 line. Rather, (as stated in DSEIR Appendix E: Transportation Impact Analysis) the

nine new transit riders would be distributed amongst the various shuttles, light-rail, and buses. In addition, as outlined in the project description of the DSEIR, a wide range of measures may be employed as a part of the TDM program. As noted in Response A-4, the text of mitigation measure MM AIR-1.1 has been revised to clarify that review and approval of the TDM program by City of San José Public Works and Planning, Building, and Code Enforcement (PBCE) staff and annual monitoring is required. This revision has been added to Section 3.2.2.5 as part of the SEIR text changes contained within Section 4.0 of this document. This clarification does not affect the significance conclusions in the DSEIR.

Comment D-10: Fourth, the TDM system to be implemented through MM AIR-1.1 is inadequate because the mandated elements are not specified and because many additional effective TDM elements are not included as requirements. Even though the Project description lists 16 possible TDM measures (i.e., the measures that the “TDM program may include” – DSEIR, p. 16), MM AIR-1.1 specifies only four required TDM measures, and these measures are not adequately specified. For example, MM AIR-1.1 calls for a “transit incentive program,” but does not clarify whether this would require mere exhortation or would require effective economic incentives and transportation measures like shuttle services. It calls for connecting the site to the regional pedestrian and bicycle trail system, but does not specify the required connections. It calls for a shuttle service, but does not specify that service; and it appears that there is actually no intention to provide such a service, but to rely on the admittedly inadequate ACE shuttle.

MM AIR-1.1 should be revised to require *all* of the “possible” TDM measures discussed in the Project description (DSEIR, pp. 16-17), as follows:

1. Eco Pass or Clipper Card for all employees, providing free rides on Santa Clara Valley Transportation Authority (VTA) transit
2. 25 percent transit subsidy for transit agencies other than the VTA, including Caltrain, ACE, Capitol Corridor, BART, MUNI, and other services
3. Monthly vanpool subsidy
4. Commuter tax benefits through WageWorks offering pre-tax deduction per month for transit and pre-tax deduction per month for parking
5. Free “Last Mile” shuttles to local train systems (e.g. Caltrain, Amtrak, ACE)
6. Internal carpool matching program utilizing zip code matching
7. Regional carpool matching program through 511
8. Preferred parking for carpools and vanpools located near entrances to every building
9. Bicycle lockers and/or bicycle racks near entrances to every building
10. Showers for cyclists and pedestrians, with amenities
11. Intranet site featuring transit, bike, ridesharing and telework information
12. New hire orientation presentations focusing on commute alternatives
13. Centrally-located kiosks with transit schedules, bike and transit maps, and other commute alternative information
14. Periodic events which connect employees with local transit agencies and transportation organizations (e.g. Spare the Air Fair and/or Bike to Work Day)
15. On-site amenities that allow employees to complete errands without a car, such as bicycle repair, dry cleaning, haircuts, cafeteria, coffee bars, fitness center, mail and shipping services, ATM, small-scale retail

16. Participation in the Bay Area Bike Share Program, or other similar bicycle sharing program.

We note that many of the above measures are identified as effective mitigation measures by BAAQMD in its CEQA Guidelines and by the California Air Pollution Control Officers Association (“CAPCOA”) in its study of effective GHG mitigation, which includes transportation trip reduction measures. See BAAQMD, CEQA Air Quality Guidelines, May, 2017, pp. 4-13 to 4-14; CAPCOA, 2010, Quantifying Greenhouse Gas Mitigation Measures (available at <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>). Additional TDM measures should be imposed. These include measures proposed by BAAQMD CAPCOA as follows (the CAPCOA mitigation measure and/or the BAAQMD page number source is identified for each measure in parentheses):

17. Incorporate bike lanes into streets (CAPCOA SDT-5) [see comments above regarding specified bicycle trail connections]
18. Provide electric vehicle parking with charging (CAPCOA SDT-8)
19. Dedicate land for bike trails (CAPCOA SDT-9)
20. Limit parking supply (CAPCOA PDT-1; BAAQMD p. 4-14) [the Project may qualify for parking reductions if it provides a sufficiently robust TDM program]
21. Implement commute trip reduction with required implementation and monitoring (CAPCOA TRT-2)
22. Provide ride-sharing programs (CAPCOA TRT-3)
23. Implement a subsidized or discounted transit program (CAPCOA TRT-4)
24. Provide end of trip facilities (e.g. showers, lockers, changing spaces) (CAPCOA TRT-5)
25. Encourage alternative work schedules and telecommuting (CAPCOA TRT-6)
26. Implement commute trip reduction marketing (CAPCOA TRT-7)
27. Implement preferential parking permit program (CAPCOA TRT-8)
28. Implement car-sharing program (CAPCOA TRT-9)
29. Provide employer-sponsored vanpool/shuttle (CAPCOA TRT-11)
30. Implement bike-sharing program (CAPCOA TRT-12)
31. Price workplace parking (CAPCOA TRT-14; BAAQMD, p. 4-13)
32. Implement employee parking “cash-out” (CAPCOA TRT-15; BAAQMD, p. 4-13)
33. Provide local shuttles (CAPCOA TST-6)
34. Require Project contribution to regional transit improvement (CAPCOA RPT-3)

If any of these measures is already required of the Project either by applicable regulations, mitigation proposed in the DSEIR, or by the Project description, please identify specifically where that requirement is set out. If any of these measures are not otherwise required, please include them as proposed mandatory mitigation.

Response D-10: As noted in Response A-4, the text of mitigation measure MM AIR-1.1 has been revised to clarify that review and approval of the TDM program by City of San José Public Works and PBCE staff and annual monitoring to measure the effectiveness of the TDM plan is required. The TDM Plan would be required to contain components or equivalent measures to result in a 10 percent reduction in projected weekday mobile emissions. This revision has been added to Section 3.2.2.5 as part of the SEIR text changes

contained within Section 4.0 of this document. This clarification does not affect the significance conclusions in the DSEIR.

Appropriate measures from the project description (DSEIR pages 16-17) and the BAAQMD/CAPCOA list above will be incorporated into the TDM program as determined by the City's Department of Public Works staff and Department of Planning, Building and Code Enforcement staff.

The commenter's request to include additional specific measures as conditions of approval or required mitigation for the project is noted and may be considered by the decision makers.

Comment D-11: The DSEIR states that the Project would be required to obtain a LEED-silver certification. DSEIR, p. 16. That certification might include some, but not necessarily all, of the trip reduction measures listed above, because LEED certification includes credits for measures unrelated to transportation and because LEED certification may not include all of the measures identified here. Thus, the mere fact that the building may be LEED-certified cannot substitute for implementing each of the trip reduction measures recommended above.

Response D-11: The reference to LEED-silver certification is under the heading "Green Building Measures". The discussion notes the project will include bicycle parking spaces along with a TDM program. The Green Building Measures outlined in the project description are not presented as a substitute for other trip reduction measures, such as those under the subheading "Transportation Demand Management Program" also on page 16 of the DSEIR.

Comment D-12: We note that the DSEIR admits that the Project will not install solar panels, will not include car sharing, will not limit parking places, and will not price parking, even though these measures are identified as GHG reduction strategies in the City's GHG Reduction Strategy. DSEIR, p. 99. The fact that these measures are identified as "voluntary" in that strategy does not prohibit the City from requiring these measures to mitigate significant impacts.

Response D-12: The project is consistent with the site's General Plan designation and will implement mandatory GHG reduction measures. The DSEIR notes that the applicant is not proposing voluntary measures from the City's GHG Reduction Strategy. A significant GHG emissions impact was not identified and additional mitigation measures are not required to reduce GHG emissions.

Car sharing, limits on parking places or price parking are tools that could be included in a TDM program for the site. They are not currently proposed by the applicant as options in the TDM program for the site (refer to page 16 of the DSEIR).

Comment D-13: Development standards for areas outside the Village Area, including height limitations, are applicable to the Project. A project is only eligible to construct buildings over 45 feet tall if the height will "facilitate the transfer of development intensity away from the baylands and environmentally sensitive areas in the vicinity of the Alviso village to a location closer to Highway

237 in order to achieve habitat preservation or other environmental protection objectives.” DSEIR, p. 120.

In light of the fact that prior development entitlements have *already* resulted in preventing development in the areas designated as open space on the north end of the site, permitting this Project to exceed 45 feet does nothing to “facilitate the transfer of development intensity away from the baylands and environmentally sensitive areas....” That transfer has already been accomplished. Permitting additional high-building, high-density commercial development at a site that has already attained the transfer of intensity away from the baylands and has already established “habitat buffer areas...on the northern portions of the site” is not consistent with the Alviso Master Plan.

Response D-13: As discussed on pages 123-124 of the DSEIR, the project would not exceed the height limits for the site in the Alviso Master Plan. The Alviso Master Plan specifically states that buildings as tall as 90 feet may be allowed if all of the following are met:

1. The building is set back at least 500 feet from Wilson Way, Tony P. Santos Street, and Grand Boulevard. Within this setback, 45-foot-tall buildings, landscaping, and parking are allowed as well as 60 foot buildings that are set back 400 feet from Wilson Way, Tony P. Santos Street, and Grand Boulevard, Buildings taller than 45 feet are only allowed on the southern portion of the former Cargill Landfill site.
2. The building is well-designed and contributes positively to the Alviso area; and
3. Such building heights facilitate the transfer of development intensity away from the baylands and environmentally sensitive areas in the vicinity of the Alviso village to a location closer to Highway 237 in order to achieve habitat preservation or other environmental projection objectives. In other words, development can be concentrated in taller buildings closer to Highway 237 if clear environmental/ habitat buffer areas are established on the northern portions of the site.

The project meets the requirements for the allowed 90-foot height, in that the project site is located on the southern portion of the Cargill Landfill site (also known as the closed Highway 237 Landfill), the buildings have been reviewed by the City to be well designed and compatible with the other four previously approved buildings, and the proposed Building 5 and parking garage extension are located closest to Highway 237, are approximately 1,000 feet from the Bay and 700 feet from sensitive habitat areas, and a habitat open space area is established on the northern portion of the site (thus focusing development intensity away from the Baylands). For these reasons, the proposed 90-foot height for Building 5 is consistent with the Alviso Master Plan. The information above clarifies and supports the discussion of consistency with the Alviso Master Plan. The conclusions in the DSEIR regarding land use impacts are unchanged.

Comment D-14: The DSEIR assumes the following additional improvements will be in place under background conditions because they are in the City of Santa Clara CIP or are part of approved development projects:

- Great America Parkway and Mission College Boulevard – Addition of a third westbound left-turn lane, fourth southbound through lane, third northbound left-turn lane, and separate westbound right-turn lane
- Great America Parkway and Old Glory Lane – Addition of a second northbound left-turn lane
- Great America Parkway and Patrick Henry Drive – Addition of a second northbound left-turn lane and eastbound free-right-turn lane, the eastbound right-turn lane includes the addition of a fourth southbound lane on Great America Parkway between Patrick Henry Drive and Mission College Boulevard

For each of the above improvements, please identify the source of the claim that the improvement will be constructed. If the improvement is required mitigation for another project, please identify that project and the specific condition of approval that require the mitigation. Please also explain when the improvement is required to be implemented. If the improvement is part of the Santa Clara CIP, please identify the CIP document and explain when the improvement is committed to be constructed.

Response D-14: Each of the referenced improvements were identified either as part of the City of Santa Clara 2016/2017 CIP improvement list or conditions of approval for individual development projects. The improvements are identified in each project’s Mitigation and Monitoring Reporting Program for each development project. Timing for the improvements is further described below.

Per the City of Santa Clara 2016/2017 CIP, the Great America Parkway and Mission College Boulevard intersection improvements are scheduled to be completed in the fourth quarter of 2017.

Improvements at Great America Parkway and Tasman Drive, to be completed by the City Place project in Santa Clara, are required at Phase 2 of development (once the project generates 2,610 project trips). Construction of the City Place development has not yet begun and the date when improvements would be in place is not currently known.

Improvements at Great America Parkway and Old Glory Lane, to be completed by the Yahoo! project, are required by the City of Santa Clara to be implemented prior to issuance of occupancy permits. Construction of this approved project also has not begun and the date when improvements would be in place is not currently known.

The analysis of background conditions in the DSEIR includes all traffic associated with approved developments as well as the identified improvements. Therefore, exclusion of the planned improvements also would result in removal of the traffic associated with those approved projects. However, the effects of project traffic are required to be evaluated against baseline (background) conditions that includes traffic associated with all approved development in the project area.

The evaluation of existing plus project conditions, as presented in the TIA, indicates that traffic associated with the proposed project alone would not result in the degradation of LOS

and impact at any of the study intersections. Therefore, the timing of construction of the approved developments and associated improvements, if delayed, would not significantly affect LOS at any of these intersections under existing plus project conditions.

Comment D-15: Please also explain whether the following background condition improvement, identified in the traffic report but omitted from the DSEIR's list of background improvements, is in fact included in the traffic analysis:

- Great America Parkway and Tasman Drive – Addition of a second northbound left-turn lane (Yahoo!)

If it is included, please provide the same information (source of mitigation requirement or CIP, date improvement to be constructed) for this improvement.

Response D-15: The description of the improvement included under background conditions within the TIA is incorrect; however, the analysis included the improvements as described below:

- Great America Parkway and Tasman Drive – Addition of a separate southbound right-turn lane (CityPlace)
- Great America Parkway and Old Glory Lane – Addition of a second northbound left-turn lane (Yahoo!)

The text of the TIA has been modified to clarify the improvements as outlined in Section 4.0 of this document. The text correction has no effect on the results of the traffic analysis. The timing for implementation of the improvements is described in Response D-14.

Comment D-16: The traffic analysis acknowledges that the 95th percentile vehicle queues will exceed available left-turn lane storage at several intersections. Some of the excess queues cannot or will not be mitigated by proposed improvements. Please explain whether and how the additional delay from this queuing was included in the determination of intersection level of service and average intersection delay.

Response D-16: An overview of level of service methodology is provided on pages on pages 149-150 of the DSEIR. LOS is a measurement used to relate the quality of traffic using ratings A-F. The level of service method approved by the City of San José, VTA, and Caltrans analyzes a signalized intersection's operation based on average control vehicular delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. In contrast, queuing is an evaluation of waiting lines, or queues. It includes estimates of queue lengths and waiting time.

Analysis in Section 3.13.2.5 of the DSEIR states that project traffic will lengthen the projected queue lengths by no more than one vehicle at each of the referenced locations. Vehicular queuing does not have a direct effect on intersection delay as suggested by the comment. Delay at intersections is a function of volume moving through an intersection and the capacity of the intersection to serve the volume. Large delays at intersections (LOS D, E

or F) are due to demand approaching or exceeding the capacity of the intersection. In some instances, increases in delay will result in increases in vehicle queue lengths; however, it is possible for intersections to operate with large delays and not have lengthy vehicle queues.

The estimation of vehicle queueing as reported in the traffic analysis is based on the projected 95th-percentile queue. The 95th-percentile queue is defined to be the queue length (in vehicles) that has only a five-percent probability of being exceeded during the analysis time period. It is a useful measure for determining the appropriate length of turn pockets, but it may not be typical of what an average driver would experience.

The City has not adopted criteria for the evaluation of vehicular queues; however, the extension of projected queues by one vehicle is not considered to have significant effect on traffic safety, which would be a significant impact under CEQA. Furthermore, the queue lengths at each of the locations are projected to extend beyond available storage capacity without the proposed project at all but one location, Great America Parkway/SR 237 (South).

Comment D-17: The queuing analysis establishes that available storage is now adequate at some locations under background conditions, but will not be adequate with the addition of Project traffic (e.g., Great American Parkway at SR 237 SBL during PM peak conditions). This should be identified a significant impact.

Response D-17: From a CEQA standpoint, there are no quantitative thresholds specific to queuing. There is, however, a qualitative threshold which states that the project would have a significant impact if the project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

A queuing analysis for the project was conducted as part of the operational analysis to evaluate the size of the existing pockets and the number of vehicles a proposed project would generate at the existing pocket. If project traffic exceeds an existing pocket length and traffic spills out of the pocket, typically traffic will be more congested, resulting in more delay but not result in any safety concern, which could be a significant impact under CEQA. As described in Response D-16, the queues would be extended by one vehicle, which may slow traffic but would not be considered a significant traffic safety impact. Therefore, the impact conclusions for transportation impacts in the SEIR would not change.

Comment D-18: The traffic analysis identifies additional problems that will be caused by Project traffic, but fails to acknowledge that these impacts are significant or propose mitigation. For example, the Project may result in the requirement for a signal at Lafayette and Great American Parkway. The DSEIR states that the Project “may be required to contribute a fair share toward the future traffic signal.” DSEIR, p. 163. The intersection is in the City of Santa Clara, which has no jurisdiction over this Project, especially after it been approved. Thus, there is no way that the Project could be required to make a fair share contribution unless the City of San José identifies the impact as significant in this EIR and imposes as mitigation the requirement to make the fair share contribution.

Response D-18: Preparation of the traffic analysis was coordinated with the City of Santa Clara. Signal warrants are discussed in the SEIR as “Other Transportation and Site Access

Considerations” for informational purposes. This section addresses operational effects that are not necessarily CEQA issues.

The need for signalization of an unsignalized intersection is assessed based on the Peak Hour Volume Warrant described in the *California Manual on Uniform Traffic Control Devices for Streets and Highways*. This method makes no evaluation of intersection level of service, but simply provides an indication whether vehicular peak hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. Signal warrant requirements are not, however, a CEQA threshold but are rather an issue of overall traffic operations and acceptable engineering standards. Thus, there is no CEQA impact requiring mitigation.

The fair share arrangement disclosed in the SEIR was coordinated with the City of Santa Clara. The fair share based on the cost of the improvement at the time the payment is due and the project’s contribution to the impact as determined by the Director of Public Works. It is paid to the City of San José Public Works Depositors Fund, in which the City of San José will manage moving the funds to the City of Santa Clara. The text of the DSEIR has been modified regarding the provision of a fair share contribution in Section 4.0 of this FSEIR.

Comment D-19: The DSEIR admits that the Project will increase critical turning movements by 54% at SR 237 Eastbound On-Ramp from Great America Parkway during the PM peak hour. DSEIR, p. 163. This will increase wait times by 34 seconds and extend storage beyond the available storage. In light of the significance criteria, under which an additional intersection delay of 4 seconds is deemed significant, this additional delay at the ramp should be identified as a significant impact.

Response D-19: As noted in on page 163 of the DSEIR, the analysis of metered freeway ramps providing access to the project site was performed to identify the effect of the addition of project traffic on the queues at metered study freeway on-ramps. The evaluation of freeway ramps is not required based on the City’s transportation impact analysis guidelines and the City of San José does not apply CEQA impact criteria to freeway ramp analyses. A summary of this operational analysis is included in the DSEIR for informational purposes and no significance conclusions were made.

The comment also references the operational Freeway Ramp Analysis presented in Table 14 of the TIA. The comment incorrectly identifies the reported increase in delay of 34 seconds at the referenced freeway ramp meter in the TIA as a critical movement and suggests that intersection LOS significance criteria be applied to ramp queue analysis. The evaluation of intersection LOS and the analysis of freeway ramps are two separate analyses that utilize different methodologies. Intersection LOS impact criteria cannot be applied to freeway ramp analysis; therefore, the project would not result in a new significant traffic impact at this location under CEQA.

Comment D-20: The traffic report states that “The City’s Bicycle Parking requirements require one bicycle parking space per 4,000 square feet of office floor area. The proposed Project is required to provide 271 bicycle parking spaces to meet the city standards.” DSEIR, Appendix E, p. 53. The

Project proposes only 178 bicycle parking spaces. The DSEIR also admits that the Project will not meet City standards, although it confusingly states that 285 spaces are required. DSEIR, p. 164.

The Project and its mitigation must be revised to ensure that the City standards are met. Failure to meet the standard would make the Project inconsistent with applicable policies, and would make the TDM mitigation measures less effective.

Response D-20: The City calculates bicycle parking at one space per 4,000 square feet of the floor area (which is defined to be 85 percent of the total gross floor area); therefore, $1,044,112 \text{ gross square feet} \times 85 \text{ percent} = 887,495 \text{ net square feet} / 4,000 = 222$ required bike spaces. These spaces will be accommodated in the future parking garage and site surface areas adjacent to the building entries. References to 178 bicycle spaces within Sections 2.2.2.5, 3.7.2.3, and 3.13.2.5 of the DSEIR were incorrect. The text of the DSEIR and Appendix E have been revised to state the correct number (222) of required and proposed bike parking spaces (see Section 4.0 of this FSEIR). Therefore, the project meets City standards for bicycle parking.

Refer to Response D-6 for a discussion of connectivity to bicycle trails in the project vicinity. This information does not affect the identified CEQA impacts described within the DSEIR and no additional mitigation measures are required.

Comment D-21: The DSEIR acknowledges that the Project makes a considerable contribution to a significant cumulative impact at the Great America Parkway and Eastbound SR 237 intersection. The proposed mitigation is a fair share payment toward intersection improvements.

The traffic report states that the improvement was identified as a mitigation measure for the City Place development in the City of Santa Clara. DSEIR, Appendix E, p. 46. Since the City of San José has no authority over development in other jurisdictions, it cannot ensure that this mitigation is actually constructed unless it requires *this* Project to construct it. Mitigation Measure TRA (C)-1.2 should be revised to require that the Project applicant fully design, construct, and improve the intersection. If appropriate, the measure can provide for reimbursement to the applicant of the cost of construction in excess of its fair share.

Response D-21: The SR 237/Great America Parkway improvements are fully funded and will be constructed by the City of Santa Clara's development (see Section 4.0, text revisions to Section 4.1.5.13). Thus, a cumulative impact at the Great America Parkway and Eastbound SR 237 intersection would only occur in a cumulative scenario that would include the City Place development responsible for construction of the third left-turn lane and second right-turn lane to reduce the LOS impact. If City Place was not constructed, there would be no cumulative impact; therefore, the City is not able to require mitigation for the impact.

E. Steve Dunn, Steelwave

Comment E-1: 1. With respect to conditions (2) & (3) it is unjust to require Applicant to improve the Lafayette Street and Gold Street Connector & GAP and N 237 with improvements as specified:

- a. Subject property's use is consistent with current zoning use and only requires partial additional square footage, less than an add of approximately 78,750 sf (per application) of additional office space (the report notes 190,000 SF add).
 - b. The City required NO traffic mitigations for recent approval of two adjacent new hotels, requiring change of zoning use which added significant traffic to the original EIR and who further burdened a private driveway.
2. Such unjust mitigations could prevent additional job creation in this proposed San José project, a strong mission of the current Mayor and City Council.
 3. Such offsite requirements will delay the potential development of the site.
 4. Such offsite requirement will put an undue financial burden on the potential project.
 5. As noted in the study, background traffic counts include City Place. We believe City Place triggers this proposed improvement need, not America Center Building 5.

Response E-1: The comment presents the opinions of the commenter regarding the justness of identified mitigation measures and financial considerations for the project, and does not raise any specific environmental issue under CEQA, therefore, no further response or analysis is required. It is included in the public record for consideration by the decision makers. Please see Section 4.0 for a revision in MM TRA-1.1 and MM TRA(C)-1.2 reflecting further coordination with the City of Santa Clara.

Comment E-2: 6. The Owner will be establishing a TDM program. An effective TDM program can easily achieve a 25 % reduction in work related vehicle trips that will result in a reduction of trips created by the project and parking demand. Such reduction of vehicle trips are NOT assumed in this traffic analysis and conclusions.

Response E-2: The traffic analysis used City of San José, City of Santa Clara and Congestion Management (CMP) methodologies and impact criteria to assess traffic impacts, based upon appropriate trip generation and allowable trip reduction of the project. As the proposed TDM program included in the project description did not include quantified reduction targets for vehicle trips and a third-party monitoring program to ensure a specific level of trip reduction that would be monitored and is enforceable, trip reduction credits for the TDM program were not included in the traffic analysis. As there was not substantial evidence included in the project description of the trip reduction that could be assured, trip reduction from implementation of the proposed TDM program was not included in the traffic analysis on which the conclusions of the SEIR were based.

SECTION 4.0 DRAFT SEIR TEXT REVISIONS

This section contains revisions to the text of the America Center Phase III Project Draft Subsequent Environmental Impact Report, dated June 2017. Revised or new language is underlined. All deletions are shown with a ~~line through the text~~.

Page and Section	Text Revisions
Page vi; Summary	<p>MM AIR-1.1: The project applicant shall include the following updated measures from the Legacy Terrace FEIR:</p> <ul style="list-style-type: none">• Provide physical improvements, such as sidewalk improvements, landscaping and bicycle parking which would encourage pedestrian and bicycle modes of travel;• Connect site with regional bicycle/pedestrian trail system;• Provide shuttle bus service to the Tasman/Lafayette light rail and Altamont Corridor Express (ACE) rail system; and• Implement other feasible transportation demand management (TDM) program measures; including a ride-matching program, guaranteed ride home programs, coordination with regional ride-sharing organizations, and a transit incentives program. <u>The Project applicant shall submit a Transportation Demand Management (TDM) Plan to the satisfaction of the Transportation Manager of the Department of Public Works and the PBCE Supervising Environmental Planner prior to approval of a Planned Development Permit. The TDM Plan shall contain components or equivalent measures to result in a 10 percent reduction in projected weekday mobile emissions. The project will be required to submit an annual monitoring report to the Transportation Manager of the Department of Public Works and the PBCE Supervising Environmental Planner to measure the effectiveness of the TDM plan. Additional TDM measures may be required if the TDM measures are not effective.</u> <p>Significant, Unavoidable Impact</p>
Page xiv; Summary	<p>MM TRA-1.1: <u>Prior to Public Works Clearance, the project applicant shall fully design, construct, and pay a fair share amount towards improvements (including full cost for design, construction, etc.) to the Lafayette Street and Gold Street Connector intersection. Improvements would include with the addition of a second northbound left-turn lane in a vacant area between the Gold Street Connector and SR 237. The improvement shall require widening of the Gold Street Connector and shifting of travel lanes to the south by approximately 12 feet to accommodate a second receiving lane for the second northbound left-turn lane. The roadway widening would also require the relocation of the Highway 237 Bikeway, south of the Gold Street Connector. The Director of Public Works shall determine the fair share based on the cost of the</u></p>

improvement at the time the payment is due and the project's contribution to the impact (an estimated 5 percent). The fair share amount shall be paid to the City of San José Public Works Depositors Fund.

During construction of the intersection improvement, a trail detour shall be provided and/or the Highway 237 Bikeway relocated prior to construction of the road widening.

Less than Significant Impact with Mitigation Incorporated

Page xv;
Summary

MM TRA (C)-1.1: Lafayette Street and Gold Street Connector – See MM TRA-1.1,

Less than Significant Cumulative Impact with Mitigation Incorporated

MM TRA (C)-1.2: Great America Parkway and Eastbound SR 237 - ~~Prior to Public Works Clearance, the project applicant shall pay a fair share amount towards improvements to the Great America Parkway/State Route 237 intersection.~~ Improvements to the Great America Parkway/State Route 237 intersection include the addition of a third left-turn lane and second right-turn lane to the westbound approach to the intersection (SR 237 off-ramp), and would reduce the project and cumulative impact at this intersection to a less than significant level. These improvements are fully funded and will be constructed by the City of Santa Clara's City Place development, as a condition of approval. ~~The Director of Public Works shall determine the fair share based on the cost of the improvement at the time the payment is due and the project's contribution to the impact (typically based on a 25 percent contribution of traffic or more to the cumulative impact). The fair share amount shall be paid to the City of San José Public Works Depositors Fund.~~

Less than Significant Cumulative Impact with Mitigation

Page 16;
Section 2.2.2.5

2.2.2.5 Green Building Measures

Per the San José Green Building Policy (Council Policy 6-32), the proposed Commercial Office/R&D buildings would be required to obtain, at a minimum, LEED-Silver certification. In addition, the project would be required to implement a Transportation Demand Management (TDM) program to reduce vehicle trips generated by the project. In support of the TDM program, full build-out of the proposed development would include a total of ~~478~~ 222 bicycle parking spaces, 71 motorcycle spaces, and 284 fuel-efficient vehicle parking spaces.

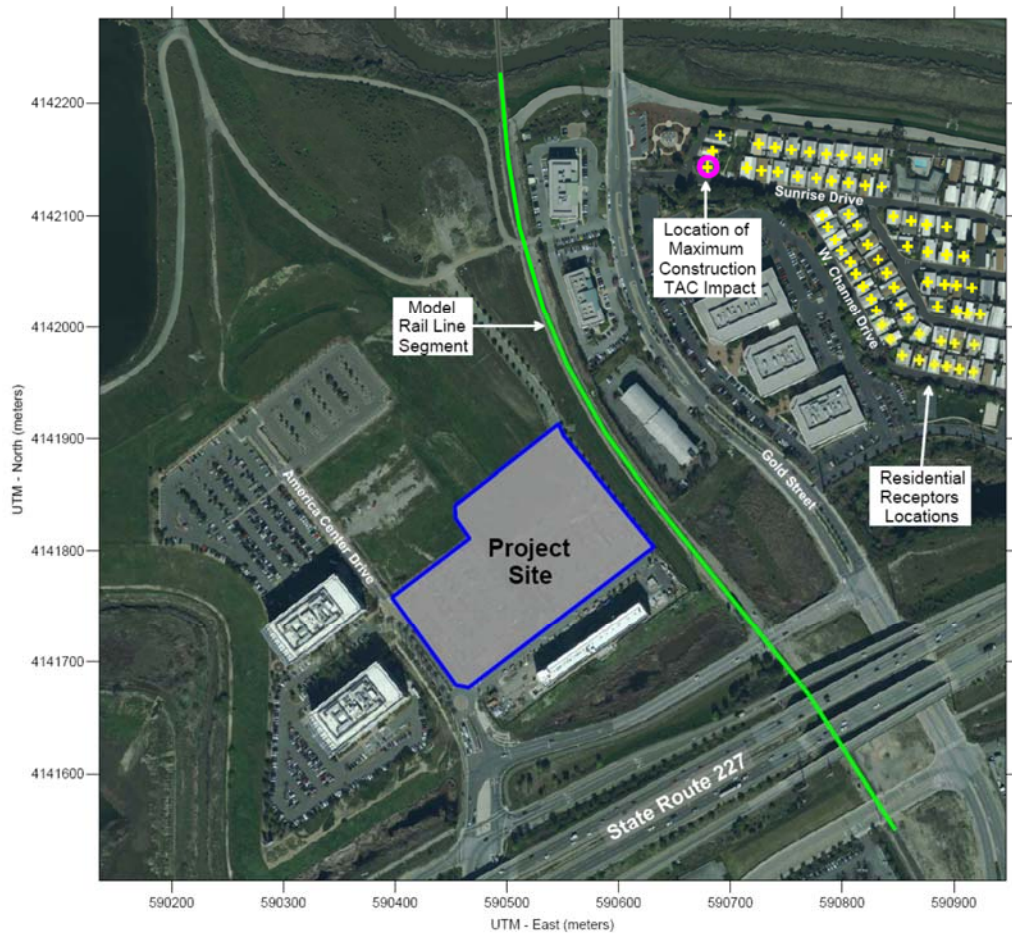
Page 45;
Section 3.2.2.5

Construction TAC Health Risks

Construction equipment and associated heavy-duty truck traffic generate diesel exhaust, which is a known TAC. Construction of Building 5 and the parking structure extension are anticipated to take approximately 20 months with approximately 6 months of work for site preparation and grading. The closest sensitive receptors are residences in the Summerset Mobile Home Estates are approximately 950 feet from the eastern edge of the project site and proposed parking structure. At this distance, during temporary construction, the project is not anticipated to result in significant construction-related TAC on sensitive receptors.

A construction period TAC impact analysis was prepared by Illingworth & Rodkin for the project to document quantitatively the conclusions in the DSEIR. The analysis is provided as Appendix F: Construction TAC Analysis. It should be noted that the two adjacent hotels are not considered sensitive receptors per the BAAQMD CEQA Air Quality Guidelines.

The primary community risk impact issues associated with construction emissions are increased cancer risk at nearby receptors and exposure to PM_{2.5}. The nearest sensitive receptors to the project site are residences along West Channel Drive at the Summerset Mobile Estates and the maximally exposed individual (MEI), is shown in the figure that follows. Emissions and dispersion modeling was conducted to predict the off-site concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated. It should be noted that this analysis represents a conservative estimate of impact as default construction assumptions from CalEEMod were used, as well as a conservative construction timeline.



As detailed within Appendix F and shown in Table 3.2-3a below, cancer risk from construction activities would be below the single-source significance threshold at the residence with the maximum impact. The project construction activities would also have annual PM_{2.5} concentrations below the single-source threshold. Non-cancer hazards would be below the significance thresholds. The combination of construction activities with exposure to other TAC sources in the area would have cumulative cancer risk and annual PM_{2.5} concentrations below the significance thresholds. Since cancer risk and annual PM_{2.5} concentrations from construction activities would be below the significance threshold, the impact would be less than significant.

Within the cumulative scenario, the nearest development that could be under construction at a similar timeframe as the proposed project would be the Residence Inn/Fairfield Inn and Suites America Center Court Project (File Number: PDC15-016), located immediately north of the America Center campus. Cumulative construction TAC impacts could occur; however, as shown in the following Table 3.2-3a, cumulative impacts for stationary and construction sources would not result in cumulative impacts at the maximally exposed individual (MEI); even assuming simultaneous construction activities, which would be unlikely. Further reducing the potential for an impact is the

fact that typical wind flow in the area (from the north to northwest) do not put sensitive receptors downwind of these construction activities. Therefore, there are low risk levels at the MEI. As a result, cumulative construction TAC impacts would be less than significant, as stated in the SEIR.

Table 3.2-3a: Cumulative Construction TAC Levels at MEI			
Source	Cancer Risk (per million)	PM_{2.5} Concentration (µg/m³)	Acute and Chronic Hazard Index
Proposed Project Construction	Infant = 1.8 Adult = 0.03	0.01	<0.01
Residence Inn/Fairfield Inn and Suites America Center Court Project Construction	Infant = 5.9 Adult = 0.1	0.1	0.01
SR 237 Link 336, at over 1,000 feet north	<10.2	<0.05	<0.01
Plant #17239 City of Santa Clara Generator at 5601 Lafayette Street, at over 1,000 feet	<1.4	<0.01	<0.01
Plant #17393 City of Santa Clara Generator at 5611 Lafayette Street, at over 1,000 feet	<0.5	0.00	0.00
Union Pacific Railroad, at 550 feet west	12.1	0.04	<0.01
Uncontrolled Total	Infant = 31.9	<0.21	<0.05
<i>BAAQMD Thresholds Single Source</i>	<i>10.0</i>	<i>0.3</i>	<i>1.0</i>
<i>BAAQMD Thresholds Combined Source</i>	<i>100.0</i>	<i>0.8</i>	<i>10.0</i>
<i>Significant without mitigation?</i>	<i>No</i>	<i>No</i>	<i>No</i>
<i>Significant with mitigation?</i>	<i>No</i>	<i>No</i>	<i>No</i>
Sources: Illingworth & Rodkin, Inc. <i>America Center Phase III Rezone Project Construction TAC Assessment</i> . August 18, 2017. (included in Appendix F) Illingworth & Rodkin, Inc. <i>Residence Inn/Fairfield Inn and Suites, America Center Project Construction TAC Assessment</i> . March 16, 2016. (included in Appendix F)			

The Top Golf project is over 1,000 feet from the project site, but could be constructed within the same timeframe. Consistent with industry-standard impact assessment practices and CEQA Air Quality Guidelines, however,

sources of TACs over 1,000 feet from the project site are not quantitatively analyzed and would not result in a CEQA impact. From a qualitative and non-CEQA standpoint, the Top Golf project (with incorporated mitigation) would have a very low risk level at the MEI, and that project's MEI is different than the proposed project MEI. As a result, TAC and cumulative TAC impacts would be less than significant. (Less Than Significant Impact)

Page 46,
Section 3.2.2.5

Mitigation Measure

The following updated mitigation measures identified as mitigation in the Legacy Terrace FEIR and the existing PD zoning would reduce the identified NO_x impact.

MM AIR-1.1: The project applicant shall implement the following measures:

- Provide physical pedestrian and bicycle improvements, such as sidewalk improvements, landscaping and bicycle parking which would encourage pedestrian and bicycle modes of travel;
- Connect site with regional bicycle/pedestrian trail system;
- Provide shuttle bus service to the Tasman/Lafayette light rail and Altamont Corridor Express rail system; and
- Implement other feasible TDM program measures; including a ride-matching program, guaranteed ride home programs, coordination with regional ride-sharing organizations, and a transit incentives program. The Project applicant shall submit a TDM plan to the satisfaction of the Transportation Manager of the Department of Public Works and the PBCE Supervising Environmental Planner prior to approval of a Planned Development Permit. The TDM Plan shall contain components or equivalent measures to result in a 10 percent reduction in projected weekday mobile emissions. The project will be required to submit an annual monitoring report to the Transportation Manager of the Department of Public Works and the PBCE Supervising Environmental Planner to measure the effectiveness of the TDM plan. Additional TDM measures may be required to meet the 10 percent reduction target if the TDM measures are not effective.

The air quality analysis in the original Legacy Terrace EIR estimated that a five to ten percent reduction in regional air emissions as a result of implementation

of the TDM and physical improvements measures in MM AIR-1.1 would be feasible site-wide. In comparison, the more recent 2010 California Air Pollution Control Officers Association's guidance for quantifying greenhouse gas mitigation measures⁷ estimates that implementation of a voluntary Commute Trip Reduction program could result in reductions in vehicle miles travelled (VMT), and associated vehicle emissions, from one to 6.2 percent. This level of reduction would reduce air emissions associated with the project, but not to a less than significant level.

MM AIR-1.1 was approved as part of PD zoning for the site evaluated in the Legacy Terrace Final Environmental Impact Report (FEIR) that was certified in 2000. A significant and unavoidable impact was identified for operational NOx emissions (as a result of vehicle emissions), despite the implementation of MM AIR-1.1. With the implementation of MM AIR-1.1, regional air quality impacts would be lessened and would not result in substantially greater impacts than the significant and unavoidable NOx impact previously identified in the Legacy Terrace FEIR. The project would still exceed the BAAQMD CEQA threshold of 54 pounds per day thus, the project would still exceed emissions thresholds for NOx. (Significant Unavoidable Impact)

Page 65;
Section 3.3.2.7

3.3.2.7

Impacts on Habitat Conservation Plan/Natural Community Conservation Plan

The Habitat Plan went into effect in October 2013, subsequent to preparation of the Legacy Terrace FEIR. America Center (including the Building 5 and parking garage expansion area) is located outside the primary study area of the Habitat Plan. The project site is within the Expanded Study Area for Burrowing Owl Conservation, an area of the Habitat Plan limited only to conservation actions for western burrowing owl. An existing Open Space Preserve area was established as a part of the approval of the Legacy Terrace FEIR and a burrowing owl mitigation and management program is being implemented.

The General Plan FPEIR discussed the impacts of atmospheric nitrogen deposition on serpentine habitats. This analysis determined development allowed under the proposed General Plan would result in emissions of nitrogen compounds that could affect the species composition and viability of sensitive serpentine grasslands. To address nitrogen deposition impacts from new development within the City, development projects will contribute to the Habitat Plan to offset new nitrogen deposition impacts from vehicular emissions. Due to the project's contribution to citywide cumulative nitrogen deposition, the project will pay into the Habitat Plan nitrogen deposition fee

⁷ Source: California Air Pollution Officers Association. Quantifying Greenhouse Gas Emissions Mitigation Measures. August 2010. (Measure T-1), p. 66.

program. Payment of this fee, as outlined in the standard permit condition below, will contribute to the impact reduction for indirect impacts to sensitive serpentine habitats as determined in the General Plan FPEIR.

Standard Permit Conditions: Consistent with the General Plan FPEIR analysis on indirect impacts to sensitive serpentine habitats, the project will contribute to the Habitat Plan nitrogen deposition fee program. The project applicant shall submit the Santa Clara Valley Habitat Plan Application for Nitrogen Deposition-Only Projects and the payment of the nitrogen deposition fees (based on a fee rate per new daily vehicle trip) to the Supervising Environmental Planner of the Department of Planning, Building, and Code Enforcement for review and approval prior to issuance of any grading permit.

Thus, the proposed project is not anticipated to conflict with provisions of the Habitat Plan. **(Less than Significant Impact)**

Page 68;
Section 3.4.1.2

3.4.1.2 Existing Setting

Tribal Cultural Resources

On September 25, 2014, Governor Edmund G. Brown signed Assembly Bill 52 (AB 52), creating a new category of environmental resources (tribal cultural resources), which must be considered under CEQA. A tribal cultural resource can be a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.

The legislation imposes new requirements for consultation regarding projects that may affect a tribal cultural resource, includes a broad definition of what may be considered to be a tribal cultural resource, and includes a list of recommended mitigation measures. AB 52 also requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified of projects proposed within that area. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or when it is concluded that mutual agreement cannot be reached.

Page 69;
Section 3.4.2.1

3.4.2.1 Thresholds of Significance

For the purposes of this EIR, a cultural resources impact is considered significant if the project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5;

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of dedicated cemeteries;
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or
 - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying this criteria, the significance of the resource to a California Native American tribe shall be considered.

Page 70;
Section 3.4.2.4

3.4.2.4 *Archaeological Resources Impacts*

The construction of the proposed project would require the demolition of the existing surface parking lot and landscaping, some limited grading, excavation and driving the foundation piles, and installation of underground utilities. The project structures would be constructed at a grade of approximately 30 feet above mean amsl for the parking garage expansion to 50 feet amsl for Building 5. Adjacent grades surrounding the site at adjacent roadways are at approximately 15 feet amsl. As shown in Figure 2.2-3, a small portion of the parking garage extension would be located in an area that was not occupied by the Highway 237 Landfill. This area is, however, located on top of non-native fill soils that compose the landfill cap. The building pads would be located on surface parking lot areas over the landfill cap that were previously graded to the approximate elevations necessary for the proposed structures. With the exception of driving foundation piles, all of this work would take place within landfill or landfill cap materials.

Page 70;
Section 3.4.1.6

3.4.2.6 *Tribal Cultural Resources*

The site is a former landfill site, with landfill materials covering the original landscape. A sacred lands request was sent to the Native American Heritage Commission (NAHC) by David J. Powers & Associates, Inc. on July 10, 2017. A response was received on August 22, 2017 (refer to Attachment G). No

known sacred lands have been identified by the NAHC to be located in the project vicinity. No tribes have requested notice under AB 52 of projects within the geographic area of the proposed project and no tribal cultural resources have been identified by geographically related tribes at the project site, the site of a former landfill. For these reasons, there is no evidence that there would be an impact to tribal cultural resources identified as having cultural value to a Native American tribe. (Less than Significant Impact)

Page 77;
Section 3.5.2.3

Transportation

The proposed project would be required to provide ~~178~~ 222 bicycle parking spaces, per the City of San José Municipal Code; showers for employees, which would incentivize the use of alternative methods of transportation to and from the site. The Legacy Terrace FEIR required that the project implement a transportation demand management (TDM) program to reduce single-occupancy trips. (Less than Significant Impact)

Page 98;
Section 3.7.2.3

Per Criteria 1, the proposed project is consistent with the General Plan designation for the site in the Land Use/Transportation Diagram of Combined Industrial/Commercial; therefore, site emissions were incorporated into the City's GHG Reduction Strategy. Per Criteria 2 and 3, the project proposes a high level of commercial office density (FAR of 0.37), which would facilitate transit shuttle ridership. New structures would be constructed in compliance with Municipal Code Chapter 17.84 (Green Building Regulations for Private Development) and CALGreen, and would be LEED-Silver certified (or equivalent). Bicycle parking would be provided consistent with San José requirements (the project will provide the required ~~178~~ 222 bicycle parking spaces).

Top of Page
100; Section
3.7.2.3

Methane from Existing Landfill

Regarding existing sources of methane at the project site, landfill gas is a byproduct of decomposition of organic material in landfills as bacteria decompose the waste under anaerobic (without oxygen) conditions. Landfill gas is composed of approximately 50 percent methane, 50 percent CO₂, and a small amount of non-methane organic compounds. Methane is a potent greenhouse gas that is 28 to 36 times more effective than CO₂ at trapping heat in the atmosphere.⁸ With regard to methane release, it should be noted that the closed Highway 237 Landfill (where the project is located) contains waste materials composed of approximately 44 percent concrete and wood, 43 percent

⁸ United States Environmental Protection Agency. "Basic Information about Landfill Gas". Site accessed June 21, 2017. <https://www.epa.gov/lmop/basic-information-about-landfill-gas>.

soil, and 13 percent refuse; therefore, the landfill produces a far lower amount of methane than a tradition municipal landfill containing primarily organic municipal waste.^{9,10} Landfill gas generation for 2017 was estimated at 11 to 16 standard cubic feet per minute, and it can be assumed that half of that was methane.¹¹ For comparison purposes, the closed Santa Clara All Purpose Landfill (a former municipal landfill approximately 0.2 mile south of the site) produces over 400 cubic feet of landfill gas per minute.¹²

This landfill gas would be produced by the bacteria within the landfill and would be vented whether or not the project was constructed at the site. The project would not cause an increase in methane production at the site; therefore, it would not result in a new GHG-related impact with regard to methane production.

During construction, holes for the support piles would be predrilled and a bentonite grout cap would be inserted at the bottom of the hole. Corrugated metal pipe (CMP) would then be inserted into the opening and a pea gravel and concrete slurry would fill in the space between the landfill material and CMP. After the piles are installed within the CMP, the spaced between the CMP and the pile is filled with pea gravel, and an additional cap consisting of hydrated bentonite pellets covered by a five-foot-thick reinforced concrete pile cap. The initial CMP, bentonite grout, and concrete slurry provide the primary barrier to prevent the movement of landfill gases, which effectively seals the penetration through the existing landfill cover. The addition of bentonite pellets and concrete pile caps and grade beams act as a supplemental barrier to prevent the migration of landfill gases. An illustration of the pile construction and fill is shown in Figure 4.7-1: Pile Construction Detail.

Based on a review of construction field reports for Phase I and Phase II of America Center, drilling the hole for each pile takes approximately one to two hours and installation of the bentonite grout cap, placement of the CMP, and filling of the space between the landfill material and CMP with pea gravel and concrete slurry takes about 15 minutes. The installation of the foundation piles and the construction of the remaining foundation elements, including the pile caps and grade beams, are performed in accordance with the contractor's construction schedule but it can be assumed that construction of Building 5 and

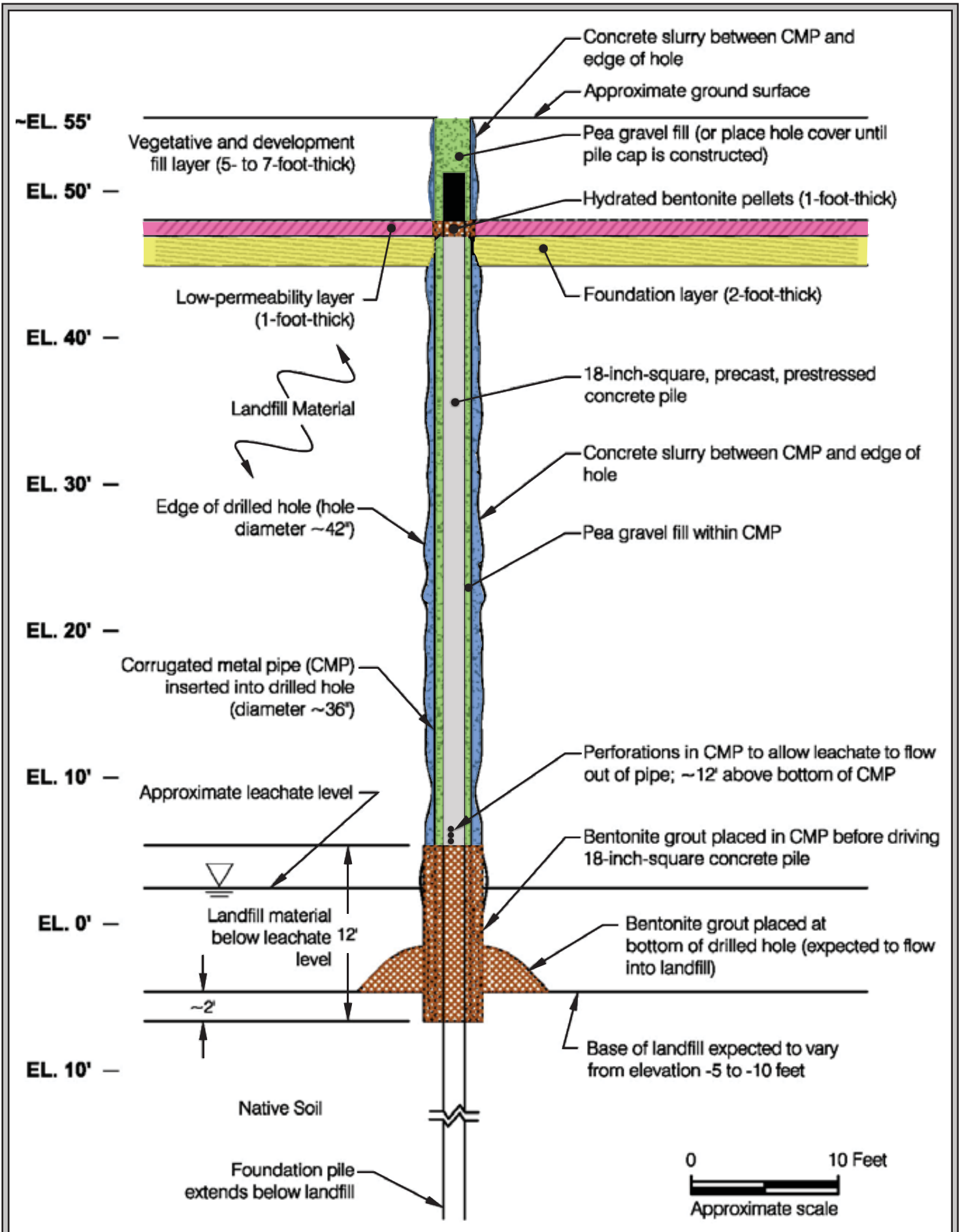
⁹ Postclosure Land Use Proposal Highway 237 Disposal Site prepared by EMCON dated July 28, 1999 and revised October 1, 1999

¹⁰ Wheeler, Mark C. with Crawford Consulting, Inc. and Iwassa, Dean with Haley & Aldrich. Email correspondence with Ashton, Amie with David J. Powers & Associates, Inc. August 22, 2017.

¹¹ Wheeler, Mark C. with Crawford Consulting, Inc. Email correspondence with Ashton, Amie with David J. Powers, Inc. August 9, 2017.

¹² Source: Waste Advantage. *Santa Clara Converts Low Concentration Landfill Gas to Clean Energy*. Site accessed August 21, 2017. http://www.ameresco.com/wp-content/uploads/2017/03/lfg_management_case_study.pdf.

the parking garage expansion would follow a similar construction timeframe. Given that the overall rate of landfill gas production at the landfill is relatively low (because of the large inorganic material component) and the fact that the holes would only be open for up to two hours at a time, large amounts of methane are not anticipated to escape during construction; therefore, no significant impacts associated with implementation of the proposed project are anticipated to occur.



PILE CONSTRUCTION DETAIL

FIGURE 3.7-1

Methane emissions from former landfills in San José are included in the City's Greenhouse Gas Inventory. Measures in the City's Greenhouse Gas Reduction Strategy focus on reducing waste placed in landfills and diverting materials for recycling to limit the potential for future methane emissions. As discussed previously, landfill gas would be produced by the bacteria within the landfill and would vent whether or not the project was constructed at the site. Construction activities would not cause an increase in methane production at the site; therefore, it would not result in a GHG-related impact that would conflict with the City's Greenhouse Gas Reduction Strategy or require mitigation. (Less than Significant Impact)

Page 155-157;
Table 3.13-2

Revise the Average Delay in seconds for *Intersection 8. Great America Parkway/Tasman Drive** under Background Conditions during the PM peak hour as follows in the revised excerpt from Table 3.13-2

Table 3.13-2: Existing and Background Plus Project Intersection Levels of Service (table excerpt)

Intersection	Jurisdiction	Peak Hour	Existing		Existing Plus Project		Background		Background Plus Project			
			Average Delay ¹ (seconds)	LOS ²	Average Delay ¹ (seconds)	LOS ²	Average Delay ¹ (seconds)	LOS ²	Average Delay ¹ (seconds)	LOS ²	Increase in Crit. Delay ³ (seconds)	Increase in Crit. V/C ⁴
8. Great America Parkway/Tasman Drive*	San José	AM	26.6	C	26.8	C	35.5	D	35.8	D	0.5	0.007
		PM	28.7	C	28.7	C	73.6	E	76.5	E	2.0	0.005

¹ Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 HCM, with adjusted saturation flow rates to reflect Santa Clara County Conditions. Total control delay for the worst movement is presented for side-street stop-controlled intersections. Delay for the worst approach is reported for unsignalized intersections.

² LOS calculations conducted using the TRAFFIX level of service analysis software package.

³ Change in critical movement delay between Existing and Existing plus Project Conditions.

⁴ Change in the critical V/C between Existing and Existing plus Project Conditions.

* Denotes a VTA CMP intersection.

Bold and shading denote a significant impact.

Source: Hexagon Transportation Consultants. *America Center Phase III Building 5 Development Traffic Impact Analysis*. March 28, 2017.

Page 158;
Section 3.13.2.3

MM TRA-1.1: Prior to Public Works Clearance, the project applicant shall fully design, construct, and pay a fair share amount towards improvements (including full cost for design, construction, etc.) to the Lafayette Street and Gold Street Connector intersection. Improvements would include with the addition of a second northbound left-turn lane in a vacant area between the Gold Street Connector and SR 237. The improvement shall require widening of the Gold Street Connector and shifting of travel lanes to the south by approximately 12 feet to accommodate a second receiving lane for the second northbound left-turn lane. The roadway widening would also require the relocation of the Highway 237 Bikeway, south of the Gold Street Connector. The Director of Public Works shall determine the fair share based on the cost of the improvement at the time the payment is due and the project's contribution to the impact (an estimated 5 percent). The fair share amount shall be paid to the City of San José Public Works Depositors Fund.

During construction of the intersection improvement, a trail detour shall be provided and/or the Highway 237 Bikeway relocated prior to construction of the road widening. **(Less than Significant Impact with Mitigation Incorporated)**

There is currently approximately 12 feet of right-of-way between the edge of the curb along the Gold Street Connector and the Highway 237 Bikeway, and an additional 100 feet from the bikeway to Highway 237; thus, there is adequate space on the south side of the Gold Street Connector to widen the road. It is not anticipated that the improvement would result in a physical reduction in the capacity and/or a substantial deterioration in the quality (aesthetic or otherwise) of any other planned or existing transportation facilities given the space available to make the improvements. As part of MM TRA-1.1, a trail detour is required be provided and/or the Highway 237 Bikeway relocated prior to widening of the Gold Street Connector. This would further decrease the potential for delays or inconvenience to cyclists and pedestrians during construction and any impact would be less than significant. The City of Santa Clara has agreed to construct the mitigation as a Phase I improvement with their development with a 5 percent contribution toward their adopted program.

Page 162;
Section 3.13.2.4

It is unlikely that the proposed project will result in measureable increase of pedestrians given that the nearest commercial uses and transit services are located more than one mile from the project site. Pedestrian traffic from the project site, however, could use the Bay Trail, which runs along the north side of SR 237. Access to the trail is provided at the SR 237 and Great America Parkway westbound ramps intersection. The intersection provides controlled crosswalks across Great America Parkway on its north approach and across the SR 237 westbound on-ramp. Use of the trail and crosswalks at the SR 237 and Great America westbound ramps intersection by pedestrians originating from

the proposed Building 5 will require crossing America Center Drive. Because this indirect connection to the Bay Trail is provided, the project would be consistent with General Plan Policy DC-3.3 and impacts as a result of policy conflict would be less than significant.

Construction Impacts

Temporary impacts on pedestrians and bicyclists could result from the implementation of MM TRA-1.1; however, during construction of the intersection improvement, a trail detour will be provided and/or the Highway 237 Bikeway would be relocated prior to widening of the road to ensure impacts would be less than significant. The project would also be required to submit a Traffic Control Plan, consistent with City requirements, to accommodate pedestrian and bicycle access and safety during construction. The construction work and the public traveling through the work zone in vehicles, bicycles, or as pedestrians must be given equal consideration when developing the project Traffic Control Plan (as required by the City of San José). (Less than Significant Impact)

Page 163;
Section 3.13.2.5

Signal Warrant Analysis

Peak-hour traffic signal warrant checks indicate that the traffic volumes at the Lafayette Street and Great America Way intersection during the PM peak hour are projected to meet thresholds that warrant signalization under background and background with project conditions. Traffic volumes indicate that the signalization of the Lafayette Street and Great America Way intersection is not necessary until the construction of other approved development in the project area (including the City Place development) is completed. The installation of a signal at the intersection was also identified to be warranted with the City Place development. The proposed project will result in a total of 58 PM peak hour trips through the intersection. Because signalization of an intersection is dependent upon many factors and may be required regardless of the proposed project, the City of Santa Clara will decide when and if a signal should be installed and provide funding for its construction. ~~If the City of Santa Clara determine a traffic signal will be constructed prior to issuance of building permits for the proposed project, it may be required to contribute a fair share towards the future traffic signal.~~

Page 164;
Section 3.13.2.5

The City should work cooperatively with VTA and Caltrans to implement measures to minimize the effects of vehicular queues at freeway ramps, such as ~~shutting off the ramp meters~~ using queue detector loops to cause the ramp meters to operate on-demand when vehicular queues extend back onto the arterials.

Page 164;
Section 3.13.2.5

The City's Bicycle Parking requirements require one bicycle parking space per 4,000 square feet of office floor area. America Center is required to provide ~~285~~ 222 bicycle parking spaces to meet the city standards and the requirements of General Plan Policy TR-1.1, TR-9.1, and CD-3.3, as well as Alviso Master Plan Bicycle Policy 3.; ~~however,~~ The proposed PD Permit for the project includes ~~only 178~~ 222 bicycle parking spaces.

Page 176;
Section 4.1.5.2

The proposed project could be constructed at the same time as all the projects in Table 4.1-1 (~~except for Top Golf~~); thus, there is the potential for cumulative construction air quality impacts. However, the cumulative projects are scattered throughout the City of San José and neighboring City of Santa Clara and their schedules for active ground-disturbing construction would likely differ, which lessens the potential for cumulative impacts because construction-related air-quality impacts are generally localized.

~~Only the Residence Inn, South Bay Salt Pond Restoration Project, and Bay Trail Reach 9 would be constructed within a close enough proximity that there is a potential for a cumulative construction air quality impact to sensitive receptors as a result of TAC emissions from heavy equipment. Based upon a Construction TAC Analysis prepared by Illingworth & Rodkin, Inc. (included as Appendix F), the project would not contribute to a significant cumulative health risk due to construction emissions of TACs or PM_{2.5} by heavy equipment (refer to Table 3.2-3a: Combined Construction Cancer Risks, PM_{2.5} Concentrations, and Hazard Index). However,~~†The proposed project would implement MM AQ-1.1 and cumulative projects in the vicinity would also be required to implement similar measures to reduce air quality impacts. As a result, the project, along with all the other cumulative projects, would not result in a significant short-term cumulative construction air quality impact.

Page 176;
Section 4.1.5.3

4.1.5.3 Biological Resources

The proposed project would not impact sensitive habitat, wetlands, or riparian areas; therefore, construction and operation of the project would not contribute to a cumulative impact for those resources. There is a potential for nesting and migratory birds or burrowing owls to occur in the proposed project area; however, the proposed project and other developments in the cumulative scenario would be required to implement conditions of approval or mitigation measures that would avoid nesting bird and burrowing owl impacts, consistent with the provisions of state and federal law, and the Habitat Plan (where applicable). Projects in San José would also be subject to Council Policy 6-34, requiring bird-safe design measures be incorporated into projects. These conditions, measures, and policies would reduce each project's contribution to cumulative impacts to nesting birds and burrowing owls to a less than significant level. For these reasons, the proposed project, would not result in significant cumulative impacts to nesting birds or burrowing owls.

The project would contribute to the cumulative nitrogen deposition impact as outlined in the General Plan FPEIR. To address nitrogen deposition impacts from new development within the City, development projects will contribute to the Habitat Plan to offset new nitrogen deposition impacts from vehicular emissions. These conditions would reduce each project's contribution to cumulative impacts to sensitive serpentine habitats to a less than significant level.

The proposed project would remove 87 on-site trees, which could result in a cumulative impact as a result of the removal of trees and tree canopy in the project area. However, other projects in Table 4.1-1 are located far enough from the proposed project that cumulative impacts to the coverage of the urban tree canopy in the project area would not occur. Thus, the potential for the project to contribute to a significant loss of trees in the area is unlikely due to separation and distance and because those trees would be protected by their corresponding jurisdictions and any removal would require review and tree replacement. **(Less than Significant Cumulative Impact)**

Page 181,
Section 4.1.5.13

Cumulative Intersection Impacts

Intersections level of service results under cumulative conditions are summarized in the following Table 4.1-2. Based on the analysis, two City of San José intersections would be cumulatively impacted during the AM peak hour.

Impact TRA(C)-1: The proposed project would result in a cumulatively considerable contribution to traffic impacts at two San José intersections (Lafayette Street and Gold Street Connector and Great America Parkway and Eastbound SR 237) based on cumulative impact criteria. **(Significant Cumulative Impact)**

Mitigation Measures

MM TRA (C)-1.1: Lafayette Street and Gold Street Connector - MM TRA-1.1, requiring improvements at the intersection of Lafayette Street and the Gold Street Connector (e.g., addition of a second northbound left-turn lane), would reduce the project and cumulative impact at this intersection to a less than significant level. **(Less than Significant Cumulative Impact with Mitigation Incorporated)**

MM TRA (C)-1.2: Great America Parkway and Eastbound SR 237 - ~~Prior to Public Works Clearance, the project applicant shall pay a fair share amount towards improvements to the Great America Parkway/State Route 237 intersection.~~ Improvements to the Great America Parkway/State Route 237

intersection include the addition of a third left-turn lane and second right-turn lane to the westbound approach to the intersection (SR 237 off-ramp), and would reduce the project and cumulative impact at this intersection to a less than significant level. These improvements are fully funded and will be constructed by the City of Santa Clara's City Place development, as a condition of approval. The Director of Public Works shall determine the fair share based on the cost of the improvement at the time the payment is due and the project's contribution to the impact (typically based on a 25 percent contribution of traffic or more to the cumulative impact). The fair share amount shall be paid to the City of San José Public Works Depositors Fund. (Less than Significant Cumulative Impact with Mitigation)

A determination for fair share is based on the cost of the improvement at the time the payment is due, prior to issuance of building permits, and the project's contribution to the impact. The City of San José determines cumulatively considerable based on 25 percent contribution of traffic or more to the cumulative impact.

Page 195,
Section 9
(additional
references)

California Air Pollution Officers Association. *Quantifying Greenhouse Gas Emissions Mitigation Measures*. August 2010. <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

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Wheeler, Mark C. with Crawford Consulting, Inc. Email correspondence with Ashton, Amie with David J. Powers, Inc. August 9, 2017.

Appendix E:
Transportation
Impact Analysis,
Page x

Bicycle Parking

The City's Bicycle Parking requirements require one bicycle parking space per 4,000 square feet of office floor area. The proposed project at full buildout is required to provide ~~274~~222 bicycle parking spaces to meet the city standards. It is recommended that the project provide bicycle parking that exceeds the City requirements to encourage the use of non-auto modes of travel and minimize the demand for on-site parking described above.

Appendix E:
Transportation
Impact Analysis,
Page 26

Background Transportation Network

It is assumed in this analysis that the transportation network under background conditions would be the same as the existing transportation network with the exception of the following improvements. The improvements were identified as mitigation measures to be completed by the City of Santa Clara Capital Improvement Program (CIP) or other approved development projects in the study area.

Great America Parkway and Mission College Boulevard – Addition of a third westbound left-turn lane, fourth southbound through lane, third northbound left-turn lane, and separate westbound right-turn lane. (CIP)

Great America Parkway and Tasman Drive – Addition of a second northbound left-turn lane (~~Yahoo!~~) (CityPlace)

Great America Parkway and Old Glory Lane – Addition of a separate southbound right-turn lane (~~CityPlace~~) (Yahoo!)

Great America Parkway and Patrick Henry Drive – Addition of a second northbound left-turn lane and eastbound free-right-turn lane. The eastbound right-turn lane includes the addition of a fourth southbound lane on Great America Parkway between Patrick Henry Drive and Mission College Boulevard. (Yahoo!)

Appendix E:
Transportation
Impact Analysis,
Page 51

The City should work cooperatively with VTA and Caltrans to implement measures to minimize the effects of vehicular queues at freeway ramps, such as ~~shutting off the ramp meters~~ using queue detector loops to cause the ramp meters to operate on-demand when vehicular queues extend back onto the arterials.

Bicycle Parking

The City's Bicycle Parking requirements require one bicycle parking space per 4,000 square feet of office floor area. The proposed project is required to provide ~~274~~ 222 bicycle parking spaces to meet the city standards. It is recommended that the project provide bicycle parking that exceeds the City requirements to encourage the use of non-auto modes of travel and minimize the demand for on-site parking described above.

AMENDED APPENDIX B

America Center
Santa Clara County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,090.00	1000sqft	30.00	1,090,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Acreage of site
- Vehicle Trips - Trip rate based on ITE
- Consumer Products -
- Mobile Land Use Mitigation -
- Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00
tblLandUse	LotAcreage	25.02	30.00
tblProjectCharacteristics	OperationalYear	2014	2018

2.0 Emissions Summary

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	26.4511	1.0600e-003	0.1128	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2386	0.2386	6.5000e-004		0.2523
Energy	0.5546	5.0416	4.2349	0.0303		0.3832	0.3832		0.3832	0.3832		6,049.8953	6,049.8953	0.1160	0.1109	6,086.7139
Mobile	36.3009	72.1592	342.8218	0.8578	60.5524	1.0363	61.5887	16.1433	0.9549	17.0983		69,996.6042	69,996.6042	2.5905		70,051.0045
Total	63.3066	77.2019	347.1696	0.8880	60.5524	1.4199	61.9723	16.1433	1.3385	17.4819		76,046.7380	76,046.7380	2.7071	0.1109	76,137.9707

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	26.4511	1.0600e-003	0.1128	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2386	0.2386	6.5000e-004		0.2523
Energy	0.5546	5.0416	4.2349	0.0303		0.3832	0.3832		0.3832	0.3832		6,049.8953	6,049.8953	0.1160	0.1109	6,086.7139
Mobile	36.3009	72.1592	342.8218	0.8578	60.5524	1.0363	61.5887	16.1433	0.9549	17.0983		69,996.6042	69,996.6042	2.5905		70,051.0045
Total	63.3066	77.2019	347.1696	0.8880	60.5524	1.4199	61.9723	16.1433	1.3385	17.4819		76,046.7380	76,046.7380	2.7071	0.1109	76,137.9707

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2093	0.2400	2.8241	7.9300e-003	0.6601	4.6100e-003	0.6647	0.1751	4.2700e-003	0.1794		593.7685	593.7685	0.0258		594.3106
Total	0.2093	0.2400	2.8241	7.9300e-003	0.6601	4.6100e-003	0.6647	0.1751	4.2700e-003	0.1794		593.7685	593.7685	0.0258		594.3106

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	36.3009	72.1592	342.8218	0.8578	60.5524	1.0363	61.5887	16.1433	0.9549	17.0983		69,996.60 42	69,996.60 42	2.5905		70,051.00 45
Unmitigated	36.3009	72.1592	342.8218	0.8578	60.5524	1.0363	61.5887	16.1433	0.9549	17.0983		69,996.60 42	69,996.60 42	2.5905		70,051.00 45

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	12,000.90	2,583.30	1068.20	21,731,729	21,731,729
Total	12,000.90	2,583.30	1,068.20	21,731,729	21,731,729

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.551461	0.058468	0.185554	0.123211	0.029507	0.004440	0.012712	0.023230	0.001775	0.001270	0.006089	0.000516	0.001766

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
NaturalGas Mitigated	0.5546	5.0416	4.2349	0.0303		0.3832	0.3832		0.3832	0.3832		6,049.8953	6,049.8953	0.1160	0.1109	6,086.7139
NaturalGas Unmitigated	0.5546	5.0416	4.2349	0.0303		0.3832	0.3832		0.3832	0.3832		6,049.8953	6,049.8953	0.1160	0.1109	6,086.7139

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	51424.1	0.5546	5.0416	4.2349	0.0303		0.3832	0.3832		0.3832	0.3832		6,049.8953	6,049.8953	0.1160	0.1109	6,086.7139
Total		0.5546	5.0416	4.2349	0.0303		0.3832	0.3832		0.3832	0.3832		6,049.8953	6,049.8953	0.1160	0.1109	6,086.7139

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	51.4241	0.5546	5.0416	4.2349	0.0303		0.3832	0.3832		0.3832	0.3832		6,049.8953	6,049.8953	0.1160	0.1109	6,086.7139
Total		0.5546	5.0416	4.2349	0.0303		0.3832	0.3832		0.3832	0.3832		6,049.8953	6,049.8953	0.1160	0.1109	6,086.7139

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	26.4511	1.0600e-003	0.1128	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2386	0.2386	6.5000e-004		0.2523
Unmitigated	26.4511	1.0600e-003	0.1128	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2386	0.2386	6.5000e-004		0.2523

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	23.3260					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0108	1.0600e-003	0.1128	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2386	0.2386	6.5000e-004		0.2523
Architectural Coating	3.1143					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	26.4511	1.0600e-003	0.1128	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2386	0.2386	6.5000e-004		0.2523

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	23.3260					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0108	1.0600e-003	0.1128	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2386	0.2386	6.5000e-004		0.2523
Architectural Coating	3.1143					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	26.4511	1.0600e-003	0.1128	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2386	0.2386	6.5000e-004		0.2523

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Aloft
Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.00	1000sqft	1.00	81,350.00	380

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - lot

Construction Phase -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00
tblConstructionPhase	PhaseEndDate	1/13/2017	10/16/2015
tblConstructionPhase	PhaseEndDate	10/19/2015	1/16/2017
tblConstructionPhase	PhaseStartDate	10/17/2015	1/14/2017
tblLandUse	LandUseSquareFeet	0.00	81,350.00
tblLandUse	LotAcreage	0.00	1.00
tblLandUse	Population	0.00	380.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3601	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	7.5500e-003	0.0687	0.0577	4.1000e-004		5.2200e-003	5.2200e-003		5.2200e-003	5.2200e-003	0.0000	541.2045	541.2045	0.0225	5.7300e-003	543.4551
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3677	0.0687	0.0577	4.1000e-004	0.0000	5.2200e-003	5.2200e-003	0.0000	5.2200e-003	5.2200e-003	0.0000	541.2045	541.2045	0.0225	5.7300e-003	543.4551

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3601	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	7.5500e-003	0.0687	0.0577	4.1000e-004		5.2200e-003	5.2200e-003		5.2200e-003	5.2200e-003	0.0000	541.2045	541.2045	0.0225	5.7300e-003	543.4551
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3677	0.0687	0.0577	4.1000e-004	0.0000	5.2200e-003	5.2200e-003	0.0000	5.2200e-003	5.2200e-003	0.0000	541.2045	541.2045	0.0225	5.7300e-003	543.4551

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	10/16/2015	5	10	
2	Site Preparation	Site Preparation	1/14/2017	1/16/2017	5	1	
3	Grading	Grading	1/17/2017	1/18/2017	5	2	
4	Building Construction	Building Construction	1/19/2017	6/7/2017	5	100	
5	Paving	Paving	6/8/2017	6/14/2017	5	5	
6	Architectural Coating	Architectural Coating	6/15/2017	6/21/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0.75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 122,025; Non-Residential Outdoor: 40,675 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	6.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	26.00	13.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.9000e-003	0.0000	2.9000e-003	1.4800e-003	0.0000	1.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1600e-003	0.0121	7.9600e-003	1.0000e-005		6.5000e-004	6.5000e-004		6.0000e-004	6.0000e-004	0.0000	0.7948	0.7948	2.4000e-004	0.0000	0.7999
Total	1.1600e-003	0.0121	7.9600e-003	1.0000e-005	2.9000e-003	6.5000e-004	3.5500e-003	1.4800e-003	6.0000e-004	2.0800e-003	0.0000	0.7948	0.7948	2.4000e-004	0.0000	0.7999

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	2.0000e-005	1.8000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0309	0.0309	0.0000	0.0000	0.0309
Total	1.0000e-005	2.0000e-005	1.8000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0309	0.0309	0.0000	0.0000	0.0309

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.9000e-003	0.0000	2.9000e-003	1.4800e-003	0.0000	1.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1600e-003	0.0121	7.9600e-003	1.0000e-005		6.5000e-004	6.5000e-004		6.0000e-004	6.0000e-004	0.0000	0.7948	0.7948	2.4000e-004	0.0000	0.7999
Total	1.1600e-003	0.0121	7.9600e-003	1.0000e-005	2.9000e-003	6.5000e-004	3.5500e-003	1.4800e-003	6.0000e-004	2.0800e-003	0.0000	0.7948	0.7948	2.4000e-004	0.0000	0.7999

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	2.0000e-005	1.8000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0309	0.0309	0.0000	0.0000	0.0309
Total	1.0000e-005	2.0000e-005	1.8000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0309	0.0309	0.0000	0.0000	0.0309

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.9100e-003	0.0000	4.9100e-003	2.5300e-003	0.0000	2.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8800e-003	0.0198	0.0132	1.0000e-005		1.0700e-003	1.0700e-003		9.8000e-004	9.8000e-004	0.0000	1.3056	1.3056	4.0000e-004	0.0000	1.3140
Total	1.8800e-003	0.0198	0.0132	1.0000e-005	4.9100e-003	1.0700e-003	5.9800e-003	2.5300e-003	9.8000e-004	3.5100e-003	0.0000	1.3056	1.3056	4.0000e-004	0.0000	1.3140

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	3.6000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0617	0.0617	0.0000	0.0000	0.0618
Total	3.0000e-005	4.0000e-005	3.6000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0617	0.0617	0.0000	0.0000	0.0618

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.9100e-003	0.0000	4.9100e-003	2.5300e-003	0.0000	2.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8800e-003	0.0198	0.0132	1.0000e-005		1.0700e-003	1.0700e-003		9.8000e-004	9.8000e-004	0.0000	1.3056	1.3056	4.0000e-004	0.0000	1.3140
Total	1.8800e-003	0.0198	0.0132	1.0000e-005	4.9100e-003	1.0700e-003	5.9800e-003	2.5300e-003	9.8000e-004	3.5100e-003	0.0000	1.3056	1.3056	4.0000e-004	0.0000	1.3140

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	3.6000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0617	0.0617	0.0000	0.0000	0.0618
Total	3.0000e-005	4.0000e-005	3.6000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0617	0.0617	0.0000	0.0000	0.0618

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1477	0.9554	0.7156	1.1000e-003		0.0613	0.0613		0.0591	0.0591	0.0000	92.2737	92.2737	0.0194	0.0000	92.6803
Total	0.1477	0.9554	0.7156	1.1000e-003		0.0613	0.0613		0.0591	0.0591	0.0000	92.2737	92.2737	0.0194	0.0000	92.6803

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7600e-003	0.0581	0.0810	1.5000e-004	4.2000e-003	8.4000e-004	5.0400e-003	1.2000e-003	7.7000e-004	1.9800e-003	0.0000	13.8155	13.8155	1.1000e-004	0.0000	13.8177	
Worker	4.3300e-003	6.1000e-003	0.0591	1.4000e-004	0.0118	9.0000e-005	0.0119	3.1500e-003	8.0000e-005	3.2300e-003	0.0000	10.0304	10.0304	5.1000e-004	0.0000	10.0411	
Total	0.0111	0.0642	0.1401	2.9000e-004	0.0160	9.3000e-004	0.0170	4.3500e-003	8.5000e-004	5.2100e-003	0.0000	23.8458	23.8458	6.2000e-004	0.0000	23.8588	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1477	0.9554	0.7156	1.1000e-003		0.0613	0.0613		0.0591	0.0591	0.0000	92.2736	92.2736	0.0194	0.0000	92.6801
Total	0.1477	0.9554	0.7156	1.1000e-003		0.0613	0.0613		0.0591	0.0591	0.0000	92.2736	92.2736	0.0194	0.0000	92.6801

3.5 Building Construction - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7600e-003	0.0581	0.0810	1.5000e-004	4.2000e-003	8.4000e-004	5.0400e-003	1.2000e-003	7.7000e-004	1.9800e-003	0.0000	13.8155	13.8155	1.1000e-004	0.0000	13.8177
Worker	4.3300e-003	6.1000e-003	0.0591	1.4000e-004	0.0118	9.0000e-005	0.0119	3.1500e-003	8.0000e-005	3.2300e-003	0.0000	10.0304	10.0304	5.1000e-004	0.0000	10.0411
Total	0.0111	0.0642	0.1401	2.9000e-004	0.0160	9.3000e-004	0.0170	4.3500e-003	8.5000e-004	5.2100e-003	0.0000	23.8458	23.8458	6.2000e-004	0.0000	23.8588

3.6 Paving - 2017**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.9600e-003	0.0303	0.0226	3.0000e-005		1.8300e-003	1.8300e-003		1.6900e-003	1.6900e-003	0.0000	3.0564	3.0564	9.2000e-004	0.0000	3.0757
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.9600e-003	0.0303	0.0226	3.0000e-005		1.8300e-003	1.8300e-003		1.6900e-003	1.6900e-003	0.0000	3.0564	3.0564	9.2000e-004	0.0000	3.0757

3.6 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.5000e-004	1.4800e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2508	0.2508	1.0000e-005	0.0000	0.2510
Total	1.1000e-004	1.5000e-004	1.4800e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2508	0.2508	1.0000e-005	0.0000	0.2510

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.9600e-003	0.0303	0.0226	3.0000e-005		1.8300e-003	1.8300e-003		1.6900e-003	1.6900e-003	0.0000	3.0564	3.0564	9.2000e-004	0.0000	3.0757
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.9600e-003	0.0303	0.0226	3.0000e-005		1.8300e-003	1.8300e-003		1.6900e-003	1.6900e-003	0.0000	3.0564	3.0564	9.2000e-004	0.0000	3.0757

3.6 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.5000e-004	1.4800e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2508	0.2508	1.0000e-005	0.0000	0.2510
Total	1.1000e-004	1.5000e-004	1.4800e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2508	0.2508	1.0000e-005	0.0000	0.2510

3.7 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9426					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total	0.9435	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397

3.7 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	6.0000e-005	5.7000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0965	0.0965	0.0000	0.0000	0.0966	
Total	4.0000e-005	6.0000e-005	5.7000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0965	0.0965	0.0000	0.0000	0.0966	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Archit. Coating	0.9426					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397	
Total	0.9435	5.4600e-003	4.6700e-003	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.551854	0.058218	0.185395	0.123453	0.029544	0.004438	0.012761	0.022956	0.001780	0.001269	0.006045	0.000523	0.001763

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	466.4499	466.4499	0.0211	4.3600e-003	468.2456
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	466.4499	466.4499	0.0211	4.3600e-003	468.2456
NaturalGas Mitigated	7.5500e-003	0.0687	0.0577	4.1000e-004		5.2200e-003	5.2200e-003		5.2200e-003	5.2200e-003	0.0000	74.7545	74.7545	1.4300e-003	1.3700e-003	75.2095
NaturalGas Unmitigated	7.5500e-003	0.0687	0.0577	4.1000e-004		5.2200e-003	5.2200e-003		5.2200e-003	5.2200e-003	0.0000	74.7545	74.7545	1.4300e-003	1.3700e-003	75.2095

5.2 Energy by Land Use - NaturalGas
Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	1.40085e+006	7.5500e-003	0.0687	0.0577	4.1000e-004		5.2200e-003	5.2200e-003		5.2200e-003	5.2200e-003	0.0000	74.7545	74.7545	1.4300e-003	1.3700e-003	75.2095
Total		7.5500e-003	0.0687	0.0577	4.1000e-004		5.2200e-003	5.2200e-003		5.2200e-003	5.2200e-003	0.0000	74.7545	74.7545	1.4300e-003	1.3700e-003	75.2095

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	1.40085e+006	7.5500e-003	0.0687	0.0577	4.1000e-004		5.2200e-003	5.2200e-003		5.2200e-003	5.2200e-003	0.0000	74.7545	74.7545	1.4300e-003	1.3700e-003	75.2095
Total		7.5500e-003	0.0687	0.0577	4.1000e-004		5.2200e-003	5.2200e-003		5.2200e-003	5.2200e-003	0.0000	74.7545	74.7545	1.4300e-003	1.3700e-003	75.2095

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.60341e+006	466.4499	0.0211	4.3600e-003	468.2456
Total		466.4499	0.0211	4.3600e-003	468.2456

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0424					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3177					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3601	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0424					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3177					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3601	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

APPENDIX F

***AMERICA CENTER PHASE III
REZONE PROJECT
CONSTRUCTION TAC
ASSESSMENT
San Jose, CA***

August 18, 2017

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Introduction

The purpose of this report is to address community risk impacts associated with construction of a commercial building and expansion of a parking structure at the America Center Development in San Jose, California. Specifically, the project would construct a 192,350-square foot (sf) office building (referred to as Building 5) and construct 332,150 sf of an expanded above-ground parking structure. The total project site is about 5 acres. Extensive grading or soil hauling is not anticipated, as the site is relatively flat and developed with a surface parking lot.

Community risk air quality impacts could occur due to the temporary construction emissions. The closest sensitive receptors are residences approximately 900 feet east of the closest portion of the site. This analysis addresses construction community risk issues following the guidance provided by the BAAQMD.

Setting

The project is located in the Santa Clara County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}).

Toxic Air Contaminants

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

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

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB approved a new regulation to reduce emissions of DPM and nitrogen oxides from existing on-road heavy-duty diesel fueled

vehicles.¹ The regulation requires affected vehicles to meet specific performance requirements between 2014 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle.

The BAAQMD is the regional agency tasked with managing air quality in the region. At the State level, the CARB (a part of the California Environmental Protection Agency [EPA]) oversees regional air district activities and regulates air quality at the State level. The BAAQMD has recently published California Environmental Quality Act (CEQA) Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects.²

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. For construction cancer risk assessments, infants are the most sensitive receptors, since they are more susceptible to cancer causing TACs and assumed to be present each day. Residential locations are assumed to include infants and small children. The closest sensitive receptors to the project site are residences to the east. While the adjacent and nearby hotels could contain sensitive receptors, they would not be chronically exposed (i.e., exposed for extended periods lasting more than a few days or weeks). There are no acute or short-term effects from construction activities that would warrant a potential for significant effects, in terms of community risk levels.

Significance Thresholds

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA. These Thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA and were posted on BAAQMD's website and included in the Air District's updated CEQA Guidelines (updated May 2011). The significance thresholds identified by BAAQMD and used in this analysis are summarized in Table 1.

BAAQMD recently updated these guidelines in response to court challenges to the Thresholds. Following litigation in the trial court, the court of appeal, and the California Supreme Court (December 17, 2015), upheld all of the Thresholds. However, the opinion issued by the Supreme Court held that CEQA does not generally require an analysis of the impacts of locating development or project sensitive receptors in areas subject to environmental hazards unless the project would exacerbate existing environmental hazards. The Supreme Court also found that CEQA requires the analysis of exposing people to environmental hazards in specific circumstances, including the location of development near airports, schools near sources of toxic

¹ Available online: <http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>. Accessed: June 9, 2015.

² Bay Area Air Quality Management District. *BAAQMD CEQA Air Quality Guidelines*. May 2017.

contamination, and certain exemptions for infill and workforce housing. The Supreme Court also held that public agencies remain free to conduct this analysis, regardless of whether it is required by CEQA. The significance thresholds identified by BAAQMD and used in this analysis are summarized in *Table 1*.

Table 1. Air Quality Significance Thresholds

Effect	Threshold
Health Risks and Hazards for Single Sources	
Excess Cancer Risk	>10 per one million
Hazard Index	>1.0
Incremental annual PM _{2.5}	>0.3 µg/m ³
Health Risks and Hazards for Combined Sources (Cumulative from all sources within 1,000 foot zone of influence)	
Excess Cancer Risk	>100 per one million
Hazard Index	>10.0
Annual Average PM _{2.5}	>0.8 µg/m ³

Note: PM_{2.5} = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less

This analysis measures the effect of the project on incrementally increasing community risk levels. Community risk levels that exceed the thresholds for single sources or combined sources listed in *Table 1* would be considered to have a cumulatively considerable contribution to cumulatively significant community risk levels. That is, if cancer risk from the project exceeds 10 chances per million by itself or 100 chances per million when combined with other nearby sources, then the project would be considered to have a cumulatively considerable increase in overall cancer risk. The premise here is that overall cancer risk is significant anywhere in the Bay Area. If annual PM_{2.5} concentrations from the project exceeds 0.3 µg/m³ by itself or 0.8 µg/m³ when combined with other nearby sources, then the project would be considered to have a cumulatively considerable increase in overall annual PM_{2.5} concentrations. The premise here is that overall annual PM_{2.5} concentrations exceed the health-based ambient air quality standards of 12 µg/m³, and therefore, are considered cumulatively significant anywhere in the Bay Area. Likewise, a Hazard Index that exceeds 1.0 for single sources or 10.0 for combined sources would be considered to have a cumulatively considerable increase in overall Hazard Index levels.

Emissions Modeling Methodology

The California Emissions Estimator Model (CalEEMod) Version 2016.3.1 was used to estimate emissions from construction of the project. The project land use types and size were input to CalEEMod. The proposed project land uses were input into CalEEMod, which included: 192,350 sf of commercial as “Research and Development” and 332,150 sf as “Unenclosed Parking with Elevator.” The total site area was input at 5.0 acres. No existing uses were considered in this analysis.

Construction Start Year

Emissions associated with construction equipment and related vehicle activity depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. To ensure construction emissions would not be underestimated, a start date of January 2018 was used in this analysis, which would be the earliest construction start time that could occur.

Construction Schedule and Equipment Usage

Construction activity is anticipated to include some demolition, grading and site preparation, building construction, architectural coatings, and paving. The CalEEMod model generated a construction schedule and equipment usage assumptions based on the size and type of project. These were used to model on- and near-site construction emissions.

Vehicle Travel

Most vehicle emissions associated with construction occur offsite and away from the construction site. CalEEMod defaults for worker and vendor trips were used. The amount of asphalt to be removed during demolition was computed based on the area paved (16,000 square yards) and assumed depth of 0.1 yards. A travel distance of 1 mile was used in CalEEMod to represent emissions from vehicle and truck travel on and near the site. All PM exhaust emissions were assumed to be diesel particulate matter, even though there would be emissions from gasoline-powered vehicles (i.e., worker automobile and some vendor vehicles).

Health Impact Evaluation Methodology

This community risk assessment includes a health risk assessment (HRA) for exposure to TACs that requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.³ These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA’s recommended methods.⁴ This HRA used the recent 2015 OEHHA risk assessment guidelines and CARB guidance. The BAAQMD has adopted recommended procedures for applying the newest OEHHA guidelines as part of

³ OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.

⁴ CARB, 2015. *Risk Management Guidance for Stationary Sources of Air Toxics*. July 23.

Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.⁵ Exposure parameters from the OEHHA guidelines and the recent BAAQMD HRA Guidelines were used in this evaluation.

Cancer Risk

Potential increased cancer risk from inhalation of TACs are calculated based on the TAC concentration over the period of exposure, inhalation dose, the TAC cancer potency factor, and an age sensitivity factor to reflect the greater sensitivity of infants and children to cancer causing TACs. The inhalation dose depends on a person's breathing rate, exposure time and frequency of exposure, and the exposure duration. These parameters vary depending on the age, or age range, of the persons being exposed and whether the exposure is considered to occur at a residential location or other sensitive receptor location.

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day). As recommended by the BAAQMD, 95th percentile breathing rates are used for the third trimester and infant exposures, and 80th percentile breathing rates for child and adult exposures. Additionally, CARB and the BAAQMD recommend the use of a residential exposure duration of 30 years for sources with long-term emissions (e.g., roadways).

Under previous OEHHA and BAAQMD HRA guidance, residential receptors are assumed to be at their home 24 hours a day, or 100 percent of the time. In the 2015 Risk Assessment Guidance, OEHHA includes adjustments to exposure duration to account for the fraction of time at home (FAH), which can be less than 100 percent of the time, based on updated population and activity statistics. The FAH factors are age-specific and are: 0.85 for third trimester of pregnancy to less than 2 years old, 0.72 for ages 2 to less than 16 years, and 0.73 for ages 16 to 70 years. Use of the FAH factors is allowed by the BAAQMD if there are no schools in the project vicinity that would have a cancer risk of one in a million or greater assuming 100 percent exposure (FAH = 1.0).

Functionally, cancer risk is calculated using the following parameters and formulas:

$$\text{Cancer Risk (per million)} = \text{CPF} \times \text{Inhalation Dose} \times \text{ASF} \times \text{ED/AT} \times \text{FAH} \times 10^6$$

Where:

CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

⁵ BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*. January 2016.

FAH = Fraction of time spent at home (unitless)

$$\text{Inhalation Dose} = C_{\text{air}} \times \text{DBR} \times A \times (\text{EF}/365) \times 10^{-6}$$

Where:

C_{air} = concentration in air ($\mu\text{g}/\text{m}^3$)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10^{-6} = Conversion factor

The health risk parameters used in this evaluation are summarized as follows:

Table 2. Health Risk Parameters Used for Cancer Risk Calculations

Parameter	Exposure Type →	Infant			Child	Adult
	Age Range →	3 rd Trimester	0<2	2 < 9	2 < 16	16 - 30
DPM Cancer Potency Factor ($\text{mg}/\text{kg}\text{-day}$) ⁻¹		1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
Daily Breathing Rate (L/kg-day)*		361	1,090	631	572	261
Inhalation Absorption Factor		1	1	1	1	1
Averaging Time (years)		70	70	70	70	70
Exposure Duration (years)		0.25	2	14	14	14
Exposure Frequency (days/year)		350	350	350	350	350
Age Sensitivity Factor		10	10	3	3	1
Fraction of Time at Home		0.85-1.0	0.72-1.0	.72-1.0	0.72-1.0	0.73-1.0

* 95th percentile breathing rates for 3rd trimester and infants and 80th percentile for children and adults

Non-Cancer Hazards

Potential non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). OEHHHA has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The total HI is calculated as the sum of the HIs for each TAC evaluated and the total HI is compared to the BAAQMD significance thresholds to determine whether a significant non-cancer health impact from a project would occur.

Typically, for residential projects located near roadways with substantial TAC emissions, the primary TAC of concern with non-cancer health effects is diesel particulate matter (DPM). For DPM, the chronic inhalation REL is 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

Annual PM_{2.5} Concentrations

While not a TAC, fine particulate matter (PM_{2.5}) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA). The thresholds of significance for PM_{2.5} (project level and cumulative) are in terms of an increase in the annual average concentration. When considering PM_{2.5} impacts, the contribution from all sources of PM_{2.5} emissions should be included. For projects with potential impacts from nearby local roadways, the PM_{2.5} impacts should include those from vehicle exhaust emissions, PM_{2.5} generated from vehicle tire and brake wear, and fugitive emissions from re-suspended dust on the roads.

Project Construction Community Risk Impacts

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations. Construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects of sensitive receptors at these nearby residences from construction emissions of DPM and PM_{2.5}.⁶ The closest sensitive receptors to the project site are residences along W. Channel Drive (see **Figure 1**). Emissions and dispersion modeling was conducted to predict the off-site concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

Construction Period Emissions

Construction period emissions of DPM and PM_{2.5} were modeled using the CalEEMod model, as previously described for project air pollutant emissions. The CalEEMod modeling included emissions from truck and worker travel, assumed to occur over a distance of 1 mile on or near the site.

The CalEEMod model provided total uncontrolled annual PM_{2.5} exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles, with total emissions from all construction stages of 0.215 tons (430 pounds). The on-road emissions are a result of haul truck travel during demolition and grading activities, worker travel, and vendor deliveries during construction. It was assumed that emissions from on-road vehicles traveling at or near the site would occur at the construction site. Fugitive PM_{2.5} dust emissions were calculated by CalEEMod as 0.049 tons (97 pounds) for the overall construction period.

Dispersion Modeling

⁶ DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

The EPA AERMOD dispersion model was used to predict concentrations of DPM and PM_{2.5} concentrations at existing sensitive receptors (residences) in the vicinity of the project construction area. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects.⁷ The AERMOD modeling utilized two area sources to represent the on-site construction emissions, one for exhaust emissions and one for fugitive dust emissions. To represent the construction equipment exhaust emissions, an emission release height of 6 meters (19.7 feet) was used for the area source. The elevated source height reflects the height of the equipment exhaust pipes plus an additional distance for the height of the exhaust plume above the exhaust pipes to account for plume rise of the exhaust gases. For modeling fugitive PM_{2.5} emissions, a near-ground level release height of 2 meters (6.6 feet) was used for the area source. Emissions from the construction equipment and on-road vehicle travel were distributed throughout the modeled area sources. Construction emissions were modeled as occurring daily between 7 a.m. to 4 p.m., when the majority of construction activity would occur. **Figure 1** shows the project site and nearby sensitive receptor (residences) locations where health impacts were evaluated.

The modeling used two years (1999 - 2000) of hourly meteorological data from the BAAQMD Alviso monitoring station prepared for use with the AERMOD model. The Alviso monitoring station is about 1.7 miles northeast of the project site. Annual DPM and PM_{2.5} concentrations from construction activities during the 2018 - 2019 period were calculated using the model. DPM and PM_{2.5} concentrations were calculated at nearby sensitive receptors. Receptor heights of 1.5 meters (5 feet) were used to represent the breathing heights of residents at ground or first floor levels of nearby residences.

The maximum-modeled DPM and PM_{2.5} concentrations occurred south of the construction site at a residence on Sunrise Drive. The location where the maximum PM_{2.5} and DPM concentrations occurred (and maximum cancer risk) is identified on **Figure 1**.

Predicted Cancer Risk and Hazards

Increased cancer risks were calculated using the maximum modeled concentrations for the 2018-2019 period and BAAQMD recommended risk assessment methods for an infant exposure (3rd trimester through two years of age) and for an adult exposure. The cancer risk calculations were based on applying the BAAQMD recommended parameters and age sensitivity factors to the TAC concentrations, as previously described. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. Infant and adult exposures were assumed to occur at all residences through the entire construction period.

The maximum community risk impacts associated with project construction are shown in **Table 3**. Results of the assessment for project construction indicate the maximum incremental residential child cancer risk at the maximally exposed individual (MEI) receptor would be 1.8 in one million and the residential adult incremental cancer risk would be 0.03 in one million. The maximum-modeled annual PM_{2.5} concentration, which is based on combined exhaust and fugitive dust

⁷ Bay Area Air Quality Management District (BAAQMD), 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0*. May.

emissions, was 0.01 µg/m³. The maximum modeled annual residential DPM concentration (i.e., from construction exhaust) was 0.0107 µg/m³, which is lower than the REL. The maximum computed HI based on this DPM concentration is less than 0.01 which is much lower than the BAAQMD significance criterion of a HI greater than 1.0.

Combined Construction Risk Assessment

In addition to construction of the project, there are other sources identified within 1,000 feet of the project site that are sources of TACs (see *Figure 1*). The impact of these sources was predicted using BAAQMD screening tools for roadways and stationary sources. In addition, the Union Pacific Railroad lies adjacent to the project site, within 1,000 feet. Each of the nearby sources was assessed, as described below.

Highway 237 Traffic

BAAQMD provides a Highway Screening Analysis Google Earth Map tool to identify estimated risk and hazard impacts from highways throughout the Bay Area. Cumulative risk, hazard and PM_{2.5} impacts at various distances from the highway are estimated for different segments of the highways. The tool uses the average annual daily traffic (AADT) count, fleet mix and other modeling parameters specific to that segment of the highway. The cancer risk was adjusted to reflect the latest OHHEA and BAAQMD guidance for cancer risk calculations (see Health Impact Evaluation Methodology). An adjustment factor of +1.3744 was applied to the BAAQMD predicted cancer risk⁸.

Stationary Sources

Permitted stationary sources of air pollution near the project site and most affected sensitive receptor were identified using BAAQMD's *Stationary Source Risk & Hazard Analysis Tool*. This mapping tool uses Google Earth and identified the location of four stationary sources and their estimated risk and hazard impacts. The 2012 estimated risk values were also adjusted using the +1.3744 factor. The risk values were then adjusted with the appropriate distance multiplier values provided by BAAQMD. The values reported in **Table 3** reflect the above adjustments.

Union Pacific Railroad

The project site is located near a Union Pacific rail line and rail activity currently generates TAC and PM_{2.5} emissions from locomotive exhaust. This rail line is used for passenger (ACE, Capitol Corridor, and Amtrak) and freight service by trains using diesel fueled locomotives.

Based on the U.S. DOT Crossing Form, generated by the Federal Railroad Administration for the railroad crossing closest to the site, there are 26 daily train movements on that line, which travel 20 to 40 miles per hour⁹.

⁸ Includes adjustment factor of 1.3744 to account for latest OEHHA methodology per correspondence with Alison Kirk, BAAQMD, November 23, 2015.

⁹ The US DOT Crossing Inventory Form was obtained from FRA's website at <http://fragis.fra.dot.gov/GISFRASafety/>, accessed August 15, 2017. The form is contained in *Attachment 2*.

DPM and PM_{2.5} emissions from trains on the rail line were calculated using EPA emission factors for locomotives and CARB adjustment factors to account for fuels used in California. Amtrak, Capitol Corridor, and ACE passenger trains were assumed to use 3,200 hp diesel locomotives and would continue to do so in the future. Emissions from the freight trains were calculated assuming they would use two diesel locomotives with 2,300 hp engines. Passenger and freight trains were assumed to be traveling at an average speed of 30 mph in the vicinity of the project site. Passenger and freight train emissions for 2020 were conservatively used to represent emissions over the entire 30 year exposure period used in calculating cancer risks (in this case the period from 2020 through 2049).

Dispersion modeling of locomotive emissions was conducted using the EPA's AERMOD dispersion model and two years (1999-2000) of hourly meteorological data from the BAAQMD monitoring station in Alviso prepared for use with the AERMOD model. Locomotive emissions from train travel within about 1,000 feet of the project site were modeled as a single line-volume source comprised of a series of volume sources along the rail line. DPM concentrations were calculated at the receptor location where maximum impacts from construction occurred. Figure 1 shows the railroad line segments used for the modeling and receptor locations where concentrations were calculated, including the receptor where the maximum impacts from construction would occur. These impacts are reported in **Table 3**.

Conclusion for Construction Impacts

The effect of community risk levels caused by the project construction activity are assessed by predicting the increased cancer risk, annual PM_{2.5} concentration and Health Index at nearby sensitive receptors. Two thresholds are used to measure the effect: 1) single source thresholds that address the effect of the source and 2) the combined effect of the source and other sources in close proximity (i.e., within 1,000 feet). This analysis measures the effect of the project on incrementally increasing community risk levels.

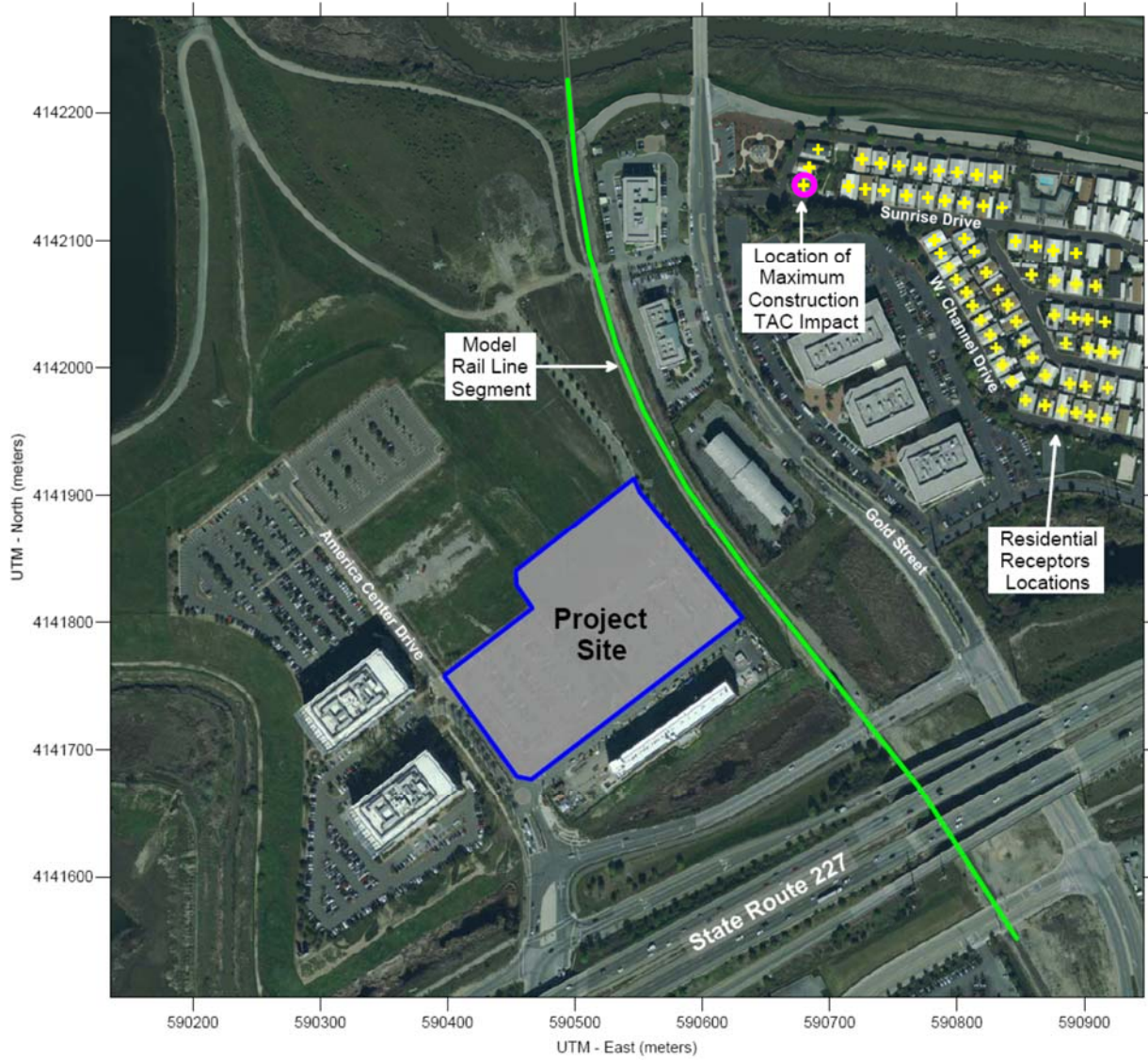
Cancer risk from construction activities would be below the single-source significance threshold at the residence with the maximum impact. The project construction activities would have annual PM_{2.5} concentrations below the single-source threshold. Non-cancer hazards would be below the significance thresholds. The combination of construction activities with exposure to other TAC sources in the areas would have cumulative cancer risk and annual PM_{2.5} concentrations below the significance thresholds. Since cancer risk and annual PM_{2.5} concentrations from construction activities would be below the significance threshold, the impact is considered less than significant.

The project would have a *less than significant* impact with respect to community risk caused by project construction activities. *Attachment 1* includes the emission calculations and source information used in the modeling and the cancer risk calculations for the project. *Attachment 2* includes the data and calculations for the existing sources.

Table 3. Combined Construction Cancer Risks, PM_{2.5} Concentrations, and Hazard Index

Source	Cancer Risk (per million)	PM_{2.5} Concentration (µg/m³)	Acute and Chronic Hazard (HI)
Proposed Project Construction	Infant = 1.8 Adult = 0.03	0.01	<0.01
State Route 237 using BAAQMD Highway Screening Tool – Link 336 (6ft elevation) at over 1,000 feet north.	<10.2	<0.05	<0.01
Plant #17239 City of Santa Clara Generator at 5601 Lafayette St., at over 1,000 feet	<1.4	<0.01	<0.01
Plant #17393 City of Santa Clara Generator at 5611 Lafayette St., at over 1,000 feet	<0.5	0.00	0.00
Union Pacific Railroad at 550 feet west	12.1	0.04	<0.01
Uncontrolled Total	Infant = 26.0	<0.11	<0.04
<i>BAAQMD Thresholds Single Source</i>	<i>10.0</i>	<i>0.3</i>	<i>1.0</i>
<i>BAAQMD Thresholds Combined Source</i>	<i>100.0</i>	<i>0.8</i>	<i>10.0</i>
<i>Significant without mitigation?</i>	<i>No</i>	<i>No</i>	<i>No</i>
<i>Significant WITH mitigation?</i>	<i>No</i>	<i>No</i>	<i>No</i>

Figure 1. Project Construction Site and Rail Line and Locations of Off-Site Sensitive Receptors and TAC Impacts



Attachment 1 CalEEMod output files for construction period and health risk calculations

America Center II - San Jose, CA

DPM Emissions and Modeling Emission Rates - Un mitigated

Construction Year	Activity	DPM (ton/year)	Area Source	DPM Emissions			Modeled Area (m ²)	DPM Emission Rate (g/s/m ²)
				(lb/yr)	(lb/hr)	(g/s)		
2018	Construction	0.2152	CON_DPM	430.4	0.13101	1.65E-02	26,475	6.24E-07

Operation Hours

hr/day =	9	(7am - 4pm)
days/yr =	365	
hours/year =	3285	

America Center II - San Jose, CA

PM2.5 Fugitive Dust Emissions for Modeling - Unmitigated

Construction Year	Activity	Area Source	Area (ton/year)	PM2.5 Emissions			Modeled Area (m ²)	PM2.5 Emission Rate g/s/m ²
				(lb/yr)	(lb/hr)	(g/s)		
2018	Construction	CON_FUG	0.0487	97.3	0.02963	3.73E-03	26,475	1.41E-07

Operation Hours

hr/day =	9	(7am - 4pm)
days/yr =	365	
hours/year =	3285	

America Center II, San Jose, CA - Health Impact Summary

Maximum Impacts at MEI Location - Unmitigated

Emissions Year	Maximum Concentrations		Cancer Risk (per million)		Hazard Index (-)	Maximum Annual PM2.5 Concentration (µg/m ³)
	Exhaust PM10/DPM (µg/m ³)	Fugitive PM2.5 (µg/m ³)	Child	Adult		
	2018	0.0107	0.0039	1.8	0.03	0.002

America Center II - San Jose, CA - Construction Impacts
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 1.5 Meter Receptor Height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

- Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
 ASF = Age sensitivity factor for specified age group
 ED = Exposure duration (years)
 AT = Averaging time for lifetime cancer risk (years)
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

- Where: C_{air} = concentration in air (µg/m³)
 DBR = daily breathing rate (L/kg body weight-day)
 A = Inhalation absorption factor
 EF = Exposure frequency (days/year)
 10⁻⁶ = Conversion factor

Values

Age --> Parameter	Infant/Child				Adult
	3rd Trimester	0 - 2	2 - 9	2 - 16	16 - 30
ASF =	10	10	3	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	631	572	261
A =	1	1	1	1	1
EF =	350	350	350	350	350
AT =	70	70	70	70	70
FAH =	1.00	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Fugitive PM2.5	Total PM2.5
			DPM Conc (ug/m3)	Age Sensitivity Factor		Modeled		Age Sensitivity Factor			
						Year	Annual				
0	0.25	-0.25 - 0*	-	-	10	-	-	-	-	-	-
1	1	0 - 1	2018-2019	0.0107	10	2018-2019	0.0107	1	0.03	0.0039	0.015
2	1	1 - 2		0.0000	10		0.0000	1	0.00		
3	1	2 - 3		0.0000	3		0.0000	1	0.00		
4	1	3 - 4		0.0000	3		0.0000	1	0.00		
5	1	4 - 5		0.0000	3		0.0000	1	0.00		
6	1	5 - 6		0.0000	3		0.0000	1	0.00		
7	1	6 - 7		0.0000	3		0.0000	1	0.00		
8	1	7 - 8		0.0000	3		0.0000	1	0.00		
9	1	8 - 9		0.0000	3		0.0000	1	0.00		
10	1	9 - 10		0.0000	3		0.0000	1	0.00		
11	1	10 - 11		0.0000	3		0.0000	1	0.00		
12	1	11 - 12		0.0000	3		0.0000	1	0.00		
13	1	12 - 13		0.0000	3		0.0000	1	0.00		
14	1	13 - 14		0.0000	3		0.0000	1	0.00		
15	1	14 - 15		0.0000	3		0.0000	1	0.00		
16	1	15 - 16		0.0000	3		0.0000	1	0.00		
17	1	16-17		0.0000	1		0.0000	1	0.00		
18	1	17-18		0.0000	1		0.0000	1	0.00		
19	1	18-19		0.0000	1		0.0000	1	0.00		
20	1	19-20		0.0000	1		0.0000	1	0.00		
21	1	20-21		0.0000	1		0.0000	1	0.00		
22	1	21-22		0.0000	1		0.0000	1	0.00		
23	1	22-23		0.0000	1		0.0000	1	0.00		
24	1	23-24		0.0000	1		0.0000	1	0.00		
25	1	24-25		0.0000	1		0.0000	1	0.00		
26	1	25-26		0.0000	1		0.0000	1	0.00		
27	1	26-27		0.0000	1		0.0000	1	0.00		
28	1	27-28		0.0000	1		0.0000	1	0.00		
29	1	28-29		0.0000	1		0.0000	1	0.00		
30	1	29-30		0.0000	1		0.0000	1	0.00		
Total Increased Cancer Risk						1.8			0.03		

* Third trimester of pregnancy

Attachment 2 Combined TAC Sources - Rail line emissions and health risk calculations and BAAQMD Screening Data

America Center II - San Jose, CA
DPM Modeling - Rail Line Information and DPM and PM2.5 Emission Rates
Diesel-Powered Passenger and Freight Trains

Year	Description	No. Lines	Link Width (ft)	Link Width (m)	Link Length (ft)	Link Length (miles)	Link Length (m)	Release Height (m)	No. Trains per Day	Train Travel Speed (mph)	DPM Emission Rates			
											Average Daily Emission Rate (g/mi/day)	Average Daily Emission Rate (g/day)	Link Emission Rate (g/s)	Link Emission Rate (lb/hr)
2020	Passenger Trains								24	30	183.2	88.5	1.02E-03	8.13E-03
	Freight Trains								2	30	14.2	6.9	7.96E-05	6.32E-04
	Total	1	10	3.0	2,549	0.48	777	5.0	26	-	197.5	95.3	1.10E-03	8.76E-03

Notes: Emission based on Emission Factors for Locomotives, USEPA 2009 (EPA-420-F-09-025)
 Average emissions the 2020 assumed to conservatively represent emissions over the entire 2020-2049 exposure period.
 Fuel correction factors from Offroad Modeling Change Technical memo, Changes to the Locomotive Inventory, CARB July 2006.
 PM2.5 calculated as 92% of PM emissions (CARB CEIDERS PM2.5 fractions)
 Passenger trains assumed to operate for 24 hours per day
 Freight trains assumed to operate for 24 hours per day

<i>Passenger Trains</i>	Total*
Passenger trains per day =	24
Locomotive horsepower =	3200
Locomotives per train =	1
Locomotive engine load =	1
<i>Freight trains</i>	
Freight trains per day =	2
Locomotive horsepower =	2300
Locomotives per train =	2
Total horsepower =	4600
Locomotive engine load =	0.5

* Includes ACE, Capitol Corridor and Amtrak passenger trains

Locomotive DPM Emission Factors (g/hp-hr)

Train Type	2020
Passenger	0.1010
Freight	0.1106

PM2.5 to PM ratio = 0.92
 DPM to PM ratio = 1
 CARB Fuel Adj Factor
 2010 2011+
 Passenger 0.717 0.709
 Freight 0.851 0.840

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 11 / 12 / 2016		B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other		C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> Re-Open <input type="checkbox"/> New Crossing <input type="checkbox"/> Date Change Only <input type="checkbox"/> Closed <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction			D. DOT Crossing Inventory Number 749960X
Part I: Location and Classification Information							
1. Primary Operating Railroad Union Pacific Railroad Company [UP]			2. State CALIFORNIA		3. County SANTA CLARA		
4. City / Municipality <input checked="" type="checkbox"/> In <input type="checkbox"/> Near SANTA CLARA		5. Street/Road Name & Block Number PRIVATE CROSSING (Street/Road Name) * (Block Number)			6. Highway Type & No. NA		
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR				8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			
9. Railroad Division or Region <input type="checkbox"/> None ROSEVILLE		10. Railroad Subdivision or District <input type="checkbox"/> None Coast		11. Branch or Line Name <input checked="" type="checkbox"/> None		12. RR Milepost 0039.540 (prefix) (nnnn.nnn) (suffix)	
13. Line Segment *		14. Nearest RR Timetable Station *		15. Parent RR (if applicable) <input checked="" type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input checked="" type="checkbox"/> N/A	
17. Crossing Type <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private		18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0			
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard							
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number				25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established			
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnn) 37.4210474		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnn) -121.9770474		29. Lat/Long Source <input checked="" type="checkbox"/> Actual <input type="checkbox"/> Estimated	
30.A. Railroad Use *				31.A. State Use *			
30.B. Railroad Use *				31.B. State Use *			
30.C. Railroad Use *				31.C. State Use *			
30.D. Railroad Use *				31.D. State Use *			
32.A. Narrative (Railroad Use) *				32.B. Narrative (State Use) *			
33. Emergency Notification Telephone No. (posted) 800-848-8715			34. Railroad Contact (Telephone No.) 402-544-3721		35. State Contact (Telephone No.) 415-703-3722		
Part II: Railroad Information							
1. Estimated Number of Daily Train Movements							
1.A. Total Day Thru Trains (6 AM to 6 PM) 12		1.B. Total Night Thru Trains (6 PM to 6 AM) 12		1.C. Total Switching Trains 2		1.D. Total Transit Trains 0	
1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____							
2. Year of Train Count Data (YYYY) 2016			3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 45 3.B. Typical Speed Range Over Crossing (mph) From 20 to 40				
4. Type and Count of Tracks Main 1 Siding 0 Yard 0 Transit 0 Industry 0							
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input checked="" type="checkbox"/> Other <input type="checkbox"/> None							
6. Is Track Signaled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			7.A. Event Recorder <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

**America Center II, San Jose, CA -Rail Line DPM & PM2.5 Concentrations
 AERMOD Risk Modeling Parameters and Maximum Concentrations
 Diesel-Powered Passenger and Freight Trains**

Receptor Information

Number of Receptors 65
 Receptor Height = 1.5 meters
 Receptor distances = variable - at residential units

Meteorological Conditions

Alviso Hourly 1999-2000
 Land Use Classification rural
 Wind speed = variable
 Wind direction = variable

Construction MEI Maximum Concentrations

	Average DPM Concentration ($\mu\text{g}/\text{m}^3$)
Meteorological Data Years	2020
1999-2000	0.0308
	Average PM2.5 Concentration ($\mu\text{g}/\text{m}^3$)
Meteorological Data Years	2020-2024
1999-2000	0.0283

**America Center II, San Jose, CA - Construction Maximum Impact Receptor
AERMOD Railroad DPM Risk Modeling Parameters and Maximum Cancer Risk
Diesel-Powered Passenger and Freight Trains**

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

- Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
 ASF = Age sensitivity factor for specified age group
 ED = Exposure duration (years)
 AT = Averaging time for lifetime cancer risk (years)
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

- Where: C_{air} = concentration in air (µg/m³)
 DBR = daily breathing rate (L/kg body weight-day)
 A = Inhalation absorption factor
 EF = Exposure frequency (days/year)
 10⁻⁶ = Conversion factor

Values

Cancer Potency Factors (mg/kg-day)⁻¹

TAC	CPF
DPM	1.10E+00

Age --> Parameter	Infant/Child			Adult
	3rd Trimester	0 - <2	2 - <16	16 - 30
ASF	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
ED =	0.25	2	14	14
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Rail Locomotive Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Year	Exposure Duration (years)	Age	Age Sensitivity Factor	DPM Annual Conc (ug/m3)	DPM Cancer Risk (per million)
0	2020	0.25	-0.25 - 0*	10	0.0308	0.418
1	2020	1	1	10	0.0308	5.052
2	2021	1	2	10	0.0308	5.052
3	2022	1	3	3	0.0308	0.795
4	2023	1	4	3	0.0308	0.795
5	2024	1	5	3	0.0000	0.000
6	2025	1	6	3	0.0000	0.000
7	2026	1	7	3	0.0000	0.000
8	2027	1	8	3	0.0000	0.000
9	2028	1	9	3	0.0000	0.000
10	2029	1	10	3	0.0000	0.000
11	2030	1	11	3	0.0000	0.000
12	2031	1	12	3	0.0000	0.000
13	2032	1	13	3	0.0000	0.000
14	2033	1	14	3	0.0000	0.000
15	2034	1	15	3	0.0000	0.000
16	2035	1	16	3	0.0000	0.000
17	2036	1	17	1	0.0000	0.000
18	2037	1	18	1	0.0000	0.000
19	2038	1	19	1	0.0000	0.000
20	2039	1	20	1	0.0000	0.000
21	2040	1	21	1	0.0000	0.000
22	2041	1	22	1	0.0000	0.000
23	2042	1	23	1	0.0000	0.000
24	2043	1	24	1	0.0000	0.000
25	2044	1	25	1	0.0000	0.000
26	2045	1	26	1	0.0000	0.000
27	2046	1	27	1	0.0000	0.000
28	2047	1	28	1	0.0000	0.000
29	2048	1	29	1	0.0000	0.000
30	2049	1	30	1	0.0000	0.000
Total Increased Cancer Risk						12.1

* Third trimester of pregnancy

Stationary source information

Plant 17239

Santa_Clara_May_2012_schema:FID	1916
Santa_Clara_May_2012_schema:PlantNo	17239
Santa_Clara_May_2012_schema:Name	City of Santa Clara
Santa_Clara_May_2012_schema:Address	5601 LAFAYETTE STREET
Santa_Clara_May_2012_schema:City	Santa Clara
Santa_Clara_May_2012_schema:UTM_East	590978.451443
Santa_Clara_May_2012_schema:UTM_North	4141612.53
Santa_Clara_May_2012_schema:Cancer	25.63
Santa_Clara_May_2012_schema:Hazard	0.009
Santa_Clara_May_2012_schema:PM25	0.045
Santa_Clara_May_2012_schema:Type	Generator
Diesel BUG Distance Multiplier for 1,000 feet	0.04

Highway Screening Analysis

SR 237 Link 336 (6ft elevation)

	PM2.5 Risk	Chron.HI	Acute.HI
500 ft N	0.097	13.350	0.012
750 ft N	0.069	9.593	0.009
1000 ft N	0.053	7.397	0.007

Residence Inn/Fairfield Inn and Suites, America Center Project Construction TAC Assessment San Jose, California

March 16, 2016

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I&R Project# 16-052

Introduction

The purpose of this report is to address air quality community risk impacts associated with development of a 261-room Residence Inn and Fairfield Inn & Suites hotel in San Jose, California. The four-story, 261-unit hotel building will be approximately 164,000 square feet (sf) in size. The project is proposed to be constructed on a 6.7 acre vacant site, which is a component of the larger 70 acre Legacy Terrace/America Center. The site is bordered by the Guadalupe River/Alviso Slough channel to the north, the Union Pacific railroad tracks to the east and the America Center Development (i.e., office buildings, vacant land, and a 175-room hotel) to the south and the America Center open space preserve to the west.

This analysis focuses on the localized construction air quality impacts that could occur due to temporary construction emissions. Existing residents near the project would be exposed to emissions from construction of the project that could result in community risk impacts. This analysis addresses those issues following the guidance provided by the Bay Area Air Quality Management District (BAAQMD) in their 2011 version of the CEQA Air Quality Guidelines.

Setting

The project is located in Santa Clara County, which is in the San Francisco Bay Area Air Basin. Toxic air contaminants (TACs) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level.

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

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of diesel particulate matter (DPM). Several of these regulatory programs affect medium and heavy duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB approved a new regulation to reduce emissions of DPM and nitrogen oxides from existing on-road heavy-duty diesel fueled vehicles.¹ The regulation requires affected vehicles to meet specific performance requirements between 2014 and 2023, with all affected diesel vehicles

¹ Available online: <http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>. Accessed: November 21, 2014.

required to have 2010 model-year engines or equivalent by 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle.

The BAAQMD is the regional agency tasked with managing air quality in the region. At the State level, the CARB (a part of the California Environmental Protection Agency [EPA]) oversees regional air district activities and regulates air quality at the State level. The BAAQMD has recently published California Environmental Quality Act (CEQA) Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects.²

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. The closest sensitive receptors to the project site are mobile-home residences located about 600 feet or further east. Other residences appear to be 1,000 feet or further to the northeast.

BAAQMD Significance Thresholds

The BAAQMD provides guidance in assessing impacts to lead agencies in the Bay Area. In May 2011, BAAQMD adopted new CEQA Air Quality Guidelines that included thresholds of significance to assist in the review of projects under CEQA. These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA and were posted on BAAQMD's website and included in the Air District's updated CEQA Guidelines.³

The BAAQMD CEQA Air Quality Guidelines consider exposure of sensitive receptors to air pollutant levels that result in an unacceptable cancer risk or hazard, to be significant. For cancer risk, which is a concern with diesel particulate matter and other mobile-source TACs, the BAAQMD considers an increased risk of contracting cancer that is 10 in one million chances or greater, to be significant risk for a single source. The BAAQMD CEQA Guidelines also consider single-source TAC exposure to be significant if annual PM_{2.5} concentrations exceed 0.3 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) or if the computed Hazard Index is greater than 1.0 for non-cancer risk hazards. Cumulative exposure is assessed by combining the risks and annual PM_{2.5} concentrations for all sources within 1,000 feet of a project. The thresholds for cumulative exposure are an excess cancer risk of 100 in one million, annual PM_{2.5} concentrations of 0.8 $\mu\text{g}/\text{m}^3$ and a Health Index greater than 10.0.

² Bay Area Air Quality Management District. 2011. BAAQMD CEQA Air Quality Guidelines. May.

³ *Ibid.*

Project Construction Activity

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations. Construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects of sensitive receptors at these nearby residences from construction emissions of DPM and PM_{2.5}.⁴ The closest sensitive receptors to the project site are mobile-home residences east of the site (see Figure 1). Emissions and dispersion modeling was conducted to predict the off-site concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

Construction Period Emissions

Construction activity is anticipated to include demolition, grading and site preparation, trenching, building construction, and paving. Construction period emissions were modeled using the California Emissions Estimator Model, Version 2013.2.2 (CalEEMod). The anticipated construction schedule and equipment usage assumptions were provided for this modeling. The proposed project land uses were input into CalEEMod, which included 261 rooms entered as “Hotel,” and 238 spaces entered as “Parking Lot” on a 6.7-acre site. Construction of the project is expected to occur over an approximate 18-month period beginning in 2017. Construction period emissions were modeled using CalEEMod along with the anticipated project construction activity. The number and types of construction equipment and diesel vehicles, along with the anticipated length of their use for different phases of construction, were based on the CalEEMod defaults for a project of this type and size. The CalEEMod modeling included emissions from truck and worker travel, assumed to occur over a distance of one mile on or near the site.

The CalEEMod model provided total annual PM_{2.5} exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles, with total emissions from all construction stages of 0.1922 tons (384 pounds). The on-road emissions are a result of haul truck travel during demolition and grading activities, worker travel, and vendor deliveries during construction. A trip length of one mile was used to represent vehicle travel while at or near the construction site. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at the construction site. Fugitive PM_{2.5} dust emissions were calculated by CalEEMod as less than 0.2830 tons (566 pounds) for the overall construction period.

Dispersion Modeling

The EPA ISCST3 dispersion model was used to predict concentrations of DPM and PM_{2.5} concentrations at existing sensitive receptors (residences) in the vicinity of the project construction area. The ISCST3 dispersion model is a BAAQMD-recommended model for use in

⁴ DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

modeling analysis of these types of emission activities for CEQA projects.⁵ The ISCST3 modeling utilized two area sources to represent the on-site construction emissions; one for exhaust emissions and one for fugitive dust emissions. To represent the construction equipment exhaust emissions, an emission release height of 6 meters (19.7 feet) was used for the area source. The elevated source height reflects the height of the equipment exhaust pipes plus an additional distance for the height of the exhaust plume above the exhaust pipes to account for plume rise of the exhaust gases. For modeling fugitive PM_{2.5} emissions, a near-ground level release height of 2 meters (6.6 feet) was used for the area source. Emissions from the construction equipment and on-road vehicle travel were distributed throughout the modeled area sources. Construction emissions were modeled as occurring daily between 7:00 a.m. to 4:00 p.m., when the majority of construction activity would occur. Figure 1 shows the project site and nearby sensitive receptor (residences) locations where health impacts were evaluated.

The modeling used a five-year data set (1996 - 2000) of hourly meteorological data from the Alviso monitoring station that was prepared for use with the ISCST3 model by BAAQMD for use in health risk assessments. Annual DPM and PM_{2.5} concentrations from construction activities during the 2017 - 2018 were calculated using the model. DPM and PM_{2.5} concentrations were calculated at nearby sensitive receptors. Receptor heights of 1.5 meters (4.9 feet) were used to represent the breathing heights of residents of nearby residences.

The maximum-modeled DPM and PM_{2.5} concentrations occurred east of the construction site at a residence near the site. The location where the maximum PM_{2.5} and DPM concentrations occurred (and maximum cancer risk) is identified in Figure 1.

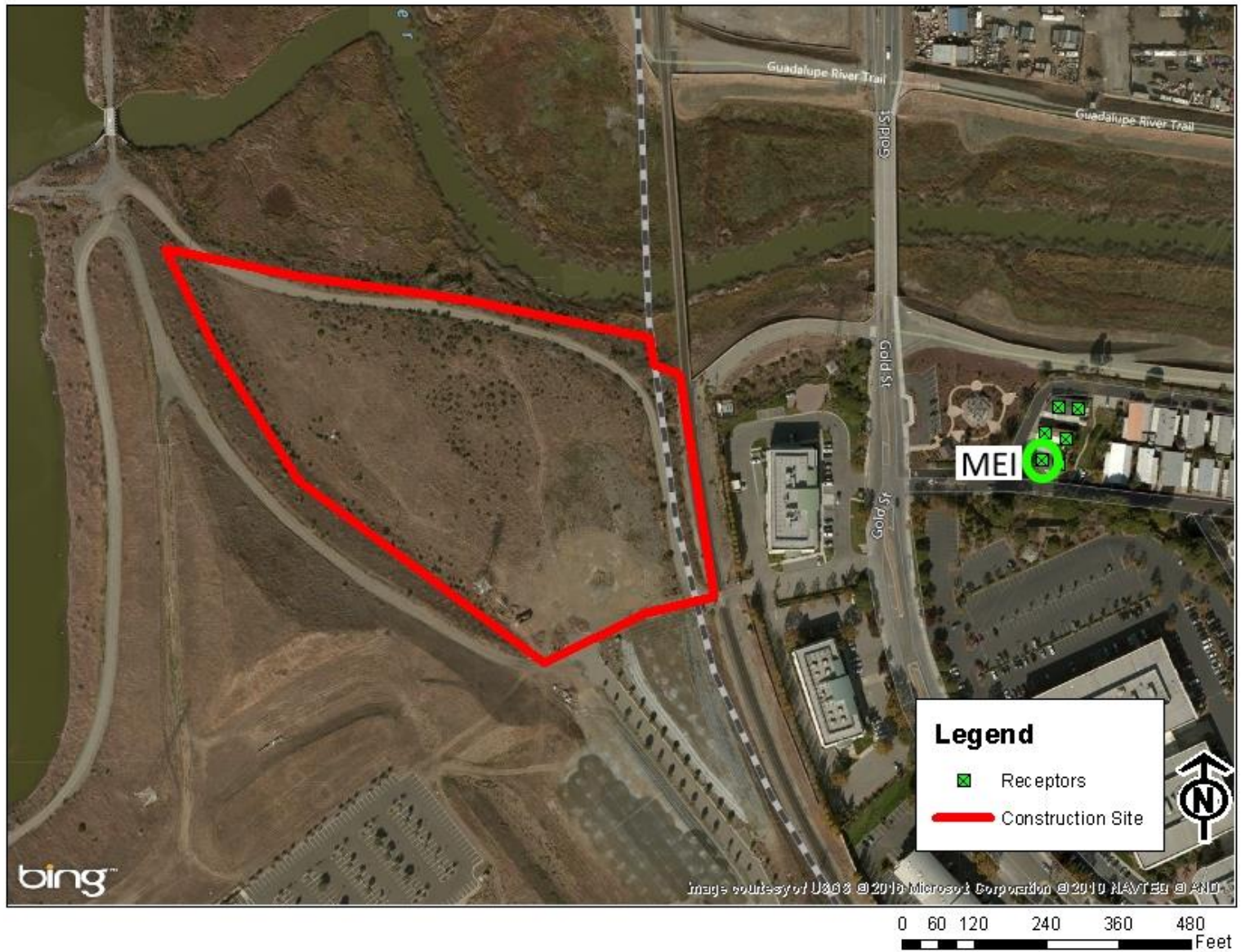
Predicted Community Risk Levels

Attachment 1 includes a description of how community risk impacts, including cancer risk are computed. Results of the assessment for project construction indicate the maximum incremental residential cancer risk for infant exposure at the maximally exposed individual (MEI) receptor would be 5.9 in one million and the corresponding cancer risk for adult exposure would be 0.1 in one million. The maximum-modeled annual PM_{2.5} concentration, which is based on combined exhaust and fugitive dust emissions, was 0.1 µg/m³. The maximum modeled annual residential DPM concentration (i.e., from construction exhaust) was 0.0325µg/m³, which is much lower than the reference exposure level (REL). The maximum computed HI based on this DPM concentration is 0.01 which is lower than the BAAQMD significance criterion of a HI greater than 1.0.

The project would have community risk impacts that are below the significance thresholds for single sources; therefore, the impacts would be less than *significant* respect to TAC and PM_{2.5} emissions caused by project construction activities. There are no other substantial sources of TACs in the area (i.e., within 1,000 feet), so cumulative community risk impacts would also be less than significant. *Attachment 1* includes the emission calculations and source information used in the modeling and the cancer risk calculations.

⁵ Bay Area Air Quality Management District (BAAQMD), 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0*. May.

Figure 1. Project Construction Site, Locations of Sensitive Receptors, and Maximum Cancer Risk



Attachment 1: Construction Risk Methodology, CalEEMod Input and Output, and Construction Community Risk Modeling Data

Construction Risk Methodology

A health risk assessment (HRA) for exposure to Toxic Air Contaminates (TACs) requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.⁶ These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA's recommended methods.⁷ This HRA used the recent 2015 OEHHA risk assessment guidelines and CARB guidance. While the OEHHA guidelines use substantially more conservative assumptions than the current Bay Area Air Quality Management District (BAAQMD) guidelines, BAAQMD has not formally adopted recommended procedures for applying the newest OEHHA guidelines. BAAQMD is in the process of developing new guidance and has developed proposed HRA Guidelines as part of the proposed amendments to Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.⁸ Exposure parameters from the OEHHA guidelines and newly proposed BAAQMD HRA Guidelines were used in this evaluation.

Cancer Risk

Potential increased cancer risk from inhalation of TACs are calculated based on the TAC concentration over the period of exposure, inhalation dose, the TAC cancer potency factor, and an age sensitivity factor to reflect the greater sensitivity of infants and children to cancer causing TACs. The inhalation dose depends on a person's breathing rate, exposure time and frequency of exposure, and the exposure duration. These parameters vary depending on the age, or age range, of the persons being exposed and whether the exposure is considered to occur at a residential location or other sensitive receptor location.

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day). As recommended by the BAAQMD, 95th percentile breathing rates are used for the third trimester and infant exposures, and 80th

⁶ OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.

⁷ CARB, 2015. *Risk Management Guidance for Stationary Sources of Air Toxics*. July 23.

⁸ BAAQMD, 2016. *Workshop Report. Proposed Amendments to Air District Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants. Appendix C. Proposed Air District HRA Guidelines*. January 2016.

percentile breathing rates for child and adult exposures. Additionally, CARB and the BAAQMD recommend the use of a residential exposure duration of 30 years for sources with long-term emissions (e.g., roadways).

Under previous OEHHA and BAAQMD HRA guidance, residential receptors are assumed to be at their home 24 hours a day, or 100 percent of the time. In the 2015 Risk Assessment Guidance, OEHHA includes adjustments to exposure duration to account for the fraction of time at home (FAH), which can be less than 100 percent of the time, based on updated population and activity statistics. The FAH factors are age-specific and are: 0.85 for third trimester of pregnancy to less than 2 years old, 0.72 for ages 2 to less than 16 years, and 0.73 for ages 16 to 70 years. BAAQMD recommends using these FAH factors for residential exposures.

Functionally, cancer risk is calculated using the following parameters and formulas:

$$\text{Cancer Risk (per million)} = CPF \times \text{Inhalation Dose} \times ASF \times ED/AT \times FAH \times 10^6$$

Where:

CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

$$\text{Inhalation Dose} = C_{\text{air}} \times DBR \times A \times (EF/365) \times 10^{-6}$$

Where:

C_{air} = concentration in air (µg/m³)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10⁻⁶ = Conversion factor

The health risk parameters used in this evaluation are summarized as follows:

Parameter	Exposure Type →	Infant		Child	Adult
	Age Range →	3 rd Trimester	0<2	2 < 16	16 - 30
DPM Cancer Potency Factor (mg/kg-day) ⁻¹		1.10E+00	1.10E+00	1.10E+00	1.10E+00
Daily Breathing Rate (L/kg-day)*		361	1,090	572	261
Inhalation Absorption Factor		1	1	1	1
Averaging Time (years)		70	70	70	70
Exposure Duration (years)		0.25	2	14	14
Exposure Frequency (days/year)		350	350	350	350
Age Sensitivity Factor		10	10	3	1
Fraction of Time at Home		0.85 – 1.0	0.72 – 1.0	0.72 - 1.0	0.73

* 95th percentile breathing rates for 3rd trimester and infants and 80th percentile for children and adults

Non-Cancer Hazards

Potential non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). OEHHA has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The total HI is calculated as the sum of the HIs for each TAC evaluated and the total HI is compared to the BAAQMD significance thresholds to determine whether a significant non-cancer health impact from a project would occur.

Typically, for residential projects located near roadways with substantial TAC emissions, the primary TAC of concern with non-cancer health effects is diesel particulate matter (DPM). For DPM, the chronic inhalation REL is 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

Annual PM_{2.5} Concentrations

While not a TAC, fine particulate matter (PM_{2.5}) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA). The thresholds of significance for PM_{2.5} (project level and cumulative) are in terms of an increase in the annual average concentration. When considering PM_{2.5} impacts, the contribution from all sources of PM_{2.5} emissions should be included. For projects with potential impacts from nearby local roadways, the PM_{2.5} impacts should include those from vehicle exhaust emissions, PM_{2.5} generated from vehicle tire and brake wear, and fugitive emissions from re-suspended dust on the roads.

**Marriott Residence & Fairfield Inn
Santa Clara County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	261.00	Room	6.70	164,000.00	0
Parking Lot	238.00	Space	0.00	95,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Project info from project description and plan drawings

Construction Phase - Anticipated phasing schedule from applicant

Off-road Equipment - Assume tractor/loader or backhoe

Trips and VMT - 500 trucks during site prep to bring material for pavement and import soil. 1 mile trip lengths.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	174.00
tblConstructionPhase	NumDays	230.00	87.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	10.00	42.00

tblConstructionPhase	PhaseEndDate	9/29/2017	9/30/2017
tblConstructionPhase	PhaseEndDate	4/28/2017	4/30/2017
tblConstructionPhase	PhaseEndDate	6/29/2018	6/30/2018
tblLandUse	LandUseSquareFeet	378,972.00	164,000.00
tblLandUse	LotAcreage	8.70	6.70
tblLandUse	LotAcreage	2.14	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,000.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	VendorTripLength	7.30	1.00
tblTripsAndVMT	WorkerTripLength	12.40	1.00
tblTripsAndVMT	WorkerTripLength	12.40	1.00
tblTripsAndVMT	WorkerTripLength	12.40	1.00
tblTripsAndVMT	WorkerTripLength	12.40	1.00
tblTripsAndVMT	WorkerTripLength	12.40	1.00
tblTripsAndVMT	WorkerTripLength	12.40	1.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.6838	3.1896	2.5861	2.9400e-003	0.5270	0.1880	0.7150	0.2828	0.1749	0.4577	0.0000	266.5663	266.5663	0.0696	0.0000	268.0274
2018	0.5813	0.2905	0.2658	4.1000e-004	1.0100e-003	0.0181	0.0191	2.7000e-004	0.0173	0.0176	0.0000	36.3531	36.3531	8.0500e-003	0.0000	36.5222
Total	1.2651	3.4801	2.8518	3.3500e-003	0.5280	0.2061	0.7341	0.2830	0.1922	0.4753	0.0000	302.9194	302.9194	0.0776	0.0000	304.5495

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2017	2/28/2017	5	42	
2	Grading	Grading	3/1/2017	4/30/2017	5	43	
3	Trenching	Trenching	5/1/2017	5/31/2017	5	23	
4	Building Construction	Building Construction	6/1/2017	9/30/2017	5	87	
5	Architectural Coating	Architectural Coating	10/1/2017	5/31/2018	5	174	
6	Paving	Paving	6/1/2018	6/30/2018	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 21.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 250,284; Non-Residential Outdoor: 83,428 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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Architectural Coating	Air Compressors	1	6.00	78	0.48
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	1	3.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	1,000.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	109.00	42.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	22.00	0.00	0.00	1.00	1.00	1.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3794	0.0000	0.3794	0.2085	0.0000	0.2085	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.0868	0.8273	8.2000e-004		0.0578	0.0578		0.0532	0.0532	0.0000	76.2623	76.2623	0.0234	0.0000	76.7530
Total	0.1016	1.0868	0.8273	8.2000e-004	0.3794	0.0578	0.4372	0.2085	0.0532	0.2618	0.0000	76.2623	76.2623	0.0234	0.0000	76.7530

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5600e-003	0.0165	0.0779	3.0000e-005	4.3000e-004	1.1000e-004	5.4000e-004	1.2000e-004	1.0000e-004	2.2000e-004	0.0000	2.4272	2.4272	4.0000e-005	0.0000	2.4280
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	3.1000e-004	3.8700e-003	0.0000	2.8000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.3041	0.3041	2.0000e-005	0.0000	0.3045
Total	5.5000e-003	0.0168	0.0818	3.0000e-005	7.1000e-004	1.1000e-004	8.3000e-004	2.0000e-004	1.0000e-004	3.0000e-004	0.0000	2.7313	2.7313	6.0000e-005	0.0000	2.7325

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Fugitive Dust					0.1409	0.0000	0.1409	0.0724	0.0000	0.0724	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0743	0.7736	0.5457	6.4000e-004		0.0438	0.0438		0.0403	0.0403	0.0000	59.3651	59.3651	0.0182	0.0000	59.7471
Total	0.0743	0.7736	0.5457	6.4000e-004	0.1409	0.0438	0.1847	0.0724	0.0403	0.1127	0.0000	59.3651	59.3651	0.0182	0.0000	59.7471

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-004	2.6000e-004	3.3000e-003	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.2594	0.2594	2.0000e-005	0.0000	0.2598
Total	8.0000e-004	2.6000e-004	3.3000e-003	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.2594	0.2594	2.0000e-005	0.0000	0.2598

3.4 Trenching - 2017

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Off-Road	3.6300e-003	0.0349	0.0274	4.0000e-005		2.6200e-003	2.6200e-003		2.4100e-003	2.4100e-003	0.0000	3.3069	3.3069	1.0100e-003	0.0000	3.3282
Total	3.6300e-003	0.0349	0.0274	4.0000e-005		2.6200e-003	2.6200e-003		2.4100e-003	2.4100e-003	0.0000	3.3069	3.3069	1.0100e-003	0.0000	3.3282

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	3.0000e-005	3.5000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0278	0.0278	0.0000	0.0000	0.0278
Total	9.0000e-005	3.0000e-005	3.5000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0278	0.0278	0.0000	0.0000	0.0278

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1350	1.1487	0.7886	1.1700e-003		0.0775	0.0775		0.0728	0.0728	0.0000	104.1734	104.1734	0.0256	0.0000	104.7118
Total	0.1350	1.1487	0.7886	1.1700e-003		0.0775	0.0775		0.0728	0.0728	0.0000	104.1734	104.1734	0.0256	0.0000	104.7118

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0135	0.0531	0.1950	9.0000e-005	1.6600e-003	4.2000e-004	2.0700e-003	4.8000e-004	3.8000e-004	8.6000e-004	0.0000	7.7530	7.7530	9.0000e-005	0.0000	7.7550
Worker	0.0118	3.8800e-003	0.0486	5.0000e-005	3.5200e-003	6.0000e-005	3.5900e-003	9.4000e-004	6.0000e-005	1.0000e-003	0.0000	3.8139	3.8139	2.8000e-004	0.0000	3.8198
Total	0.0253	0.0570	0.2435	1.4000e-004	5.1800e-003	4.8000e-004	5.6600e-003	1.4200e-003	4.4000e-004	1.8600e-003	0.0000	11.5670	11.5670	3.7000e-004	0.0000	11.5747

3.6 Architectural Coating - 2017
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3250					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.0710	0.0607	1.0000e-004		5.6300e-003	5.6300e-003		5.6300e-003	5.6300e-003	0.0000	8.2981	8.2981	8.8000e-004	0.0000	8.3165
Total	0.3358	0.0710	0.0607	1.0000e-004		5.6300e-003	5.6300e-003		5.6300e-003	5.6300e-003	0.0000	8.2981	8.2981	8.8000e-004	0.0000	8.3165

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7800e-003	5.8000e-004	7.3200e-003	1.0000e-005	5.3000e-004	1.0000e-005	5.4000e-004	1.4000e-004	1.0000e-005	1.5000e-004	0.0000	0.5751	0.5751	4.0000e-005	0.0000	0.5760
Total	1.7800e-003	5.8000e-004	7.3200e-003	1.0000e-005	5.3000e-004	1.0000e-005	5.4000e-004	1.4000e-004	1.0000e-005	1.5000e-004	0.0000	0.5751	0.5751	4.0000e-005	0.0000	0.5760

3.6 Architectural Coating - 2018
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Archit. Coating	0.5450					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0163	0.1093	0.1011	1.6000e-004		8.2100e-003	8.2100e-003		8.2100e-003	8.2100e-003	0.0000	13.9153	13.9153	1.3200e-003	0.0000	13.9430
Total	0.5613	0.1093	0.1011	1.6000e-004		8.2100e-003	8.2100e-003		8.2100e-003	8.2100e-003	0.0000	13.9153	13.9153	1.3200e-003	0.0000	13.9430

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	2.7500e-003	8.8000e-004	0.0111	1.0000e-005	8.9000e-004	2.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.9286	0.9286	6.0000e-005	0.0000	0.9300
Total	2.7500e-003	8.8000e-004	0.0111	1.0000e-005	8.9000e-004	2.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.9286	0.9286	6.0000e-005	0.0000	0.9300

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0169	0.1802	0.1522	2.3000e-004		9.8600e-003	9.8600e-003		9.0700e-003	9.0700e-003	0.0000	21.3872	21.3872	6.6600e-003	0.0000	21.5270
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0169	0.1802	0.1522	2.3000e-004		9.8600e-003	9.8600e-003		9.0700e-003	9.0700e-003	0.0000	21.3872	21.3872	6.6600e-003	0.0000	21.5270

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	1.2000e-004	1.4500e-003	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1220	0.1220	1.0000e-005	0.0000	0.1222
Total	3.6000e-004	1.2000e-004	1.4500e-003	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1220	0.1220	1.0000e-005	0.0000	0.1222

Marriott Residence & Fairfield Inn, San Jose, CA

Marriott Residence & Fairfield Inn, San Jose, CA

DPM Construction Emissions and Modeling Emission Rates - Unmitigated

PM2.5 Fugitive Dust Construction Emissions for Modeling - Unmitigated

Construction Year	Activity	DPM (ton/year)	Area Source	DPM Emissions			Modeled Area (m ³)	DPM Emission Rate (g/s/m ²)
				(lb/yr)	(lb/hr)	(g/s)		
2017	Construction	0.1749	1_DPM	349.8	0.10648	1.34E-02	32,264	4.16E-07
2018	Construction	0.0173	1_DPM	34.6	0.01053	1.33E-03	32,264	4.11E-08
Total		0.1922		384	0.1170	0.0147		

Construction Year	Activity	Area Source	PM2.5 Emissions				Modeled Area (m ³)	PM2.5 Emission Rate (g/s/m ²)
			(ton/year)	(lb/yr)	(lb/hr)	(g/s)		
2017	Construction	1_FUG	0.2828	565.6	0.17218	2.17E-02	32,264	6.72E-07
2018	Construction	1_FUG	0.0003	0.6	0.00018	2.30E-05	32,264	7.13E-10
Total			0.2831	566.2	0.1724	0.0217		

Construction Hours	
hr/day =	9 (7am - 4pm)
days/yr =	365
hours/year =	3285

Construction Hours	
hr/day =	9 (7am - 4pm)
days/yr =	365
hours/year =	3285

Marriott Residence & Fairfield Inn, San Jose, CA - Project Construction Health

Maximum Impacts at Off-Site Residences

Construction Year	Unmitigated					
	Maximum Concentrations		Cancer Risk (per million)		Hazard Index	Maximum Annual PM2.5 Concentration
	Exhaust PM2.5/DPM (µg/m ³)	Fugitive PM2.5 (µg/m ³)	Child	Adult	(-)	(µg/m ³)
2017	0.0325	0.0588	5.33	0.09	0.006	0.091
2018	0.0032	0.0001	0.53	0.01	0.001	0.003
Total	-	-	5.9	0.1	-	-
Maximum Annual	0.0325	0.0588	-	-	0.006	0.091

Marriott Residence & Fairfield Inn, San Jose, CA - Construction Impacts - Unmitigated Emissions

Maximum DPM Cancer Risk Calculations From Construction

Off-Site Residential Receptor Locations - 1.5 meters

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
 ASF = Age sensitivity factor for specified age group
 ED = Exposure duration (years)
 AT = Averaging time for lifetime cancer risk (years)
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

Where: C_{air} = concentration in air (µg/m³)
 DBR = daily breathing rate (L/kg body weight-day)
 A = Inhalation absorption factor
 EF = Exposure frequency (days/year)
 10⁻⁶ = Conversion factor

Values

Age --> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Infant/Child - Exposure Information				Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Fugitive PM2.5	Total PM2.5	
		Age	DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled	Age Sensitivity Factor	Adult Cancer Risk (per million)			
			Year	Annual								Year
0	0.25	-0.25 - 0*	-	0.0000	10	-	-	-	-	-	-	
1	1	0 - 1	2017	0.0325	10	5.33	2017	0.0325	1	0.09	0.0588	0.091
2	1	1 - 2	2018	0.0032	10	0.53	2018	0.0032	1	0.01	0.0001	0.003
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00		
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00		
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00		
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00		
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00		
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00		
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00		
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00		
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00		
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00		
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00		
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00		
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00		
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00		
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00		
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00		
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00		
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00		
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00		
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00		
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00		
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00		
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00		
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00		
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00		
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00		
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00		
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00		
Total Increased Cancer Risk						5.9				0.10		

* Third trimester of pregnancy

APPENDIX G

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



August 22, 2017

Amie Ashton
Davis J Powers and Associates

Email to: aashton@davidjpowers.com

RE: America Center Phase III, Santa Clara County

Dear Ms. Ashton,

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not preclude the presence of cultural resources in any project area. Other sources for cultural resources should also be contacted for information regarding known and/or recorded sites.

Enclosed is a list of Native Americans tribes who may have knowledge of cultural resources in the project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at frank.lienert@nahc.ca.gov.

Sincerely,

Frank Lienert
Associate Governmental Program Analyst

**Native American Heritage Commission
Native American Contacts
8/22/2017**

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
P.O. Box 5272
Galt, CA 95632
vlopez@amahmutsun.org
(916) 743-5833

Ohlone/Costanoan
Northern Valley Yokuts

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA 95024
ams@indiancanyon.org
(831) 637-4238

Ohlone/Costanoan

Amah Mutsun Tribal Band of Mission San Juan Bautista
Irene Zwieler, Chairperson
789 Canada Road
Woodside, CA 94062
amahmutsuntribal@gmail.com
(650) 851-7489 Cell
(650) 851-7747 Office
(650) 332-1526 Fax

Ohlone/Costanoan

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden, CA 95236
canutes@verizon.net
(209) 887-3415

Ohlone/Costanoan
Northern Valley Yokuts
Bay Miwok

Muwekma Ohlone Indian Tribe of the SF Bay Area
Rosemary Cambra, Chairperson
P.O. Box 360791
Milpitas, CA 95036
muwekma@muwekma.org
(408) 314-1898
(510) 581-5194

Ohlone / Costanoan

The Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3152
Fremont, CA 94539
chochenyo@AOL.com
(510) 882-0527 Cell
(510) 687-9393 Fax

Ohlone/Costanoan
Bay Miwok
Plains Miwok
Patwin

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessments for the proposed **America Center Phase III, Santa Clara County**

SECTION 5.0 DRAFT EIR COMMENT LETTERS

The original comment letters received on the Draft Subsequent EIR are provided on the following pages.

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D
OAKLAND, CA 94623-0660
PHONE (510) 286-5528
FAX (510) 286-5559
TTY 711
www.dot.ca.gov



*Making Conservation
a California Way of Life.*

July 26, 2017

04-SCL-2016-00213
SCL/237/PM R6.0
SCH# 2016092066

Ms. Krinjal Mathur
Department of Planning
City of San Jose
200 E. Santa Clara Street, Tower 3
San Jose, CA 95113

Dear Ms. Mathur:

America Center Phase III Project – Draft Subsequent Environmental Impact Report

Thank you for continuing to include the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced project. In tandem with the Metropolitan Transportation Commission's (MTC) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), Caltrans new mission signals a modernization of our approach to evaluating and mitigating impacts to the State Transportation Network (STN). Caltrans Strategic Management Plan aims to reduce vehicle miles traveled (VMT) by tripling bicycle and doubling both pedestrian and transit travel by 2020. Our comments are based on the Draft Subsequent Environmental Impact Report (SEIR). Please also refer to the previous comment letter on this project and incorporated herein.

Project Understanding

The proposed project is located approximately 100 feet north on America Center Drive from State Route (SR) 237 on Rural Fringe/Undeveloped Land (Caltrans *Smart Mobility 2010: A Call to Action for the New Decade*, Project Type 5). It would increase the total allowed commercial office/research and development (R&D) square footage at the site by 190,000 square feet (sq. ft.), from 900,000 to 1,090,000 sq. ft.

Up to 10 percent of the commercial office/R&D space could be occupied by retail or personal service uses incidental to the commercial office/R&D space. The proposed 192,350-square-foot, six-story office building would be located northwest of the existing hotel and would be the fifth office building on the site. A five-level parking structure with an approximately 6,000-square-foot retail/personal service (on-site amenity) space, such as a café, are also proposed. Thus an additional 160,112 sq. ft. is being requested for the site as part of the permit.

Lead Agency

As the lead agency, the City of San Jose (City) is responsible for all project mitigation, including any needed improvements to the STN and for VMT reduction. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Transportation Impact Fees

Caltrans commends the inclusion of a fair share fee payment towards improvements to the Great America Parkway/SR 237 intersection, to be paid to the City of San Jose Public Works Depositors Fund. The DEIR states the Director of Public Works shall determine the fair share based on the cost of the improvement at the time the payment is due and the project's contribution to the impact (typically based on a 25 percent contribution of traffic or more to the cumulative impact). However, in a VTA Board Memorandum dated February 4, 2014, subject "Update on Voluntary Contributions to Transportation Improvements" this project was committed to contribute \$1,000,000 to the SR 237 Express Lanes Project Phase II or improvements to SR 237/Great America interchange through the VTA's Voluntary Contribution Program.

Please clarify whether:

- These are two separate fair share commitments to the SR 237/Great America interchange improvements; and
- The City is still committed to the \$1,000,000 contribution amount referred to in the VTA memo.

The proposed mitigation measure to add a third left-turn lane to the intersections at the westbound approach of the SR 237 off-ramp requires an additional receiving lane at the southbound Great America Parkway undercrossing which should be included with this mitigation. Caltrans encourages a sufficient allocation of fair share contributions toward multi-modal and regional transit improvements to fully mitigate cumulative impacts to regional transportation. Also, Caltrans strongly supports measures to increase sustainable mode shares, thereby reducing VMT.

Travel Demand Analysis

Please submit a travel demand analysis that provides VMT resulting from the proposed project. With the enactment of Senate Bill (SB) 743, Caltrans is focusing on transportation infrastructure that supports smart growth and efficient development to ensure alignment with State policies through the use of efficient development patterns, innovative travel demand reduction strategies, multimodal improvements, and VMT as the primary transportation impact metric. For projects reviewed under the California Environmental Quality Act (CEQA), Caltrans uses VMT as the metric for evaluating transportation impacts and mitigation. Additionally, the CEQA Guidelines Section 15206(b) requires the SEIR for this project be circulated to the Metropolitan Planning Organization (MPO) because of the project's regional and areawide significance.

Please ensure that the travel demand analysis includes:

1. A vicinity map, regional location map, and site plan clearly showing project access in relation to nearby State roadways. Ingress and egress for all project components should be clearly identified. Clearly identify the State right-of-way (ROW). Project driveways, local roads and intersections, car/bike parking, and transit facilities should be mapped.
2. A VMT analysis pursuant to the City's guidelines or, if the City has no guidelines, the Office of Planning and Research's Draft Guidelines. Projects that result in automobile VMT per capita greater than 15% below existing (i.e. baseline) city-wide or regional values for similar land use types may indicate a significant impact.
3. Mitigation for increasing VMT, which should be identified and mitigated in a manner that does not further raise VMT. Mitigation may include contributions to the Santa Clara Valley Transportation Authority's (VTA) latest Valley Transportation Plan (VTP) and should support the use of transit and active transportation modes. Potential mitigation measures that include the requirements of other agencies such as Caltrans are fully enforceable through permit conditions, agreements, or other legally-binding instruments under the control of the City.
4. Schematic illustrations of walking, biking and auto traffic conditions at the project site and study area roadways, trip distribution percentages and volumes as well as intersection geometrics (i.e., lane configurations for AM and PM peak periods). Operational concerns for all road users that may increase the potential for future collisions should be identified and fully mitigated in a manner that does not further raise VMT.

Vehicle Trip Reduction

Caltrans commends the City on this project's Transportation Demand Management (TDM) program, thereby reducing VMT. Transportation Demand Management programs should be documented with annual monitoring reports by an onsite TDM coordinator to demonstrate effectiveness. If the project does not achieve the VMT reduction goals, the reports should also include next steps to take in order to achieve those targets. Caltrans also recommends membership in a transportation management association (TMA) for this project.

Improvements to Pedestrian and Bicycle Access: The SEIR states on page 159, "It is assumed that only a small number of employees of Building 5 would utilize existing transit services due the long walking distance and lack of pedestrian facilities linking the project site to transit facilities. In addition, the ACE shuttle provides only four scheduled runs during the morning and evening commute hours." This statement necessitates:

- Project improvements to pedestrian and bicycle access to and from the project site, to encourage active transportation modes and reduce VMT. This includes closing gaps in the pedestrian and bicycle networks, such as missing crosswalks on the east side of the intersections for both the eastbound (EB) and westbound on- and off-ramps of SR 237 and Great American Parkway as part of the improvements to pedestrian access of the site, as well

as providing continuous bike lanes along Great American Parkway across SR 237 to connect to the existing bike lanes further south. There is currently no way for pedestrians to cross the on- and off-ramps of SR 237 on the northbound side of Great American Parkway.

- Analysis of secondary impacts on pedestrians and bicyclists that may result from any traffic impact mitigation measures and describe any pedestrian and bicycle mitigation measures and safety countermeasures that would therefore be needed as a means of maintaining and improving access to transit facilities and reducing traffic impacts to state highways.
- Reduction in the number of the proposed 3,610 parking spaces, which is more than is required by the City. Caltrans supports reductions in parking supply to encourage active transportation and transit use, thereby reducing regional VMT and lessen future traffic impacts on SR 237 and the STN. Please consider instead using, if available, the parking facilities at the Santa Clara Convention Center, Levi's Stadium, and other such special event venues. For sample parking ratios and strategies that support compact growth, please refer to "Reforming Parking Policies to Support Smart Growth," an MTC study funded by Caltrans.
- Decreased headway times and improved way-finding on bus lines by working closely with the VTA and ACE to provide a better connection between the project, the Great America Station, and regional destinations.

These smart growth approaches are consistent with the MTC's RTP/SCS goals and would meet Caltrans Strategic Management Plan sustainability goals.

Reducing VMT to Reduce Queuing: Please remove from the SEIR and the TIA the following statement, "...such as shutting off the ramp meters when vehicular queues extend back onto the arterials" (see SEIR p. 164, second paragraph, and TIA p. 51, sixth paragraph) as this statement is incorrect and is not Caltrans' standard practice nor is it based on technical analysis. Also, Caltrans is concerned with the ability to contain left-turning vehicles within the available storage. A spillover of vehicles has the potential to create significant speed differentials and increase the number of conflicts. Another concern is the potential for queuing vehicles to encroach up on the upstream intersection, again creating the potential for significant conflict. CEQA does not exempt these types of operational concerns from evaluation. Reduction of VMT is a means to reduce queuing and queuing concerns.

TIA, Table 14: Please correct the calculations for the study freeway on-ramp locations and update the assessment in the TIA and the SEIR accordingly, as the freeway ramp queue length information for the Project Conditions in Table 14 of the TIA appears flawed. For example, the EB SR 237 Great America Parkway diagonal on-ramp, the queuing effect of the additional PM peak hour trips of 93 vehicles will need to be added to the wait time of the Existing Conditions of 9 minutes, 16 seconds. The table shows Project Condition wait time to be 10 minutes, 23 seconds, which does not seem to account for the existing conditions.

Design

Concerning Section 3.6.1.2 Existing Conditions (pp. 83-84), Caltrans recommends the following be included in the SEIR:

- The depth of the groundwater below the ground surface.
- The thickness of the non-liquefiable materials in the landfill.
- Bay mud, which is most likely encountered in subsurface materials, is one of the main causes of settlement and subsidence.

Cultural Resources

As noted in Section 3.4.1.2 of the SEIR on page 68, the project area is extremely sensitive for archaeological sites. To demonstrate that the project has no potential to cause a significant impact to submerged or buried historical resources, Caltrans recommends that Section 3.4.1.2 provide a detailed analysis comparing the depth of proposed impacts to the known depth of the artificial fill. Additionally, Caltrans recommends that the City conduct a records search at the Northwest Information Center of the California Historical Resources Information System (CHRIS). It is the general professional standard to include such background research to identify cultural resources and to update the CHRIS records search at least of every five years.

There is no Native American consultation referenced in the SEIR. Pursuant to CEQA and Assembly Bill (AB) 52, Caltrans recommends that the City conduct Native American consultation with tribes, groups, and individuals who are interested in the project area and may have knowledge of Tribal Cultural Resources or other sacred sites.

If an encroachment permit is needed for work within Caltrans ROW, we may require that cultural resource technical studies be prepared in compliance with CEQA, Public Resources Code (PRC) 5024, and the Caltrans Standard Environmental Reference (SER) Chapter 2 (www.dot.ca.gov/ser/vol2/vol2.htm). Should ground-disturbing activities take place within Caltrans ROW and there is an inadvertent archaeological or burial discovery, in compliance with CEQA, PRC 5024.5, and the SER, all construction within 60 feet of the find shall cease and the Caltrans District 4 Office of Cultural Resource Studies (OCRS) shall be immediately contacted at (510) 622-1673

Traffic Control Plan

A Caltrans-approved Traffic Control Plan (TCP) is required to avoid project-related impacts to the State Transportation Network (STN), if it is anticipated that vehicular, bicycle, and pedestrian traffic will be impacted during the construction of the proposed project requiring traffic restrictions and detours. The TCP must also comply with the requirements of corresponding jurisdictions.

In addition, pedestrian access through the construction zone must be in accordance with the Americans with Disabilities Act (ADA) regulations (see Caltrans *Temporary Pedestrian Facilities Handbook* for maintaining pedestrian access and meeting ADA requirements during construction at:

www.dot.ca.gov/hq/construc/safety/Temporary_Pedestrian_Facilities_Handbook.pdf) (see also

Caltrans Traffic Operations Policy Directive 11-01 “Accommodating Bicyclists in Temporary Traffic Control Zones” at: www.dot.ca.gov/trafficops/policy/11-01.pdf). All curb ramps and pedestrian facilities located within the limits of the project are required to be brought up to current ADA standards as part of this project.

For further TCP assistance, please contact the Caltrans District 4 Office of Traffic Management Operations at (510) 286-4579. Further transportation management information is available at the following website: www.dot.ca.gov/hq/traffops/trafingmt/tmp_lcs/index.htm.

Sea Level Rise

The effects of sea level rise may have impacts on transportation facilities located in the project area. Executive Order (EO) S-13-08 directs State agencies to plan for potential impacts by considering a range of sea level rise scenarios for the years 2050 and 2100. Higher water levels may increase erosion rates, change environmental characteristics that affect material durability, lead to increased groundwater levels and change sediment movement along shores and at estuaries and river mouths, as well as affect soil pore pressure at dikes and levees on which transportation facilities are constructed. All these factors must be addressed through geotechnical and hydrological studies conducted in coordination with Caltrans.

Transportation Permit

Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, a completed transportation permit application with the determined specific route(s) for the shipper to follow from origin to destination must be submitted to: Caltrans Transportation Permits Office, 1823 14th Street, Sacramento, CA 95811-7119. See the following website for more information: www.dot.ca.gov/hq/traffops/permits.

Encroachment Permit

Please be advised that any ingress-egress, work (e.g., construction, vegetation management, drainage improvement, etc.), staging, storage, or traffic control that is conducted within or adjacent to or encroaches upon the State ROW requires an encroachment permit that is issued by Caltrans. Where construction related traffic restrictions and detours affect the STN, a TMP or construction Transportation Impact Analysis (TIA) may be required. Traffic-related mitigation measures should be incorporated into the construction plans prior to the encroachment permit process.

To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW as well as any applicable specifications, calculations, maps, etc. must be submitted to the following address: David Salladay, District Office Chief, Office of Permits, California Department of Transportation, District 4, P.O. Box 23660, Oakland, CA 94623-0660. It is important to note that, in order to uphold the Caltrans statutory responsibility to protect the safety of the traveling public, if this information is not adequately provided, then a permit will not be issued for said encroachments. See the following website for more information: www.dot.ca.gov/hq/traffops/developserv/permits.

Ms. Krinjal Mathur/City of San Jose
July 26, 2017
Page 7

Should you have any questions regarding this letter, please contact Brian Ashurst at (510) 286-5505 or brian.ashurst@dot.ca.gov.

Sincerely,



PATRICIA MAURICE
District Branch Chief
Local Development - Intergovernmental Review

c: Scott Morgan, State Clearinghouse – electronic copy
Robert Swierk, VTA – electronic copy



July 26, 2017

City of San Jose
Department of Planning and Building
200 East Santa Clara Street
San Jose, CA 95113

Attention: Krinjal Mathur

Subject: America Center Phase III

Dear Ms. Mathur:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the Draft Subsequent EIR (Draft SEIR) to increase the amount of Commercial Office/R&D area for a site on America Center Drive, north of SR 237. We have the following comments.

Pedestrian and Bicycle Accommodations

The Highway 237 Bikeway is a well-used bicycle commuter route that connects Milpitas and Alameda County to San Jose, Santa Clara, Sunnyvale, Mountain View, and Palo Alto. It serves numerous employment sites, including North San Jose, Moffet Park in Sunnyvale, and North Bayshore in Mountain View. Traffic counts provided in the TIA recorded 33 bicyclists using the Highway 237 Bikeway along the Gold Street Connector during a two-hour morning period in January 2015. VTA recommends that any modifications to the transportation network in the vicinity of the bikeway maintain or improve conditions for bicyclists.

The Draft SEIR and TIA note that the proposed mitigation measure at the Lafayette Street/Gold Street Connector intersection (TRA-1) would require the relocation of the Highway 237 Bikeway, south of the Gold Street Connector (Draft SEIR p. 158 and TIA p. 39). VTA notes that per Section 10.1 of the VTA Transportation Impact Analysis (TIA) Guidelines, "Mitigation measures for Auto Level of Service (LOS) shall not unreasonably degrade bicycle, pedestrian or transit access, and circulation. If a project proposes mitigation for Auto LOS involving a change to existing roadway or intersection geometry, or changes to signal operations, the TIA shall analyze and disclose secondary effects on other modes" (p. 50). In addition, VTA notes that the City of San Jose's Council Transportation Impact Policy 5-3 states that "an LOS Traffic Improvement has an unacceptable impact if the TIA demonstrates that the improvement would result in a physical reduction in the capacity and/or a substantial deterioration in the quality (aesthetic or otherwise) of any other planned or existing transportation facilities (such as pedestrian, bicycle and transit systems and facilities)" (p. 4).

VTA notes that neither the TIA nor Draft SEIR contain an analysis of the secondary effects of proposed Mitigation Measure TRA-1, beyond stating that it would require the relocation of the Highway 237 Bikeway - for instance, whether the measure would result in increased crossing distances, longer signal cycles, removal of the grass/landscape buffer between the Highway 237 Bikeway and Gold Street Connector, or other effects. VTA requests that the City provide such an analysis in the Final SEIR, and design this mitigation measure in a way that that would maintain or enhance pedestrian and bicycle conditions at this location. VTA also requests that the City work with the applicant to correct the sub-standard bicycle/pedestrian crossing of the Union Pacific Railroad tracks along Gold Street Connector when pursuing this automobile mitigation measure. Additionally, VTA recommends that the City of San Jose work with the City of Santa Clara and Caltrans to explore other improvements to bicycle and pedestrian conditions on the stretch of Lafayette Street between Gold Street Connector and Great America Way, which is a critical connection between portions of the Highway 237 Bikeway.

VTA recommends fully disclosing the impacts of the temporary relocation the 237 Bikeway trail along the Gold Street Connector associated with Mitigation Measure TRA-1. VTA requests that a proposed routing be provided in the Final SEIR. Relocating this trail, even if temporarily, may cause significant delays to pedestrians and bicycles.

The Draft SEIR and TIA note in Mitigation Measure TRA (C)-1.2 that “Prior to Public Works Clearance, the project applicant shall pay a fair share amount towards improvements to the Great America Parkway/State Route 237 intersection. Improvements would include the addition of a third left-turn lane and second right-turn lane to the westbound approach to the intersection (SR 237 offramp)” (Draft SEIR p. 181 and TIA p. 46). While VTA recognizes that this was an identified mitigation measure in the City of Santa Clara’s EIR for the approved City Place development, VTA is concerned about potential secondary impacts to pedestrian and bicycle safety of this mitigation measure for Auto LOS. VTA requests that the City of San Jose analyze the secondary effects of this mitigation measure per VTA TIA Guidelines Section 10.1 and Council Policy 5-3, and work with the City of Santa Clara and Caltrans to explore alternative improvements that would maintain or enhance pedestrian and bicycle safety at this location.

Bus Service

In VTA’s 2018 Transit Service Plan, a new Line 59 will be operating on Gold Street, between Great America Way and Taylor Street. The bus stops are expected to be located less than ¼ mile from the project boundary, at the intersection of Gold Street and Sunrise Drive. The northbound stop will be located in front of the Alviso Outdoor Classroom and the southbound bus stop will be located directly across from the northbound bus stop. An additional pair of bus stops are expected to be located just south of the Extended Stay America hotel. VTA recommends convenient and accessible pathways between project facilities and the bus stops, including a marked pedestrian crossing on Gold Street.

For more information on VTA bus stops, please email bus.stop@vta.org

Freeway Impacts

The Draft SEIR discloses that the project will have Significant Impacts on mixed-flow lanes on four of the 12 directional freeway segments analyzed, and on HOV lanes on one of the segments analyzed. The Draft SEIR states that “There are no feasible mitigation measures available to reduce impacts on local freeway study segments to less than significant level as it is beyond the capacity of any one project to acquire right-of-way and add lanes to a state freeway. Furthermore, no comprehensive project to increase freeway capacity on SR 237 has been developed by Caltrans or VTA. Though VTA has Voluntary Mitigation Programs for impacts along 237, there are no specifically identified improvement projects to which to pay fair share fees.” (SDEIR p. 159)

VTA notes that the implementation of certain projects in the latest Valley Transportation Plan (VTP), such as SR 237 Express Lanes Phase II and SR 237 Auxiliary Lanes east of Zanker, would provide operational and efficiency improvements to SR 237 that would help mitigate the identified impacts. VTA notes that certain cities in Santa Clara County have identified contributions to Express Lanes and other regional improvements as mitigation measures for significant freeway impacts. VTA also notes that voluntary contributions to regional transportation improvements can be included as mitigation measures in CEQA documents even in the absence of a comprehensive funding strategy as described. VTA recommends that the City work with the project sponsor to provide Voluntary Contributions based on the latest Valley Transportation Plan (VTP) projects in the project area, such as SR 237 Express Lanes Phase II and SR 237 Auxiliary Lanes east of Zanker Road.

CMP Intersection Impact and Transit Vehicle Delay

The Draft SEIR notes additional project-generated traffic in the Background Plus Project Conditions Table 3.13-2 at Great America Parkway/Tasman Drive. Upon reviewing both the TIA and the SDEIR, VTA noted an error in the SDEIR Background Plus Project Conditions Table 3.13-2. The LOS for Great America Parkway/Tasman Drive is displayed as F in the Draft SEIR; however with 76.5 second of average delay, this should correctly be displayed as LOS E-.

The Draft SEIR documents existing transit routes as required by the VTA TIA Guidelines (Section 9.2), but neither the Draft SEIR nor TIA include any transit delay analysis for light rail, only bus routes serving the surrounding area. VTA requests that the City provide an appropriate Transit Delay Analysis in a revised TIA or in the Final SEIR, as required by VTA TIA Guidelines Section 9.2. Great America Parkway/Tasman Drive, Calle Del Sol/Tasman Drive and Lick Mill Boulevard/Tasman Drive are critical intersections for maintaining travel times and schedule reliability on the light rail system; therefore it is important for the lead Agency to

analyze the effect of this congestion on light rail delay through these intersections, as well as any other study intersection through which light rail vehicles travel.

VTA recommends that the City work with VTA to identify appropriate measures to offset increased delay on transit vehicles (consistent with VTA TIA Guidelines Section 10.2). These measures may include improvements to transit signal priority or other measures to speed up light rail service, or improvements to transit stops and passenger amenities (such as those identified in VTA's Light Rail Enhancements project or Tasman Corridor Complete Streets Study).

Transportation Demand Management/Trip Reduction

VTA commends the City for including a comprehensive TDM program to address the Significant Unavoidable Impacts identified as Mitigation Measure AIR1-1 under Air Quality. However, the description of the project's TDM program are inconsistent between portions of the Draft SEIR. In Section 2.2.5 under Project Description, the text states that the proposed TDM program may include many implementation measures, including but not limited to EcoPass for all employees who ride VTA transit service, a 25% transit subsidy for other transit operators (such as ACE or Capitol Corridor) and a free "Last Mile" shuttle connecting the development to (Caltrain, Amtrak and ACE) (Draft SEIR p. 16). Elsewhere in the Draft SEIR, MM AIR 1-1 states that "the project applicant shall implement the following measures... Provide shuttle bus service to the Tasman/Lafayette light rail and Altamont Corridor Express (ACE) rail system" (Draft SEIR p. 46). It is unclear whether the shuttle service documented in Draft SEIR will be required or merely an option, and whether it will include links to VTA's Light Rail corridor.

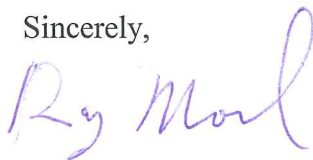
VTA recommends that the City require the developer to contribute to additional ACE Shuttle Service operations costs, or provides additional service to supplement the existing ACE Green Shuttle, in lieu of operating a stand-alone shuttle. Such service would provide connections to regional rail service (ACE, Capitol Corridor) and VTA Light Rail.

VTA recommends that the TDM program implementation measures be documented in the Draft SEIR and included as enforceable Conditions of Approval of the project. VTA notes that such programs can be more effective when they include a vehicle trip reduction target, third-party monitoring of trip generation upon Project completion and a Lead Agency enforcement/penalty structure.

City of San Jose
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Thank you for the opportunity to review this project. If you have any questions, please call me at (408) 321-5784.

Sincerely,



Roy Molseed
Senior Environmental Planner

cc: Michael Liw, San Jose Development Services
Patricia Maurice, Caltrans
Brian Ashurst, Caltrans

SJ1525



July 26, 2017

via email

Krinjal Mathur, Environmental Planner
City of San José Department of Planning, Building, & Code Enforcement
krinjal.mathur@sanjoséca.gov

Re: America Center Phase III Project

The Santa Clara Valley Audubon Society (SCVAS) was founded in 1926, and with over 2,000 members, is one of the largest National Audubon Society chapters in California. Our organization promotes the enjoyment, understanding, and protection of birds and other wildlife by engaging people of all ages in birding, education, and conservation. We submit the following comments on the America Center Phase III Project.

1. The project is within the Santa Clara Valley Habitat Plan (VHP) expanded study area for burrowing owl conservation. Please describe exactly how the project would comply with the VHP. Please describe in detail what fees are to be paid to the VHP, and how the fees are calculated.

The Project should pay fees for Nitrogen Deposition since it is likely to contribute cumulatively to regional Nitrogen emissions (both through direct new trips and by contributing to traffic congestion on Hwy. 237 and beyond), as recognized by the SEIR as a significant, unavoidable impact.

2. The project analysis is segmented in time and space, as evident from the Project description “The project site is part of the approved America Center Project site for which a traffic study was completed in 1999. The America Center project included 900,000 square feet (s.f.) of office space, a 175- room hotel, and 25,000 s.f. of commercial/retail space. A total of 420,094 sf of office space and the 175- room hotel has been constructed on the site. Two more buildings containing 431,668 sf of office space, 16,000 sf of amenity space, and an 830-space parking garage are currently under construction. The 25,000 s.f. of commercial/retail space was planned adjacent to the Guadalupe River, just west of the Union Pacific Railroad line which is now a separate zoning district approved as part of PDC15-016 in March 2016. Once the four office buildings are completed, there is 32,238 s.f. of remaining office/R&D space entitlement provided on the project site that will be used by the proposed project.”

An SEIR is not adequate to analyze the full impacts of this project - a new EIR based on a new baseline should be prepared.

Thank you,

Shani Kleinhaus, Ph.D.
Environmental Advocate

July 26, 2017

BY E-MAIL
Acknowledgement of Receipt Requested

Krinjal Mathur
Department of Planning, Building, and Code Enforcement
200 East Santa Clara St., 3rd Floor
San Jose, CA 95113
krinjal.mathur@sanjoseca.gov

**Re: Comments on Draft SEIR for America Center Phase III Project,
File Nos. PDC15-058 & PD15-053**

Dear Ms. Mathur:

Please accept the following comments on the Draft Subsequent Environmental Impact Report (“DSEIR”) referenced above, submitted on behalf of Organizacion Comunidad de Alviso (“OCA”). OCA is an unincorporated association of residents and property owners in the Alviso community of the City of San José. Its members will be directly affected by any adverse environmental impacts associated with the America Center Phase III Project (“Project”). Our comments and concerns are set forth below, organized by topic area.

1. Air pollutant modeling

The air pollutant modeling in Appendix B (CalEEMod) assesses only the unmitigated impacts of 1,090,000 sq. ft. of commercial space. No basis is provided for determining the emissions breakdown in DSEIR Table 2.2-4. For example, the public has no way to determine how the DSEIR determined the emissions associated with the hotel use. The public cannot determine how impacts were allocated between the approved 900,000 sq. ft. of commercial space and the proposed additional 190,000 sq. ft. of commercial space.

Furthermore, the modeling and the DSEIR fail to quantify the effect of proposed mitigation via Mitigation Measure AIR-1.1. The efficacy of mitigation should be demonstrated by quantifying it.

2. Impacts from emissions of toxic air contaminants

Construction of the Project will require numerous pieces of heavy diesel equipment, which are a substantial source of toxic air contaminants (“TACs”). The DSEIR dismisses TAC impacts from construction as less than significant without any actual analysis because it concludes that the nearest sensitive receptors are 950 feet away from the Project site. However, the BAAQMD CEQA Guidelines, which the DSEIR relies upon, recommend that the lead agency assess TAC risks to all receptors within 1,000 feet of a project. BAAQMD, CEQA Guidelines, 2017, p. 5-7. Furthermore, there appear to be sensitive receptors directly adjacent to the Project in the now separate development area identified as the River Commercial Area, including two hotels and the Alviso Youth Foundation Project. The DSEIR should provide a quantitative health risk assessment of construction TAC impacts following standard modeling protocols.

The DSEIR fails to evaluate cumulative health impacts from TAC emissions as required by CEQA. Instead, the DSEIR simply assumes that they will not be significant if other cumulative projects implement mitigation similar to what it calls “MM AQ-1.1.” DSEIR, p. 176. There *is* no “MM-AQ-1.1” identified in the DSEIR. There is a Mitigation Measure AIR-1.1, but that measure is intended to address NOx impacts, not TAC impacts. Furthermore, the point of cumulative analysis is to identify situations in which individually minor impact may still result in significant cumulative impacts. Thus, mitigation by individual projects does not ensure that there would be no cumulatively significant impact.

Here, the DSEIR acknowledges that air quality at the southern end of the Bay is already degraded compared to the rest of the Bay Area due to natural barriers and prevailing winds. It also acknowledges that one goal of the BAAQMD Clean Air Plan is to address regional disparities in air quality impacts. The Alviso community in particular suffers comparatively worse air quality than other locations in the Bay Area. Finally, the DSEIR admits that a number of construction projects adjacent to the Project site are scheduled to occur in the same time frame. DSEIR, p. 174.

For these reasons, a cumulative impact analysis of TAC emissions should be provided that assesses the risk from all projects that would contribute TACs to the same receptors affected by this Project.

3. Greenhouse gas (GHG) analysis fails to acknowledge unavoidably significant GHG impacts with respect to the City's mid-term 2030 to 2035 reduction target.

The DSEIR concludes the Project's GHG impact is less than significant. This conclusion is based on the Project's supposed compliance with the applicable mandatory measures in the City's GHG Reduction Strategy, adopted in 2015. However, the DSEIR acknowledges that the GHG Reduction Strategy does not contain measures to ensure that the City attains necessary GHG emission reductions from 2020 to 2035. Because of this, the City has found cumulative GHG impacts from its General Plan, including its GHG Reduction Strategy, to be significant and unavoidable for the 2020-2035 timeframe.

Given that the Project is not expected to be occupied until late 2019 (DSEIR, p. 173), and that its operational period may last another 50 years, the conclusion that this Project's GHG impacts will be less than significant merely because it implements mitigation needed to meet 2020 targets is simply misleading.

The DSEIR must be revised and recirculated to acknowledge that GHG impacts will in fact be significant. As discussed below, there are in fact additional feasible mitigation measures for GHG emissions, which the Project should be required to implement.

4. The GHG analysis fails to disclose and mitigate methane as a GHG.

The DSEIR's discussion of GHG impacts fails to provide either a quantitative or qualitative assessment of GHG sources. Although some quantification of CO₂E is provided by the air pollutant modeling in Appendix B, the information is not discussed in the DSEIR. Furthermore, there is no assessment of other sources, such as the methane that will be released from disturbance of the landfill. Methane is a particularly potent GHG. The DSEIR must be revised to discuss all sources of GHG and to propose effective mitigation for them.

The proposed mitigation for hazards addresses the dangers from explosions and fires caused by methane release, e.g., by venting methane to the atmosphere. However, it does not address mitigation for methane emissions caused by the Project as a GHG source.

5. Mitigation for congestion, air quality, and GHG impacts caused by automobile trips is not adequate.

Mitigation for air quality, GHG, and congestion impacts due to Project traffic must be strengthened. The DSEIR admits that the Project's traffic will cause

significant unmitigated impacts in the form of freeway congestion. The DSEIR also acknowledges that the air quality impact from NO_x, which would be generated almost entirely from traffic sources, is significant and unavoidable despite proposed Mitigation Measure AIR-1.1, which is supposed to reduce automobile trips. Furthermore, as discussed above, the DSEIR cannot conclude that the Project's GHG emissions after 2020 would be less than significant. In fact, the post-2020 GHG emissions, largely due to automobile traffic, are significant and unmitigated because the City's GHG Reduction Strategy admittedly fails to attain the needed GHG reductions in the 2020-2035 period. Thus, in order to provide necessary mitigation for these impacts, the Project should be required to implement all feasible mitigation for mobile sources unless and until the DSEIR can conclude that the impacts would become less than significant.

The only mitigation apparently considered by the DSEIR for traffic congestion is facilities improvements. For example, the DSEIR finds there is no feasible mitigation for freeway congestion because no one project can add capacity to a state freeway. DSEIR, p. 159. The transportation analysis simply ignores the possibility of requiring *additional* transportation demand management measures. Thus, the only mitigation proposed and discussed that is intended to reduce automobile trips is Mitigation Measure AIR-1.1. DSEIR, p. 46. However, as explained below, MM AIR-1.1 is inadequate because it is not enforceable and it does not include all feasible mitigation even though impacts remain significant.

First, the "physical pedestrian and bicycle improvements" that are supposed to "encourage pedestrian and bicycle modes of travel" in MM AIR-1.1 are not specified. Instead, a few *examples* are listed ("such as sidewalk improvements, landscaping and bicycle parking"), but without *requiring* any of these examples or specifying other needed facilities to accommodate pedestrian and bicycle travel instead of automobile trips.

Second, there is no specification of what improvements are required and will be constructed under MM AIR-1.1 in order to "connect site with regional bicycle/pedestrian trails systems." The DSEIR states that 178 bicycle parking spaces would be provided, but it admits that "new bicycle paths are not provided, as described in Policy TR-2.8." DSEIR, p. 48. It also admits that number of bicycle parking spaces does not meet the requirements of the City's General Plan. DSEIR, Appendix E, p. 53. The Project should be required to provide all of the bicycle parking spaces required under the City's standards. It should also be required to provide a Class I bicycle path connection to the Bay Trail to ensure bicycle connectivity. The Project should be required to implement, or to pay a fair share toward implementation of, the planned Class I off-street trail planned to run around the perimeter of the America Center site with connection to the Bay Trail.

The Project should also be required to provide sidewalks on America Center Court, the east side of America Center Drive along the Building 5 frontage, and either side of America Center Drive between the Gold Street Connector and the Building 5 frontage, where sidewalks do not exist and are apparently not planned. See DSEIR, p. 162.

The discussion in the traffic section states that the Project will not “result in a measureable increase in pedestrians.” DSEIR, p. 162. This conclusion is an admission that the proposed Mitigation Measure AIR-1.1 will not be effective in its goal of accommodating pedestrian transportation. Effective mitigation requires that the Project implement a suite of synergistic measures including support measures, economic incentives, and actual transportation services, as discussed below.

Third, there are no performance specifications for the proposed shuttle bus service to the Tasman/Layette light rail and ACE rail systems. A casual reader might suppose that MM AIR-1.1 is proposing that the *Project* provide a shuttle service when it lists a requirement to “provide shuttle bus service to the Tasman/Lafayette light rail and Altamont Corridor Express (ACE) rail system.” DSEIR, p. 46. In fact, the transportation analysis makes it clear that there is no such intention to improve the shuttle service *or* to increase transit ridership:

It is assumed that only a small number of employees of Building 5 would utilize existing transit services due the long walking distance and lack of pedestrian facilities linking the project site to transit facilities. In addition, the ACE shuttle provides only four scheduled runs during the morning and evening commute hours. *Assuming the existing transit service would remain unchanged*, new riders associated with the proposed project can be accommodated by the current available capacity of the transit service in the project area and improvement of the existing transit service would not be necessary.

DSEIR, p. 159, emphasis added.

MM AIR-1.1 should be revised to provide that the Project itself provide an effective shuttle service to link its employees with transit. That shuttle must be *in addition to* the existing ACE Green Shuttle, which only runs 4 times each morning and evening. The mitigation should specify that the Project-provided shuttle must provide service with at most 15 minute headways to the closest light rail and bus stops and to the Amtrak/ACE station, and do so at least during the AM and PM commute periods (from 7-9 AM and 4:30 to 6:30 PM). Without an adequate “last mile” shuttle service, employees cannot be expected to use existing transit systems. If necessary, the shuttle service could be cooperatively implemented by the entire America Center as mitigation and as compliance with the City’s ordinance regarding TDM.

Alternatively, the Project could be required to make contributions to local transit agencies if they will use it to ensure direct access to the site.

Fourth, the TDM system to be implemented through MM AIR-1.1 is inadequate because the mandated elements are not specified and because many additional effective TDM elements are not included as requirements. Even though the Project description lists 16 *possible* TDM measures (i.e., the measures that the “TDM program may include” – DSEIR, p. 16), MM AIR-1.1 specifies only four *required* TDM measures, and these measures are not adequately specified. For example, MM AIR-1.1 calls for a “transit incentive program,” but does not clarify whether this would require mere exhortation or would require effective economic incentives and transportation measures like shuttle services. It calls for connecting the site to the regional pedestrian and bicycle trail system, but does not specify the required connections. It calls for a shuttle service, but does not specify that service; and it appears that there is actually no intention to provide such a service, but to rely on the admittedly inadequate ACE shuttle.

MM AIR-1.1 should be revised to require *all* of the “possible” TDM measures discussed in the Project description (DSEIR, pp. 16-17), as follows:

1. Eco Pass or Clipper Card for all employees, providing free rides on Santa Clara Valley Transportation Authority (VTA) transit
2. 25 percent transit subsidy for transit agencies other than the VTA, including Caltrain, ACE, Capitol Corridor, BART, MUNI, and other services
3. Monthly vanpool subsidy
4. Commuter tax benefits through WageWorks offering pre-tax deduction per month for transit and pre-tax deduction per month for parking
5. Free “Last Mile” shuttles to local train systems (e.g. Caltrain, Amtrak, ACE)
6. Internal carpool matching program utilizing zip code matching
7. Regional carpool matching program through 511
8. Preferred parking for carpools and vanpools located near entrances to every building
9. Bicycle lockers and/or bicycle racks near entrances to every building
10. Showers for cyclists and pedestrians, with amenities
11. Intranet site featuring transit, bike, ridesharing and telework information
12. New hire orientation presentations focusing on commute alternatives
13. Centrally-located kiosks with transit schedules, bike and transit maps, and other commute alternative information
14. Periodic events which connect employees with local transit agencies and transportation organizations (e.g. Spare the Air Fair and/or Bike to Work Day)

15. On-site amenities that allow employees to complete errands without a car, such as bicycle repair, dry cleaning, haircuts, cafeteria, coffee bars, fitness center, mail and shipping services, ATM, small-scale retail
16. Participation in the Bay Area Bike Share Program, or other similar bicycle sharing program.

We note that many of the above measures are identified as effective mitigation measures by BAAQMD in its CEQA Guidelines and by the California Air Pollution Control Officers Association (“CAPCOA”) in its study of effective GHG mitigation, which includes transportation trip reduction measures. See BAAQMD, CEQA Air Quality Guidelines, May, 2017, pp. 4-13 to 4-14; CAPCOA, 2010, Quantifying Greenhouse Gas Mitigation Measures (available at <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>).

Additional TDM measures should be imposed. These include measures proposed by BAAQMD CAPCOA as follows (the CAPCOA mitigation measure and/or the BAAQMD page number source is identified for each measure in parentheses):

17. Incorporate bike lanes into streets (CAPCOA SDT-5) [see comments above regarding specified bicycle trail connections]
18. Provide electric vehicle parking with charging (CAPCOA SDT-8)
19. Dedicate land for bike trails (CAPCOA SDT-9)
20. Limit parking supply (CAPCOA PDT-1; BAAQMD p. 4-14) [the Project may qualify for parking reductions if it provides a sufficiently robust TDM program]
21. Implement commute trip reduction *with required implementation and monitoring* (CAPCOA TRT-2)
22. Provide ride-sharing programs (CAPCOA TRT-3)
23. Implement a subsidized or discounted transit program (CAPCOA TRT-4)
24. Provide end of trip facilities (e.g. showers, lockers, changing spaces) (CAPCOA TRT-5)
25. Encourage alternative work schedules and telecommuting (CAPCOA TRT-6)
26. Implement commute trip reduction marketing (CAPCOA TRT-7)
27. Implement preferential parking permit program (CAPCOA TRT-8)
28. Implement car-sharing program (CAPCOA TRT-9)
29. Provide employer-sponsored vanpool/shuttle (CAPCOA TRT-11)
30. Implement bike-sharing program (CAPCOA TRT-12)
31. Price workplace parking (CAPCOA TRT-14; BAAQMD, p. 4-13)
32. Implement employee parking “cash-out” (CAPCOA TRT-15; BAAQMD, p. 4-13)
33. Provide local shuttles (CAPCOA TST-6)

34. Require Project contribution to regional transit improvement (CAPCOA RPT-3)

If any of these measures is already required of the Project either by applicable regulations, mitigation proposed in the DSEIR, or by the Project description, please identify specifically where that requirement is set out. If any of these measures are not otherwise required, please include them as proposed mandatory mitigation.

The DSEIR states that the Project would be required to obtain a LEED-silver certification. DSEIR, p. 16. That certification might include some, but not necessarily all, of the trip reduction measures listed above, because LEED certification includes credits for measures unrelated to transportation and because LEED certification may not include all of the measures identified here. Thus, the mere fact that the building may be LEED-certified cannot substitute for implementing each of the trip reduction measures recommended above.

The TDM program should have a quantified performance goal in terms of attained trip reductions and should provide for on-going effectiveness monitoring and additional measures if trip reduction goals are not met. The performance goal should be based on attainable trip reductions from the published literature regarding TDM programs. For example, CAPCOA identifies available methods for quantifying the effectiveness of GHG mitigation measures, many of which are focused on transportation emissions. *See* CAPCOA, 2010, *Quantifying Greenhouse Gas Mitigation Measures*.

In sum, MM AIR-1.1 must contain a much larger suite of TDM measures because TDM measures are synergistic. TDM programs that include meaningful economic incentives (e.g., transit subsidies, parking fees for non-rideshare vehicles, parking discounts for rideshare vehicles, and transportation allowances) and actual transportation services (e.g., employer-based efforts such as van-pool programs, shuttle bus service to off-site transit stations, guaranteed ride home programs, and the provision of on-site showers and changing facilities) are more effective than TDM programs that merely provide support measures (e.g., transportation coordinators, rideshare matching, and promotional activities). The most effective TDM programs provide all three types of measures. This Project should be required to do so.

6. Mitigation for air quality and GHG impacts caused by non-mobile sources is not adequate.

Additional mitigation should be proposed and discussed in order to address air quality and GHG impacts from non-transportation sources. The DSEIR acknowledges that additional measures beyond those included in the City's GHG Reduction Strategy are necessary to meet the 2020-2035 GHG reduction goals.

DSEIR, p. 94. But the DSEIR simply punts the issue to other regulatory agencies (e.g., CARB, California Public Utilities Commission, California Energy Commission, MTC, and BAAQMD), which the DSEIR says may take further regulatory initiatives in the future. However, there is no reason to wait for initiatives by other agencies, because additional GHG reduction measures are available now and can be implemented as mitigation.

The DSEIR should be revised to propose and discuss the following additional GHG mitigation measures, which are recommended in the CAPCOA and BAAQMD guidance identified above:

35. Exceed Title 24 Building Envelope energy efficiency standards by 20% (CAPCOA BE-1; BAAQMD p. 4-14)
36. Install Programmable Thermostat Timers (CAPCOA BE-2; BAAQMD, p. 4-15)
37. Obtain Third-party HVAC Commissioning and Verification of Energy Savings (CAPCOA BE-3)
38. Install energy efficient appliances (CAPCOA BE-4)
39. Install higher efficiency area lighting (CAPCOA LE-1)
40. Limit outdoor lighting requirements (CAPCOA LE-3)
41. Establish Onsite Renewable Energy Systems-Solar Power (CAPCOA AE-2; BAAQMD, p. 4-16)
42. Install solar water heaters (BAAQMD, p. 4-16)
43. Install tankless water heaters (BAAQMD, p. 4-16)
44. Utilize a Combined Heat and Power System (CAPCOA AE-4)
45. Install low flow water fixtures (CAPCOA WUW-1; BAAQMD, p. 4-19)
46. Prohibit use of water to clean outdoor surfaces (BAAQMD, p. 4-19)
47. Prohibit gas powered landscape equipment (CAPCOA A-1; BAAQMD p. 4-14)
48. Require urban tree planting (CAPCOA V-1; BAAQMD p. 4-15)
49. Use alternative fuels for construction equipment (CAPCOA C-1)
50. Use electric and hybrid construction equipment (CAPCOA C-2)
51. Limit construction equipment idling beyond regulation requirements (CAPCOA C-3)
52. Establish a carbon sequestration project and/or offsite mitigation (CAPCOA Misc-1 and Misc-2). This mitigation should ensure that the project does its fair share to meet the identified shortfall in meeting the City's 2020-2035 GHG reduction goals.
53. Require cool roof materials (BAAQMD, p. 4-15)

If any of these measures is already required either by applicable regulations, mitigation proposed in the DSEIR, or the project description, please identify specifically where that requirement is set out. If any of these measures are not

otherwise required, please include them in the EIR as proposed mandatory mitigation. Again, the requirement to comply with a LEED certification, or to meet a green building standards program, might ensure that some but not all of the measures identified above are implemented. The Project should be required to implement each of these measures.

We note that the DSEIR admits that the Project will not install solar panels, will not include car sharing, will not limit parking places, and will not price parking, even though these measures are identified as GHG reduction strategies in the City's GHG Reduction Strategy. DSEIR, p. 99. The fact that these measures are identified as "voluntary" in that strategy does not prohibit the City from requiring these measures to mitigate significant impacts.

7. Consistency with Alviso Master Plan

Development standards for areas outside the Village Area, including height limitations, are applicable to the Project. A project is only eligible to construct buildings over 45 feet tall if the height will "facilitate the transfer of development intensity away from the baylands and environmentally sensitive areas in the vicinity of the Alviso village to a location closer to Highway 237 in order to achieve habitat preservation or other environmental protection objectives." DSEIR, p. 120.

In light of the fact that prior development entitlements have *already* resulted in preventing development in the areas designated as open space on the north end of the site, permitting this Project to exceed 45 feet does nothing to "facilitate the transfer of development intensity away from the baylands and environmentally sensitive areas . . ." That transfer has already been accomplished. Permitting additional high-building, high-density commercial development at a site that has already attained the transfer of intensity away from the baylands and has already established "habitat buffer areas . . . on the northern portions of the site" is not consistent with the Alviso Master Plan.

8. Background traffic improvements

The DSEIR assumes the following additional improvements will be in place under background conditions because they are in the City of Santa Clara CIP or are part of approved development projects:

- Great America Parkway and Mission College Boulevard – Addition of a third westbound left-turn lane, fourth southbound through lane, third northbound left-turn lane, and separate westbound right-turn lane

- Great America Parkway and Old Glory Lane – Addition of a second northbound left-turn lane
- Great America Parkway and Patrick Henry Drive – Addition of a second northbound left-turn lane and eastbound free-right-turn lane, the eastbound right-turn lane includes the addition of a fourth southbound lane on Great America Parkway between Patrick Henry Drive and Mission College Boulevard

For each of the above improvements, please identify the source of the claim that the improvement will be constructed. If the improvement is required mitigation for another project, please identify that project and the specific condition of approval that require the mitigation. Please also explain *when* the improvement is required to be implemented. If the improvement is part of the Santa Clara CIP, please identify the CIP document and explain when the improvement is committed to be constructed.

Please also explain whether the following background condition improvement, identified in the traffic report but omitted from the DSEIR's list of background improvements, is in fact included in the traffic analysis:

- Great America Parkway and Tasman Drive – Addition of a second northbound left-turn lane (Yahoo!)

If it is included, please provide the same information (source of mitigation requirement or CIP, date improvement to be constructed) for this improvement.

9. Queuing impacts

The traffic analysis acknowledges that the 95th percentile vehicle queues will exceed available left-turn lane storage at several intersections. Some of the excess queues cannot or will not be mitigated by proposed improvements. Please explain whether and how the additional delay from this queuing was included in the determination of intersection level of service and average intersection delay.

The queuing analysis establishes that available storage is now adequate at some locations under background conditions, but will not be adequate with the addition of Project traffic (e.g., Great American Parkway at SR 237 SBL during PM peak conditions). This should be identified a significant impact.

10. Signal warrant

The traffic analysis identifies additional problems that will be caused by Project traffic, but fails to acknowledge that these impacts are significant or to

propose mitigation. For example, the Project may result in the requirement for a signal at Lafayette and Great American Parkway. The DSEIR states that the Project “may be required to contribute a fair share toward the future traffic signal.” DSEIR, p. 163. The intersection is in the City of Santa Clara, which has no jurisdiction over this Project, especially after it been approved. Thus, there is no way that the Project could be required to make a fair share contribution unless the City of San Jose identifies the impact as significant in this EIR and imposes as mitigation the requirement to make the fair share contribution.

11. Freeway ramp impacts

The DSEIR admits that the Project will increase critical turning movements by 54% at SR 237 Eastbound On-Ramp from Great America Parkway during the PM peak hour. DSEIR, p. 163. This will increase wait times by *34 seconds* and extend storage beyond the available storage. In light of the significance criteria, under which an additional intersection delay of 4 seconds is deemed significant, this additional delay at the ramp should be identified as a significant impact.

12. Bicycle parking

The traffic report states that “The City’s Bicycle Parking requirements require one bicycle parking space per 4,000 square feet of office floor area. The proposed Project is required to provide 271 bicycle parking spaces to meet the city standards.” DSEIR, Appendix E, p. 53. The Project proposes only 178 bicycle parking spaces. The DSEIR also admits that the Project will not meet City standards, although it confusingly states that 285 spaces are required. DSEIR, p. 164.

The Project and its mitigation must be revised to ensure that the City standards are met. Failure to meet the standard would make the Project inconsistent with applicable policies, and would make the TDM mitigation measures less effective.

13. Cumulative traffic impact mitigation

The DSEIR acknowledges that the Project makes a considerable contribution to a significant cumulative impact at the Great America Parkway and Eastbound SR 237 intersection. The proposed mitigation is a fair share payment toward intersection improvements.

The traffic report states that the improvement was identified as a mitigation measure for the City Place development in the City of Santa Clara. DSEIR, Appendix E, p. 46. Since the City of San Jose has no authority over development in other jurisdictions, it cannot ensure that this mitigation is actually constructed unless it requires *this* Project to construct it. Mitigation Measure TRA (C)-1.2 should be

revised to require that the Project applicant fully design, construct, and improve the intersection. If appropriate, the measure can provide for reimbursement to the applicant of the cost of construction in excess of its fair share.

Thank you for the opportunity to submit the foregoing comments and concerns.

Yours sincerely,

M. R. WOLFE & ASSOCIATES, P.C.

A handwritten signature in blue ink, appearing to read 'MR Wolfe', with a long horizontal flourish extending to the right.

Mark R. Wolfe
On behalf of Organizacion Comunidad de Alviso

MRW:sa
cc: Mark Espinoza, OCA

Keyon, David

From: Mathur, Krinjal
Sent: Friday, July 28, 2017 9:57 AM
To: Keyon, David
Subject: FW: Response to America Center Building 5 Subsequent DEIR Traffic Study

Krinjal Mathur
Planner | City of San Jose
Planning, Building & Code Enforcement
krinjal.mathur@sanjoseca.gov
408.535.7874

From: Steve Dunn [mailto:SDUNN@steelwavellc.com]
Sent: Thursday, July 27, 2017 4:10 PM
To: Mathur, Krinjal <krinjal.mathur@sanjoseca.gov>
Cc: Steve Dunn <SDUNN@steelwavellc.com>; Darleen Barnes <DBARNES@steelwavellc.com>; Weerakoon, Ru <Ru.Weerakoon@sanjoseca.gov>
Subject: Response to America Center Building 5 Subsequent DEIR Traffic Study

Dear Ms. Mathur,

The Applicant and Owner of the subject property respond to the DEIR and recommended project conditions with the following comments:

1. With respect to conditions (2) & (3) it is unjust to require Applicant to improve the Lafayette Street and Gold Street Connector & GAP and N 237 with improvements as specified:
 - a. Subject property's use is consistent with current zoning use and only requires partial additional square footage, less than an add of approximately 78,750 sf (per application)of additional office space (the report notes 190,000 SF add).
 - b. The City required NO traffic mitigations for recent approval of two adjacent new hotels, requiring change of zoning use which added significant traffic to the original EIR and who further burdened a private driveway.
2. Such unjust mitigations could prevent additional job creation in this proposed San Jose project, a strong mission of the current Mayor and City Council.
3. Such offsite requirements will delay the potential development of the site.
4. Such offsite requirement will put an undue financial burden on the potential project.
5. As noted in the study , background traffic counts include City Place. We believe City Place triggers this proposed improvement need, not America Center Building 5.
6. The Owner will be establishing a TDM program. An effective TDM program can easily achieve a 25 % reduction in work related vehicle trips that will result in a reduction of trips created by the project and parking demand. Such reduction of vehicle trips are NOT assumed in this traffic analysis and conclusions.

Respectfully,

Steve Dunn
Senior Managing Director

