



City of East Palo Alto
Community and Economic Development Department, Planning Division
California Environmental Quality Act (CEQA)

MITIGATED NEGATIVE DECLARATION

PROJECT TITLE: Jobtrain Office

PROJECT LOCATION: 2535 Pulgas Avenue, East Palo Alto

ASSESSORS PARCEL NO.: 063-121-370

PROJECT DESCRIPTION: The project would demolish the existing on-site buildings, improvements, and parking associated with the existing industrial use and redevelop the site with one new four-story, approximately 110,000-square-foot office building, surface parking lot, and landscaping. The proposed office building would be constructed along Pulgas Avenue, and the surface parking lot would be located behind the office building. The new office building would have a maximum height of 78-feet (including mechanical screening) with approximately 55,000 square feet being used for JobTrain for a nonprofit office and approximately 55,000 square feet being used by Emerson Collective as general office space. The first floor of the proposed building would feature approximately 10,500 square feet of ground floor open space for a carpentry yard and a children's play area.

Project construction would include removal of the existing parking lot improvements and landscaping, excavation for building footings and construction of the office building.

I. FINDING AND BASIS FOR A MITIGATED NEGATIVE DECLARATION:

In accordance with the California Environmental Quality Act (CEQA), the City of East Palo Alto, Community and Economic Development Department has conducted an Initial Study to determine whether the proposed project may have a significant adverse effect on the environment. It is hereby determined that, based on the information contained in the attached Initial Study, the proposed project will not result in a significant effect on the environment because the mitigation and avoidance measures described in the Initial Study are included in the project. The project applicant, before public release of this draft Mitigated Negative Declaration, has made or agrees to make project revisions that clearly mitigate the effects to a less than significant level. The mitigation and avoidance measures described in the Initial Study and included in the proposed project are listed below.

II. MITIGATION MEASURES:

Air Quality

Impact AIR-1: Ground disturbing activities associated with project construction could generate fugitive dust emissions. **(Significant Impact)**

Mitigation Measure: The following mitigation measure, which is consistent with the Basic Construction Mitigation Measures identified in the BAAQMD CEQA Air Quality Guidelines to reduce impacts from construction-related fugitive dust to a less than significant level, shall be implemented.

MM AIR-1.1: During construction period ground disturbance, the project contractor shall implement the following measures recommended by BAAQMD to control dust and exhaust:

- Exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- Haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- Visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweeps at least once per day. The use of dry power sweeping is prohibited.
- Vehicle speeds on unpaved surfaces shall be limited to 15 miles per hour (mph)
- Roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be posted for construction workers at all access points.
- Construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and contact at the City of East Palo Alto regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be included to ensure compliance with applicable regulations.

Biological Resources

Impact BIO-1: Construction of the proposed project and on-site wastewater treatment facility option could result in incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, resulting in a significant impact to nesting birds.

(Significant Impact)

Mitigation Measures: The project and on-site wastewater treatment facility option would implement the following measures to avoid impacts to nesting migratory birds. With incorporation of these measures, the project would result in a less than significant impact to nesting birds.

MM BIO-1.1: Avoidance: The project applicant shall schedule demolition and construction activities to avoid the nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 31st (inclusive), as amended.

MM BIO-1.2: Nesting Bird Surveys: if it is not possible to schedule demolition and construction between September 1st and January 31st (inclusive), pre-construction surveys of all potentially suitable nesting habitat on and adjacent to the project site shall be completed by a qualified ornithologist to ensure that no nests are disturbed during project implementation. This survey shall be completed no more than 15 days prior to initiation of construction activities during the early part of the breeding season (February 1st through April 31st inclusive) and no more than 30 days prior to initiation of these activities during the late part of the breeding season (May 1st through August 31st inclusive). During this survey, the ornithologist shall inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests.

MM BIO-1.3: Buffer Zones: if an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with the California Department of Fish and Wildlife, shall determine the extent of a construction free buffer zone to be established around the nest, typically 250 feet, to ensure that raptor or migratory bird nests shall not be disturbed during project construction.

MM BIO-1.4: Reporting: Prior to any tree removal, or approval of any grading permits, (whichever occurs first), the ornithologist shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the City's Director of Community and Economic Development or the Director's designee.

Cultural Resources

Impact CUL-1: Ground disturbing activities associated with construction of the proposed project and on-site wastewater treatment facility option could disturb previously unrecorded archaeological resources. **(Significant Impact)**

Mitigation Measures: The following mitigation measures shall be implemented to reduce impacts to archaeological resources and/or human remains that may be present on the site.

MM CUL-1.1: The following mitigation measures are based on the recommendations in the archaeological assessment and based on tribal consultation completed pursuant to AB 52. Implementation of these mitigation measures would reduce impacts to archaeological resources to a less than significant level:

- Prior to issuance of the Grading Permit, the project applicant shall submit evidence that an Archaeological Monitoring Contractor Awareness

Training was held prior to ground disturbance. The training shall be facilitated by the project archaeologist in coordination with a Native American representative from Tamien Nation registered with the Native American Heritage Commissions for the City of East Palo Alto and that is traditionally and culturally affiliated with the geographic area as described in Public Resources Code Section 21080.3.

- An archaeological and Native American cultural resources monitor from Tamien Nation shall be present during removal of the existing building foundations and during all ground disturbing activities of the project. The monitors, in consultation with the qualified archaeologist, shall determine when monitoring is no longer required.
- In the event that archaeological resources are exposed during construction, work within 50 feet of the find shall cease until a qualified archaeologist and Native American representative from Tamien Nation can assess the find and provide recommendations for further treatment, if warranted. Construction and potential impacts to the area(s) within a radius determined by the archaeologist shall not recommence until the assessment is complete.
- If further treatment is warranted, then a research design and treatment plan tailored to the resources identified shall be prepared by a qualified archaeologist in consultation with a Native American representative from Tamien Nation. Once the research design and treatment plan is approved by the City, archaeological testing of the resource can begin. Testing shall be commensurate with the level of proposed impacts and determined in consultation with a Native American representative. After field testing, an evaluation report shall be prepared documenting the fieldwork, analyzing the cultural materials recovered, defining the resource boundaries on the project site, and evaluating the resource per the California Register of Historic Resources.

Impact CUL-2: Ground disturbance during construction of the proposed project and on-site wastewater treatment facility option could disturb human remains.
(Significant Impact)

Mitigation Measures: The following mitigation measures shall be implemented under the proposed project and on-site wastewater treatment facility option to reduce potential impacts to human remains.

MM CUL-2.1: If human remains are encountered during project construction activities, all work in the vicinity shall be halted and the San Mateo County Coroner contacted. In the event that the County Coroner determines the human remains are Native American, notification of the Native American Heritage Commission (NAHC) is required, who shall appoint a Most Likely Descendant (MLD) (PRC Section 5097.98). The qualified archaeologist, project sponsor, and MLD shall make all reasonable efforts to develop an agreement for treatment. The agreement shall incorporate 'best practices' as identified by the NAHC. A final report shall be prepared by the project

archaeologist in consultation with the MLD and approved by the City of East Palo Alto. Work on the project may proceed upon City approval.

Geology and Soils

Impact GEO-1: Although unlikely, construction of the proposed project and on-site wastewater treatment facility option paleontological resources could disturb paleontological resources. **(Significant Impact)**

Mitigation Measure: Consistent with Specific Plan EIR mitigation measure CULT-1, the proposed project would implement the following mitigation measure:

MM GEO-1: If paleontological resources are encountered during the grading or excavation, all construction activities within 50 feet shall stop and the City of East Palo Alto shall be notified. A qualified paleontologist shall inspect the findings within 24 hours of discovery. If it is determined that the proposed development could damage unique paleontological resources, mitigation shall be implemented in accordance with Public Resources Code Section 21083.2 and Section 15126.4 of the CEQA Guidelines. Possible mitigation under Public Resources Code Section 21083.2 requires that reasonable efforts be made for resources to be preserved in place or left undisturbed. If preservation in place is not feasible, data recovery through excavation shall be conducted with a data recovery plan in place. Therefore, when considering these possible mitigations, the City shall have a preference for preservation in place.

Hazards and Hazardous Materials

Impact HAZ-1: **Ground disturbance during construction of the proposed project and on-site wastewater treatment facility option could expose construction workers, nearby sensitive receptors, and/or the environment to contaminated soils and groundwater.**

Mitigation Measure: The following mitigation measures are based on the recommendations in the Phase II Subsurface Investigation. The following mitigation measures would be required to reduce the potential impacts related to exposure of construction workers, nearby sensitive receptors, and/or the environment to hazardous materials to a less than significant level.

MM HAZ-1.1: Prior to development of the project site, the project applicant shall submit plans demonstrating the following to the Department of Community and Economic Development for review and approval.

- Site Management Plan (SMP) shall be prepared, and Health and Safety Plan (HSP) shall be prepared. Any contaminated soils found in concentrations above established thresholds shall be removed and disposed of according to California Hazardous Waste regulations or the contaminated portions of the site shall be capped beneath the proposed development under the regulatory oversight of the Department of Toxic

Substances Control (DTSC). The contaminated soil removed from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site. Components of the SMP shall include, but shall not be limited to:

- A detailed discussion of the site background;
 - Preparation of a HSP
 - Notification procedures if previously undiscovered significantly impacted soil or free fuel product is encountered during construction;
 - On-site soil reuse guidelines based on the California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region's reuse policy;
 - Sampling and laboratory analyses of excessive soil requiring disposal at an appropriate off-site waste disposal facility; and
 - Soil stockpiling protocols
- The HSP shall include, but shall not be limited to, the following elements, as applicable:
 - Provisions for personal protection and monitoring exposure to construction workers;
 - Procedures to be undertaken in the event that contamination is identified above action levels or previously unknown contamination is discovered;
 - Emergency procedures and responsible personnel.
 - The SMP, including the HSP, shall be provided to the Director of Community and Economic Development prior to issuance of a demolition or grading permit.

Noise

Impact NOI-1: Ground disturbance during construction of the proposed project and on-site wastewater treatment facility option would occur for more than 12 months and be located within 500 feet of residential uses, resulting in a significant noise impact.

Mitigation Measure: Consistent with General Plan Policy 7.11, the applicant shall implement the following standard noise control measures during project construction.

MM NOI-1.1: The following measures shall be implemented during construction.

- Limit construction activity to weekdays between 7:00 a.m. and 7:00 p.m. and Saturdays and holidays between 9:00 a.m. and 7:00 p.m., with no construction on Sundays;¹

¹ The project proposes construction within the City's permitted construction hours. Should extended construction hours be requested, an exception may be granted by Planning Commission per Municipal Code Section

- Utilize "quiet" models of air compressors and other stationary noise sources where such technology exists;
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent land uses;
- Locate staging areas and construction material areas as far away as possible from adjacent land uses;
- Prohibit all unnecessary idling of internal combustion engines;
- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem are implemented.
- Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction.

Impact NOI-2: Construction-related vibration levels at the existing industrial buildings to the north of the project site would be up to 0.368 in/sec PPV, which would exceed the 0.3 in/sec PPV threshold. **(Significant Impact)**

Mitigation Measure: The following measure shall be implemented during construction of the proposed project and on-site wastewater treatment facility.

NOI-2.1: The proposed project shall incorporate the following measures from the Ravenswood/4 Corners TOD Specific Plan EIR during project construction:

- Avoid using vibratory rollers and tampers near sensitive areas.

Initial Study

JobTrain Office Project



Prepared by the

In Consultation with

DAVID J. POWERS
& ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

November 2021

TABLE OF CONTENTS

Section 1.0	Introduction and Purpose	1
1.1	Purpose of the Initial Study	1
1.2	Public Review Period	1
1.3	Consideration of the Initial Study and Project.....	1
1.4	Notice of Determination	1
Section 2.0	Project Information	2
2.1	Project Title	2
2.2	Lead Agency Contact	2
2.3	Project Applicant	2
2.4	Project Location.....	2
2.5	Assessor’s Parcel Number	2
2.6	General Plan Designation and Zoning District.....	2
2.7	Project-Related Approvals, Agreements, and Permits.....	2
Section 3.0	Project Description.....	3
3.1	Project Location.....	3
3.2	Proposed Project.....	3
Section 4.0	Environmental Setting, Checklist, and Impact Discussion	16
4.1	Connection to East Palo Alto Sanitary District	16
4.2	Areas of No Measureable Impact	16
4.3	Aesthetics.....	18
4.4	Air Quality	26
4.5	Biological Resources	42
4.6	Cultural Resources.....	52
4.7	Energy.....	58
4.8	Geology and Soils.....	65
4.9	Greenhouse Gas Emissions.....	75
4.10	Hazards and Hazardous Materials	84
4.11	Hydrology and Water Quality	94
4.12	Land Use and Planning.....	106
4.13	Noise.....	111
4.14	Population and Housing.....	126
4.15	Public Services.....	129
4.16	Recreation.....	135

4.17	Transportation.....	137
4.18	Tribal Cultural Resources	170
4.19	Utilities and Service Systems	174
4.20	Mandatory Findings of Significance	187
Section 5.0	References.....	192
Section 6.0	Lead Agency and Consultants.....	197
6.1	Lead Agency.....	197
6.2	Consultants	197
Section 7.0	Acronyms and Abbreviations.....	198

Figures

Figure 3.1-1:	Regional Location Map.....	4
Figure 3.1-2:	Vicinity Map	5
Figure 3.1-3:	Aerial Map	6
Figure 3.2-1:	Proposed Site Plan	7
Figure 3.2-2:	Proposed North/West Elevation.....	8
Figure 3.2-3:	Proposed South/East Elevation	9
Figure 3.2-4:	Proposed Landscaping Plan	11
Figure 3.2-5:	Location of Proposed East Palo Alto Sanitary District Improvements	14
Figure 3.2-6:	Location of Proposed On-Site Wastewater Treatment Facility Option	15
Figure 4.3-1:	Designated Viewsheds	20
Figure 4.4-1:	Location of Construction MEI and Nearby TAC and PM _{2.5} Sources	37
Figure 4.13-1:	Noise Measurement Locations.....	118
Figure 4.17-1:	Project Site and Study Intersections.....	143
Figure 4.17-2:	Existing Bicycle Facilities.....	145
Figure 4.17-3:	Existing Transit Facilities	147

Tables

Table 4.4-1: Health Effects of Air Pollutants	26
Table 4.4-2: Ambient Air Quality Standards Violations and Highest Concentrations	30
Table 4.4-3: BAAQMD Air Quality Significance Thresholds	31
Table 4.4-4: Construction Criteria Pollutant Emissions	32
Table 4.4-5: On-site Wastewater Treatment Facility Construction Emissions.....	34
Table 4.4-6: 2023 Operational Period Emissions (tons/year).....	35
Table 4.4-7: Construction Risk Impacts of Proposed Project at MEI.....	36
Table 4.4-8: Construction Risk Impacts of On-Site Wastewater Treatment Facility at MEI.....	38
Table 4.4-9: Operation Risk Impacts at the Off-Site MEI.....	39
Table 4.4-10: Impacts from Combined Sources to Project Site Receptors.....	40
Table 4.7-1: Annual Energy Use of Existing and Proposed Development.....	63
Table 4.9-1: Annual Project GHG Emissions.....	80
Table 4.13-1: Groundborne Vibration Impact Criteria	112
Table 4.13-2: Exterior Noise Level Standards.....	115
Table 4.13-3: Interior Noise Level Standards.....	116
Table 4.13-4: Summary of Existing Noise Levels.....	117
Table 4.13-5: Vibration Source Levels for Construction Equipment	123
Table 4.17-1: Project Trip Generation Estimates.....	151
Table 4.19-1: Estimated Water Supply and Demand (acre feet per year)	182
Table 4.20-1: Cumulative Community Risk Impacts from Combined TAC Sources	189

Photos

Photos 1, 2, 3 & 4: Existing Development on the Project Site	22
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Appendices

Appendix A: Air Quality and Greenhouse Gas Assessment and Addendum

Appendix B: Arborist Report

Appendix C: Geotechnical Study

Appendix D: Phase I and Phase II Environmental Site Assessment Reports and Hazardous Materials Memorandum

Appendix E: Flood Displacement Study

Appendix F: Noise and Vibration Assessment Report and Addendum

Appendix G: Transportation Impact Analysis and Supplemental Memorandum

Appendix H: Water Supply Assessment

SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of East Palo Alto, as the Lead Agency, has prepared this Initial Study for the JobTrain Office Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City East Palo Alto, California.

The project proposes to construct an approximately 110,000-square-foot office building on one parcel currently developed with a vehicle storage yard. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 30-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 30-day public review period should be sent to:

City of East Palo Alto
Community and Economic Development Department
Elena Lee, Planning Manager
1960 Tate Street
East Palo Alto, CA 94303
elee@epa.org

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, City Council will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

JobTrain Office Project

2.2 LEAD AGENCY CONTACT

City of East Palo Alto
Community and Economic Development Department
Elena Lee, Planning Manager
1960 Tate Street
East Palo Alto, CA 94303
elee@cityofepa.org

2.3 PROJECT APPLICANT

Sycamore Real Estate
Lorenzo Brooks
2555 Pulgas Avenue, Building A
East Palo Alto, CA 94303
lorenzo@emersoncollective.com

2.4 PROJECT LOCATION

2535 Pulgas Avenue, East Palo Alto, CA 94303

2.5 ASSESSOR'S PARCEL NUMBER

Assessor's Parcel Numbers 063-131-370

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

The project site has a General Plan land use designation of General Industrial and is zoned Ravenswood Employment Center (REC) in the East Palo Alto Zoning Code.

The project is within the growth assumptions of the 2013 Ravenswood/4 Corners Transit-Oriented Development Specific Plan (Ravenswood Specific Plan) and was granted permission by City Council on November 20, 2020 to proceed ahead of the planned Ravenswood Business District/4 Corners Specific Plan Update.

2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

- Site Development Permit
- Administrative Use Permit (for Office use in REC)
- Variance (allowing height increase from three stories to four stories)

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The 3.86-acre site (approximately 168,180 square feet) is located at 2535 Pulgas Avenue (Assessor's Parcel Number 063-131-370), on the west side of Pulgas Avenue, within the Ravenswood Specific Plan area of the City of East Palo Alto. The project site is currently developed with two single-story wood frame buildings, approximately six accessory structures (i.e., sheds), and uncovered, paved areas used for equipment and vehicle storage by the current occupant, Touchatt Trucking. The existing one-story buildings on-site total approximately 5,741 square feet. Figure 3.1-1, Figure 3.1-2, and Figure 3.1-3 feature a regional location map, vicinity map, and aerial map of the project site, respectively.

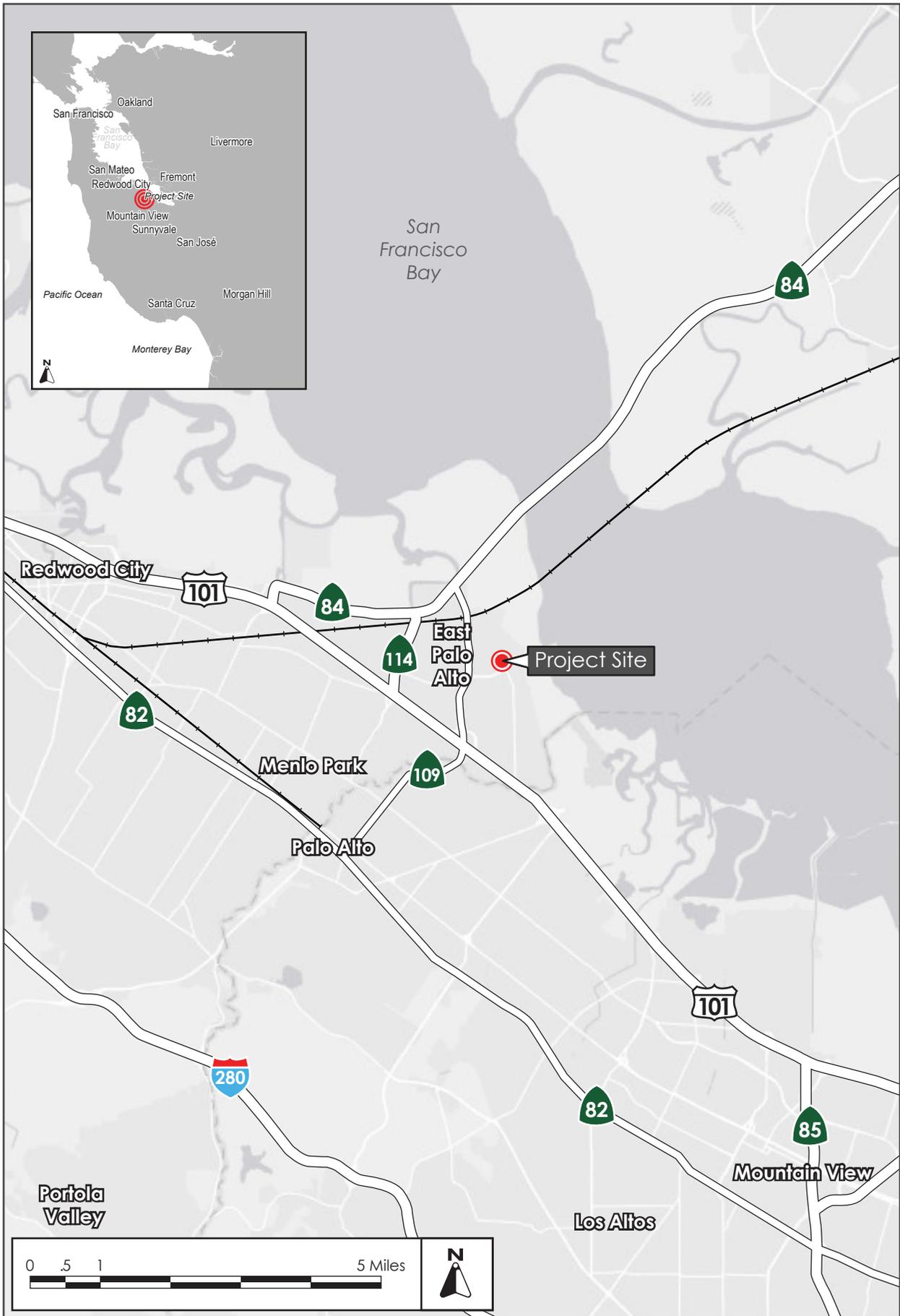
3.2 PROPOSED PROJECT

The project would demolish the existing on-site buildings, improvements, and parking associated with the existing industrial use and redevelop the site with one new four-story, approximately 110,000-square-foot office building, surface parking lot, and landscaping. The proposed office building would be constructed along Pulgas Avenue, and the surface parking lot would be located behind the office building. The new office building would have a maximum height of 78-feet (including mechanical screening) with approximately 55,000 square feet being used for JobTrain for a nonprofit office and approximately 55,000 square feet being used by Emerson Collective as general office space. The first floor of the proposed building would feature approximately 10,500 square feet of ground floor open space for a carpentry yard and a children's play area. The site plan for the proposed project is shown on Figure 3.2-1, and proposed elevations are shown on Figures 3.2-2 and 3.2-3.

3.2.1 Carpentry Area

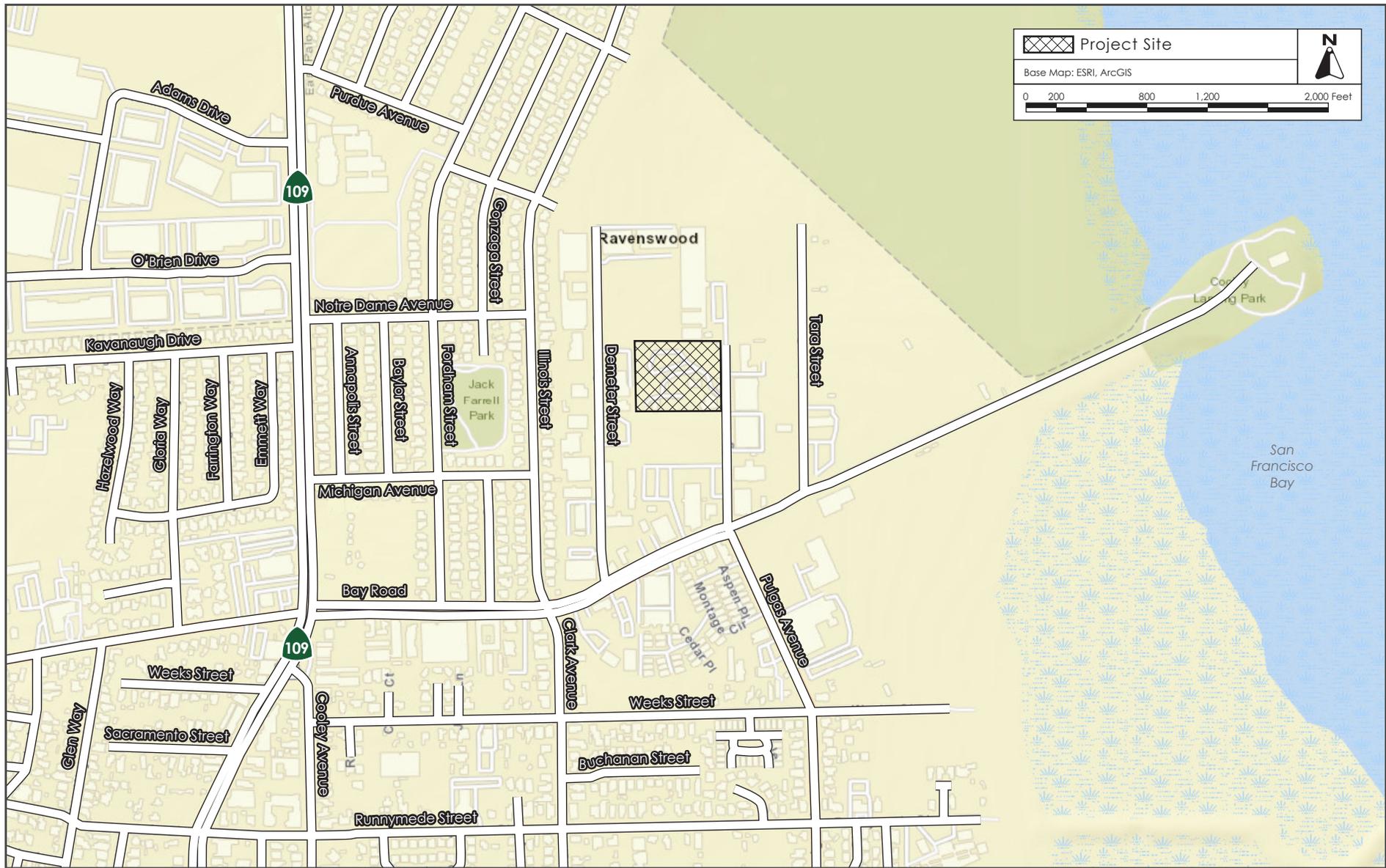
As noted above, the project would include an outdoor carpentry area adjacent to the western building façade for use during carpentry training classes. The approximately 7,600-square-foot carpentry area would include an eight-foot-tall wood fence around the perimeter. Access to the carpentry area would be provided via doors from the office building as well as from a 15-foot-wide driveway on the north side of the carpentry area. The driveway would provide vehicle access for delivery of lumber and other materials. Materials delivery would occur approximately three to four times per year. Proposed carpentry activities would include use of standard power tools (e.g., hammers, saws, and jigsaws).

Carpentry classes would be held four times per year with each class lasting 11 weeks. During the first 3-4 weeks, activities would be limited to lectures in indoor classrooms. The remaining 7-8 weeks involve hands on carpentry activities, which would occur in the outdoor carpentry area. When in session, carpentry classes would be held five days a week Monday through Friday from 8:30 am to 3:15 pm.



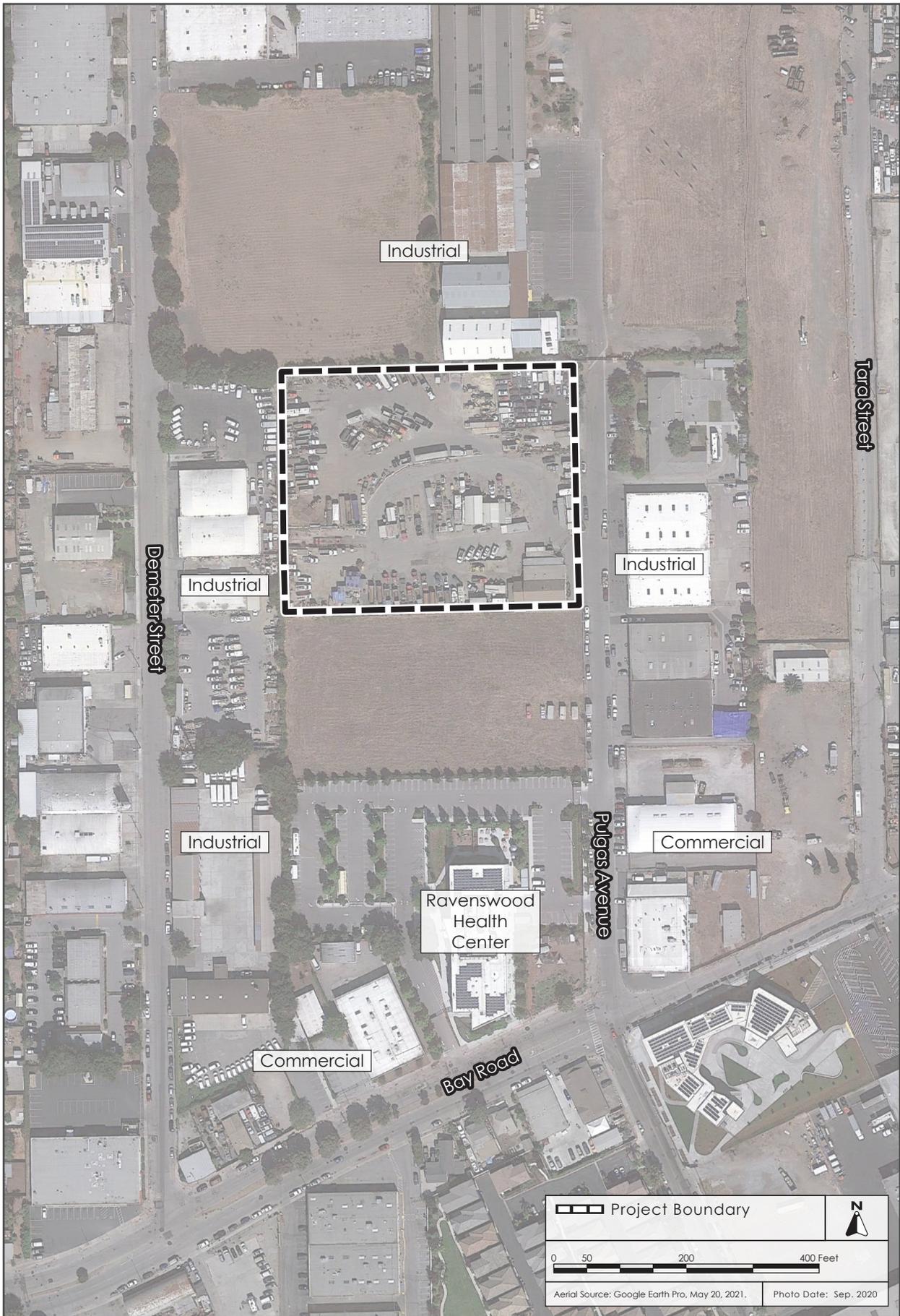
REGIONAL LOCATION MAP

FIGURE 3.1-1



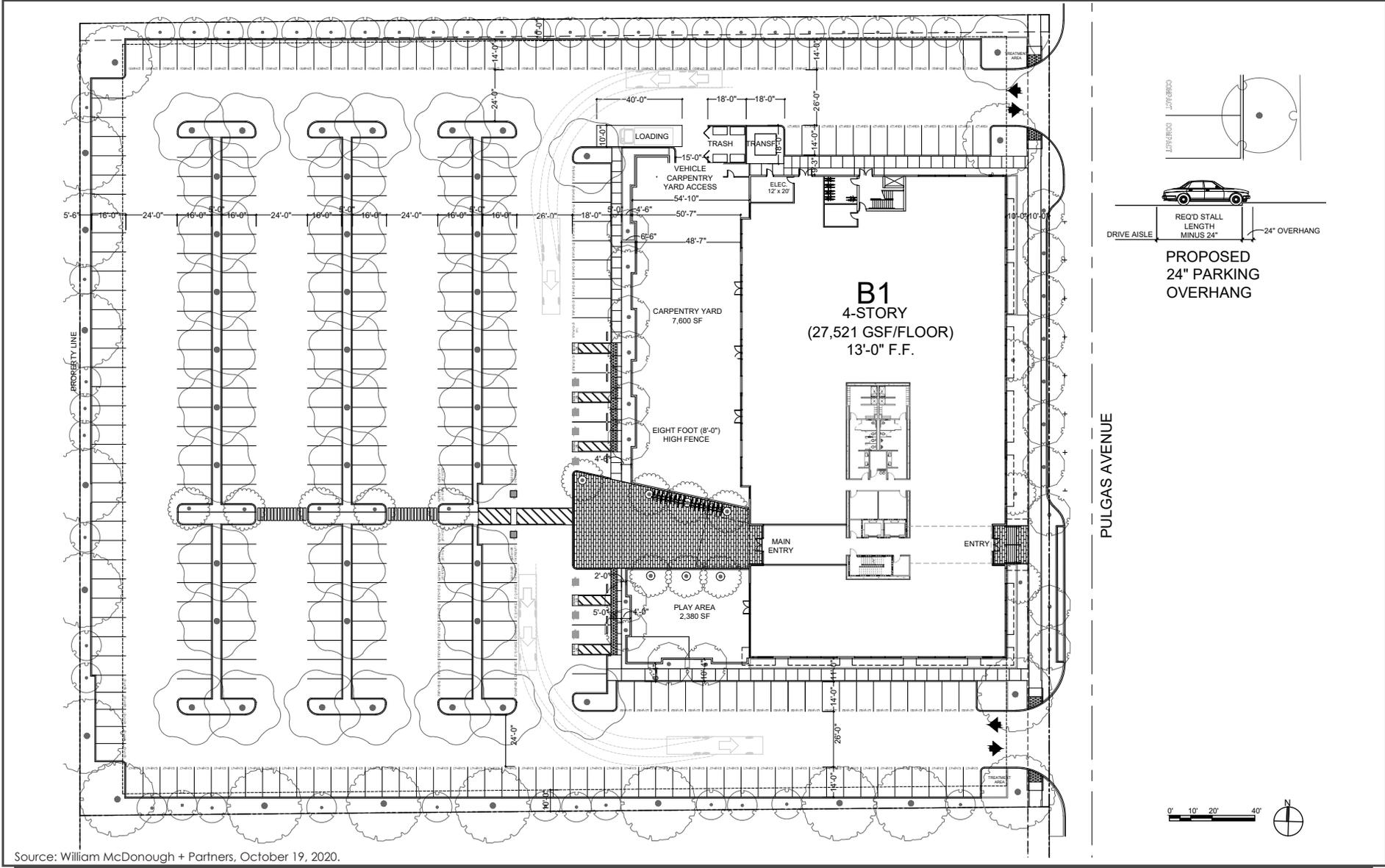
VICINITY MAP

FIGURE 3.1-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 3.1-3



Source: William McDonough + Partners, October 19, 2020.

PROPOSED SITE PLAN

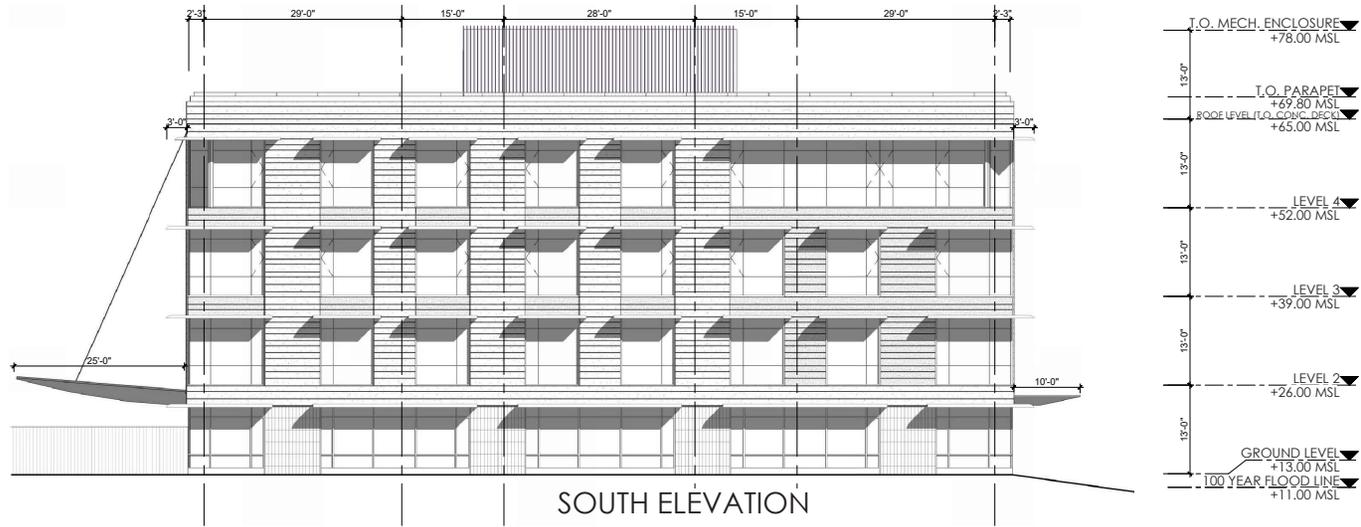
FIGURE 3.2-1



Source: William McDonough + Partners, October 19, 2020.

PROPOSED NORTH/WEST ELEVATION

FIGURE 3.2-2



Source: William McDonough + Partners, October 19, 2020.

PROPOSED SOUTH/EAST ELEVATION

FIGURE 3.2-3

3.2.2 Children's Play Area

The proposed project would include an outdoor children's play area for use by JobTrain students while they are attending training classes. The approximately 2,380-square-foot children's play area would accommodate a maximum of 24 children and would be constructed adjacent to the western building façade, south of the proposed outdoor carpentry area and building entrance. The children's play area would include an eight-foot-tall wood fence around the perimeter. Access to the play area would be provided solely from the proposed office building.

3.2.3 Site Access and Parking

A landscaped surface parking lot constructed behind the office building would provide 357 parking spaces for the proposed project. Two bi-directional driveways onto Pulgas Avenue located along the north and south property lines would provide ingress and egress to the site and surface parking lot.

3.2.4 Landscaping

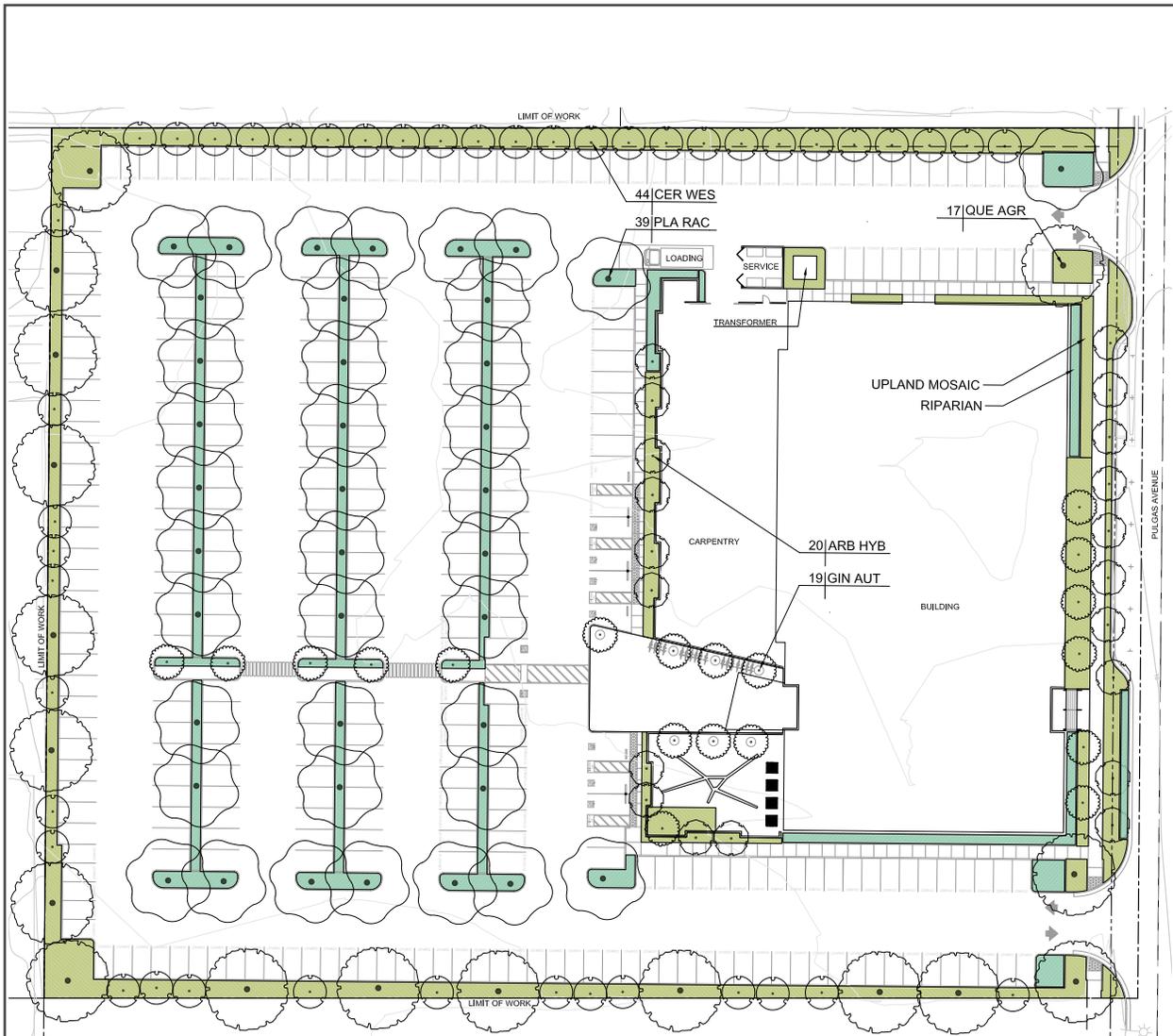
The project proposes to plant trees and shrubs around the perimeter of the site, within the surface parking lot, along the project frontage, and adjacent to the proposed carpentry and children's play areas. There are currently 14 trees on the project site. Of the 14 trees, eight are considered protected trees under the East Palo Alto Tree Preservation and Management Regulations. With project implementation, all of the existing trees would be removed, and 140 new trees would be planted on the project site. The proposed landscaping plan is shown in Figure 3.2-4 below.

3.2.5 Water

The proposed project would connect to the existing eight-inch water main in Pulgas Avenue that currently serves the project site. No new off-site water system connections are proposed by the project.

3.2.6 Storm Drain

The proposed project would connect to the existing 18-inch storm drain line in Pulgas Avenue. The project would incorporate stormwater treatment measures such as bioretention areas and flow-through planters to meet the City of East Palo Alto stormwater requirements.

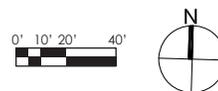


PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	SIZE	WUCOLS	CA NATIVE	QTY
	ARB HYB	ARBUTUS X 'MARINA' / ARBUTUS STANDARD	36"BOX	LOW		20
	CER WES	CERCIS OCCIDENTALIS / WESTERN REDBUD MULTI-TRUNK	24"BOX	VERY LOW	X	44
	GIN AUT	GINKGO BILOBA 'AUTUMN GOLD' TM / AUTUMN GOLD MAIDENHAIR TREE	36"BOX	MEDIUM		19
	PLA RAC	PLATANUS RACEMOSA / CALIFORNIA SYCAMORE	36"BOX	MEDIUM	X	39
	QUE AGR	QUERCUS AGRIFOLIA / COAST LIVE OAK	36"BOX	VERY LOW	X	18

SHRUBS / GRASSES / GROUNDCOVERS

	UPLAND MOSAIC	14,743 SF
	RIPARIAN	7,122 SF
		21,865 SF TOTAL (X%)



Source: William McDonough + Partners and Rana Landscape Architects; October 19, 2020.

3.2.7 Sanitary Sewer

The proposed project would connect to the existing six-inch sewer main in Pulgas Avenue. The sanitary sewer system serving the project area is owned and operated by the East Palo Alto Sanitary District (EPASD). Based on preliminary coordination, the EPASD has indicated that the existing sanitary sewer mains downstream of the project site in Bay Road and along the Bay Trail do not have sufficient capacity to serve the project, requiring the following improvements:

- Replacing the existing 15-inch sewer main in Bay Road between manholes A16 and A22 with an 18-inch main
- Replacing the existing 18-inch sewer main in the Bay Trail between manholes T28 and T22 with a 24-inch main
- Replacing the existing 18/21-inch sewer main in the Bay Trail between manholes T20 and T17 with a 24-inch main
- Replacing the existing 21-inch sewer main in the Bay Trail between manholes T17 and T16 with a 26-inch main

A total of 4,188 feet (0.79-mile) of sanitary sewer mains would be replaced by EPASD. The sanitary sewer mains to be replaced are all located within the existing right-of-way. The location of these improvements is shown in Figure 3.2-5. The improvements listed above represent the best information available at the time of preparation of this Initial Study. The exact location and length of these improvements, however, is subject to final approval by EPASD and may change as the design of improvements is finalized. For the purposes of this analysis, it is anticipated that all improvements would be located within the public right-of-way and would not exceed one mile in length.

On-Site Sanitary Sewer Treatment Facility Option

Alternatively, if connection to the EPASD system is not feasible, the project would install a pre-manufactured on-site sanitary sewer treatment facility to serve the proposed office building. The on-site treatment facility would have a capacity of 6,000 gallons per day (gpd) and would be located in the southwest corner of the project site within an above-grade structure (refer to Figure 3.2-6 below).¹ The facility would have four main components: 1) 30,000-gallon buffer/emergency storage tank, 2) wastewater treatment plant, 3) sludge collector, and 4) 20,000-gallon recycled water storage tank. Two pipes would connect the on-site sanitary sewer treatment plant to the office building transporting sewage from the office building to the treatment facility and returning processed, reclaimed water from the treatment facility back to the office building. Additionally, a backup connection to the EPASD system would be installed in the event that the on-site system is down as a result of an emergency or for maintenance. In total, the on-site sanitary sewer facility would occupy approximately 2,490 square feet and have a maximum height of 23 feet above grade.

Construction activities associated with the on-site wastewater treatment facility option would include excavation, grading, site preparation, and building construction for a structure that would house the

¹ Operation of the proposed on-site wastewater treatment facility option would require a permit from the State Water Resources Control Board and an operator to be on-site 24 hours per day seven days per week to monitor the wastewater treatment facility.

pre-manufactured wastewater treatment facility equipment. Construction of the on-site wastewater treatment facility option would take approximately 2.5 to three months to complete. The maximum depth of excavation necessary to construct the on-site sanitary sewer facility foundation would be approximately two feet below the existing grade.² Approximately 15.37 cubic yards of soil would be exported during construction of the on-site sanitary sewer treatment facility foundation.³

3.2.8 Green Building Measures

The proposed project would be built to the California Green Building Standards Code (CALGreen), which includes design provisions intended to minimize wasteful energy consumption. The proposed project would include the following green building features:

- CarbonCure (alternative concrete mix that sequesters carbon)
- Solar panels on the roof
- Water efficient landscaping with irrigation design
- On-site stormwater management, bioretention swales
- Bicycle parking spaces
- Electric vehicle charging stations
- LED light fixtures
- Low flow indoor water fixtures
- Variable refrigerant flow HVAC system
- High performance façade design which incorporates both acoustical and thermal design elements
- Performance based building energy modeling
- Exterior lighting will be specified to meet LEED/USGBC light pollution reduction guidelines

3.2.9 Project Construction

Construction of the proposed project would be completed in one phase, which would take approximately 15 months. During this time, construction activities would occur between 7:00 a.m. and 3:30 p.m. on weekdays. Construction activities would include demolition of the two existing industrial buildings, accessory structures, parking area, and landscaping, as well as excavation, and construction of a four-story office building, outdoor areas, and surface parking lot. Prior to construction of the proposed office building, approximately two feet of fill would be imported to the site to elevate the building above the current flood plain (13 feet above mean sea level (amsl)). After fill is imported, the proposed project will involve excavations of up to approximately five feet bgs for foundation construction and utility installation. Therefore, excavation would not extend greater than three feet below the current ground surface levels. It is anticipated that the project would import 307 cubic yards of soil to the project site.

² The on-site wastewater treatment facility would be located in a portion of the site with an elevation above the flood plain. No fill would be added to this portion of the site. Therefore, excavation for the on-site wastewater treatment facility option would extend through native soil only.

³ Soil export volumes were estimated based on the approximate footprints of the emergency water storage tank (10 feet x 56.5 feet), wastewater treatment plant (23.07 feet x 65 feet), recycled water storage tank (10 feet x 42.5 feet) and the depth of excavation (two feet).



- Project Boundary
- Sanitary Sewer Flow Path
- Location of Proposed Improvements
- Sanitary Sewer Treatment Plant

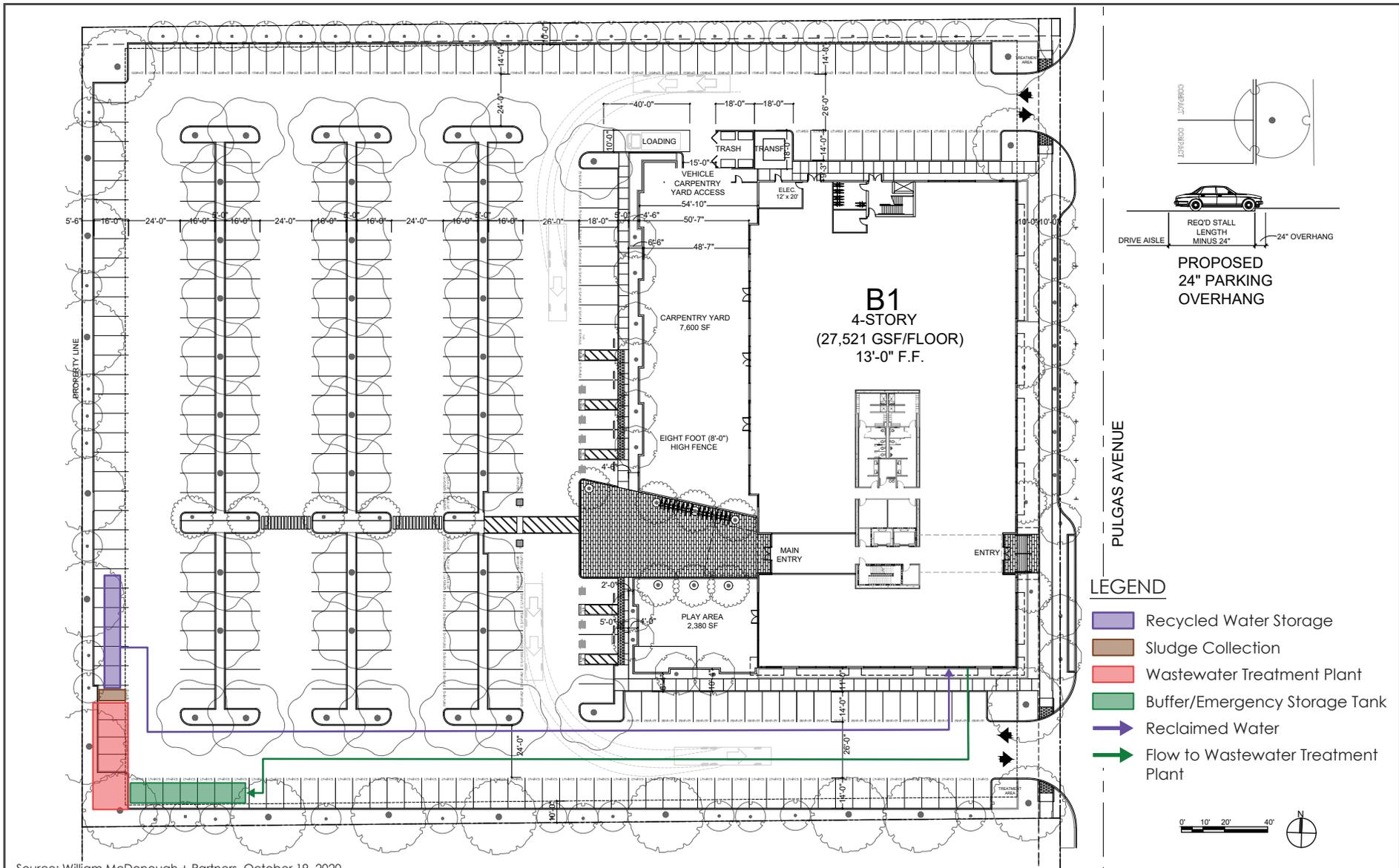


0 100 600 800 1,200 Feet

Aerial Source: Google Earth Pro, Apr. 2, 2021.

Photo Date: Sep. 2020

LOCATION OF PROPOSED EAST PALO ALTO SANITARY DISTRICT IMPROVEMENTS | FIGURE 3.2-5



PROPOSED ON-SITE WASTEWATER TREATMENT FACILITY OPTION

FIGURE 3.2-6

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

- | | | | |
|------|------------------------------------|------|------------------------------------|
| 4.1 | Aesthetics | 4.12 | Mineral Resources |
| 4.2 | Agriculture and Forestry Resources | 4.13 | Noise |
| 4.3 | Air Quality | 4.14 | Population and Housing |
| 4.4 | Biological Resources | 4.15 | Public Services |
| 4.5 | Cultural Resources | 4.16 | Recreation |
| 4.6 | Energy | 4.17 | Transportation |
| 4.7 | Geology and Soils | 4.18 | Tribal Cultural Resources |
| 4.8 | Greenhouse Gas Emissions | 4.19 | Utilities and Service Systems |
| 4.9 | Hazards and Hazardous Materials | 4.20 | Wildfire |
| 4.10 | Hydrology and Water Quality | 4.21 | Mandatory Findings of Significance |
| 4.11 | Land Use and Planning | | |

4.1 CONNECTION TO EAST PALO ALTO SANITARY DISTRICT

As discussed in Section 3.2.7, Sanitary Sewer above, the project would connect to the existing EPASD system via the existing six-inch sanitary sewer main in Pulgas Avenue. According to EPASD, a total of 4,188 feet (0.79-mile) of sanitary sewer mains downstream of the project site would require replacement in order to serve the increased sewer demand from the proposed project. The sanitary sewer mains to be replaced are all located within the existing right-of-way. Connection to the EPASD system and replacement of the downstream sanitary sewer mains would be covered under separate environmental review completed by EPASD. Based on the information contained in Section 3.2.7 above, the required improvements would not exceed one mile in length and would be located within existing public right-of-way and, therefore, would be statutorily exempt from CEQA per Section 15282 of the CEQA Guidelines. For this reason, analysis of the connection to EPASD system and replacement of the downstream sanitary sewer mains is not discussed further in this Initial Study.

4.2 AREAS OF NO MEASUREABLE IMPACT

The proposed project would construct a new 110,000-square-foot office building, associated site improvements, and surface parking lot on a site that is currently developed with industrial uses. Because the project's impacts under CEQA are measured against the baseline that consists of existing physical conditions, impacts in certain resource areas that are typically evaluated within an Initial Study will not occur. In the case of the proposed project, measurable impacts to agricultural, forest, and mineral resources, and wildfire are not anticipated because these resources are not located in the project area. The project site, which is located in an urban area, is not farmland or forest land,

is not a source of mineral resources, and is not subject to wildfire. Thus, these areas are not further analyzed in this Initial Study.

4.3 AESTHETICS

4.3.1 Environmental Setting

4.3.1.1 *Regulatory Framework*

State

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. There are no state-designated scenic highways within or near East Palo Alto. The closest officially designated state scenic highway to the project site is Interstate 280 from the San Mateo County/Santa Clara County line north to approximately Interstate 380.⁴

Local

Vista 2035 East Palo Alto General Plan

Various policies in the City’s General Plan have been adopted for the purpose of avoiding or mitigating aesthetic impacts resulting from planned development within the City, including the following:

Policy	Land Use and Urban Design
13.8	Viewsheds. Encourage developers to design projects that capitalize on views of adjacent natural resources. Require viewshed analysis as part of any potential development application. New development shall allow for the proposed east-west view corridor through Ravenswood north of Bay Road (see Specific Plan for details)

Ravenswood/ 4 Corners Transit Oriented Development Specific Plan

Various policies in the Ravenswood Specific Plan have been adopted for the purpose of avoiding or mitigating aesthetic impacts resulting from planned development within the Plan Area including the following:

Policy	Land Use and Community Character
4.4	Ensure that new development respects existing public view corridors within the Plan Area and also allows for the proposed east-west view corridor through Ravenswood north of Bay Road. (More information on this proposed view corridor is provided in Chapters Six and Seven.)

Policy	Utilities and Public Services
5.1	Ensure that new development does not adversely affect the Ravenswood Open Space Preserve

⁴ California Department of Transportation. "Scenic Highways." Accessed May 17, 2021. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>.

and the Palo Alto Baylands Nature Preserve.

5.2 Encourage developers to design projects that capitalize on views of adjacent natural resources

City of East Palo Alto Municipal Code

The City of East Palo Alto addresses visual considerations for development in various City documents, including the Municipal Code. The City Zoning Ordinance (Appendix A in the Municipal Code) sets forth specific design guidelines, height limits, building density, building design and landscaping standards, architectural features, and open space and setback requirements.

4.3.1.2 Existing Conditions

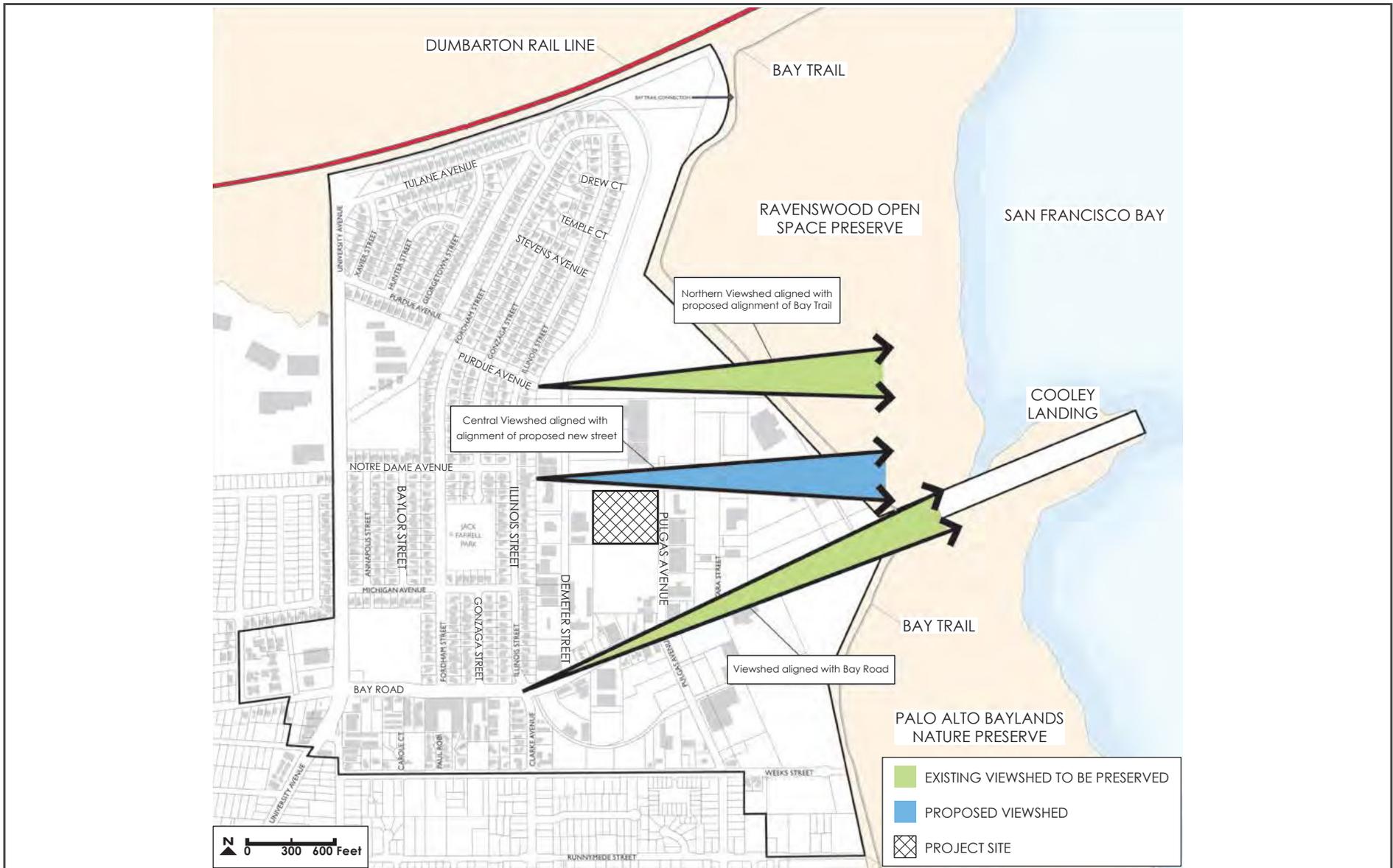
Scenic Views and Resources

As discussed in the General Plan and Specific Plan, views of the San Francisco Bay and Mount Diablo Range are considered scenic resources in the City of East Palo Alto. As shown on Figure 4.3-1, the Specific Plan identifies two existing viewsheds and a proposed viewshed that should be preserved. All three viewsheds are from the City looking east toward the San Francisco Bay. The project site is not located within any portion of the three identified viewsheds. The central viewshed extends above the northern edge of the project site.

Hillsides are visible to the east, west, and south of the site. However, these views are somewhat obstructed by existing development and landscaping. The nearest designated state scenic highway is Interstate 280, approximately 6.5-miles west of the site. Due to the distance of the project site from the nearest scenic highway and the presence of intervening structures, the project site is not visible from a state designated scenic highway.

Visual Character of Project Area

The project site is located in the eastern portion of East Palo Alto. The project site is bounded by industrial buildings and a vacant parcel to the north, Pulgas Avenue and industrial uses to the east, light industrial and commercial buildings to the west, and a vacant parcel and the Ravenswood Medical Center to the south. Existing development in the project area consists primarily of rectangular one-story commercial and industrial buildings of corrugated metal, wood frame, and concrete tilt-up construction. The Ravenswood Family Health Center building to the south is a two-story concrete tilt-up construction. The Ravenswood Open Space Preserve and Bay Trail are located approximately 700-feet northeast of the project site.



DESIGNATED VIEWSHEDS

FIGURE 4.3-1

Visual Character of the Project Site

The project site is flat and is developed with two one-story wood frame industrial buildings, approximately six accessory structures, and uncovered, paved areas used for equipment and vehicle storage. Chain link fencing around the perimeter separates the site from surrounding uses. The overall character of the site is of previously developed industrial property with occupied industrial buildings and storage areas.

Due to the flat topography of the project area and the surrounding development, views of the project site are generally limited to the immediate vicinity. Photos 1, 2, 3, and 4 illustrate the existing conditions of the project site and surrounding area.



PHOTO 1: AERIAL VIEW - LOOKING NORTH



PHOTO 2: PULGAS AVENUE VIEW - LOOKING NORTHWEST



PHOTO 3: PULGAS AVENUE VIEW - LOOKING SOUTHEAST



PHOTO 4: PULGAS AVENUE VIEW - LOOKING SOUTHEAST

Source: William McDonough + Partners, October 19, 2020.

PHOTOS 1, 2, 3, AND 4 EXISTING CONDITIONS ON PROJECT SITE AND SURROUNDING AREA

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
1) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? ⁵ If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. **(Less than Significant Impact)**

The Ravenswood Specific Plan identifies scenic vistas within the project area as bay views and views of the Diablo Range to the east, which are visible from public viewpoints and street corridors. The Specific Plan includes goals and policies related to preservation of scenic views and identifies viewshed standards for projects located within an existing or proposed viewshed. Policy LU-4.4 calls for new development to respect existing public view corridors within the plan area and allow for the proposed east-west corridor through Ravenswood north of Bay Road.

As shown in Figure 4.5-1, the project site is not located within an existing or proposed viewshed. The south viewshed, which aligns roughly with Bay Road, is located approximately 500 feet south of the project site. The proposed central viewshed extends along the northern edge of the project site and does not overlap with any portion of the site. For these reasons, the proposed project and on-site wastewater treatment facility option would not be subject to viewshed standards identified in the Specific Plan, and the proposed project and on-site wastewater treatment facility option would have a less than significant impact on scenic vistas. **(Less than Significant Impact)**

Impact AES-2: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **(No Impact)**

⁵ Public views are those that are experienced from publicly accessible vantage points.

The nearest officially designated state scenic highway to the project site is Interstate 280, which is located approximately 6.5-miles west of the project site. The site is not visible from Interstate 280. For this reason, the project and on-site wastewater treatment facility option would not damage scenic resources within a designated state scenic highway. **(No Impact)**

Impact AES-3: The project would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

East Palo Alto Zoning Code

The project site is located in an urbanized area and has a land use designation of Ravenswood Employment Center (REC) in the East Palo Alto Zoning Code. The East Palo Alto Zoning Code does not include policies related to preserving scenic quality.

Vista 2035 General Plan and Ravenswood/4 Corners TOD Specific Plan

The General Plan identifies goals to preserve the scenic quality of the city, including through the identification of Gateway areas and viewsheds. Specifically, General Plan Urban Design Policy 13-8 calls for developments to capitalize on views of adjacent natural resources, allow for the proposed east-west view corridor through Ravenswood north of Bay Road, requires a viewshed analysis as part of any development application, and refers readers to the Ravenswood Specific Plan for details on implementation. Figure 4.5-1 identifies the existing and planned viewsheds within the Specific Plan area. As shown on this figure and as noted above in Section 4.3-1, Environmental Setting, the project site is not located within an identified viewshed and would, therefore, not be subject to viewshed standards identified in the Specific Plan. The project site is not located within a designated gateway area. Therefore, the project and on-site wastewater treatment facility option would not impact the scenic quality within an identified gateway area.

Additionally, as discussed in Section 4.14, Land Use below, the project proposes to construct a four-story 78-foot-tall office building on a site where buildings up to three stories are allowed. The project proposes a variance to allow for the proposed 4-story building.

Existing development surrounding the project site consists of one- and two-story industrial and commercial buildings on Pulgas Avenue and Bay Road. The project would represent an increase in building height on-site compared to existing conditions and surrounding development. However, the difference in building height from three-stories allowed on-site to the four stories proposed by the project would not be readily perceptible. Additionally, as a part of the variance process, the project and on-site wastewater treatment facility option would be subject to Design Review to confirm consistency with General Plan development standards to ensure that the proposed building would not be out of character or inconsistent with the policies or development standards for urban design and community character in the City's General Plan and Specific Plan. For these reasons, the proposed project and on-site wastewater treatment facility option would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

Impact AES-4: The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

The project site is located in a developed area of East Palo Alto and is located approximately 900 feet west of Ravenswood Open Space Preserve. Existing lighting at the project site includes building-mounted security lighting on the existing industrial buildings and streetlights along the Pulgas Avenue.

Office Building

The project would be required to comply with lighting requirements in Section 18.22.050 of the Municipal code. Specifically, all exterior building lighting would be downcast with no visible light sources and the maximum average-maintained lighting levels for parking lot areas would be five-foot-candles and ten-foot candles along the building frontage and main drive aisles of parking lots, respectively. Furthermore, the project would comply with LEED lighting guidelines and would limit lighting levels to no greater than 0.10 horizontal foot candles at the project boundary.⁶ Because the intensity of light decreases with increasing horizontal distance from the source,⁷ increased lighting resulting from the proposed project would be incremental and would not result in impacts to wildlife within the Ravenswood Open Space Preserve.

Furthermore, project lighting would be reviewed for consistency with Municipal Code Section 18.22.050 during the building permit review process. Compliance with Municipal Code regulations would ensure exterior building lighting does not create a new source of light and glare. For these reasons, the proposed office building would not result in significant impacts as a result of lighting and glare. **(Less than Significant Impact)**

On-Site Wastewater Treatment Facility Option

Although the exact design of the on-site wastewater treatment facility option has not been determined at the time of this Initial Study, lighting would likely be installed on the outside of the treatment facility for security purposes. All security lighting for the on-site wastewater treatment facility option would be subject to Section 18.22.050 of the Municipal code and would be designed to meet LEED lighting guidelines limiting lighting levels at the project boundary, similar to the proposed office building. On-site wastewater treatment facility lighting would be reviewed for consistency with Municipal Code Section 18.22.050 during the building permit review process, which would ensure that on-site wastewater treatment facility lighting does not create a new source of light and glare. For these reasons, the on-site wastewater treatment facility option would not result in significant impacts as a result of lighting and glare. **(Less than Significant Impact)**

⁶ USGBC. "Light Pollution Reduction, Requirements for Exterior Lighting." Accessed December 17, 2020. <https://www.usgbc.org/credits/ss8>

⁷ National Aeronautics and Space Administration. More on Brightness as a Function of Distance. May 5, 2016. https://imagine.gsfc.nasa.gov/features/yba/M31_velocity/lightcurve/more.html#:~:text=The%20intensity%20or%20brightness%20of, follows%20an%20inverse%20square%20relationship.&text=Notice%20that%20as%20the%20distance,one%20over%20r%20squared%22%20relationship.

4.4 AIR QUALITY

The following discussion is based in part on an Air Quality and Greenhouse Gas Emissions Assessment and Addendum prepared by Illingworth & Rodkin, Inc. in February and May 2021, respectively. These reports are attached as Appendix A to this Initial Study.

4.4.1 Environmental Setting

4.4.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O₃), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.⁸ Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.4-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Pollutants	Sources	Primary Effects
Ozone (O ₃)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	<ul style="list-style-type: none"> • Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO ₂)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	<ul style="list-style-type: none"> • Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter (PM _{2.5}) and Coarse Particulate Matter (PM ₁₀)	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	<ul style="list-style-type: none"> • Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	<ul style="list-style-type: none"> • Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

High O₃ levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O₃ levels.

⁸ The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O₃ levels. The highest O₃ levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel 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 [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).⁹ Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are 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, and elementary schools.

4.4.1.2 Regulatory Framework

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean

⁹ California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed June 16, 2018. <https://www.arb.ca.gov/research/diesel/diesel-health.htm>.

Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O₃, CO, SO_x, NO_x, and lead.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in addition to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_x.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.¹⁰

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines.

¹⁰ BAAQMD. *Final 2017 Clean Air Plan*. April 19, 2017. <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>.

The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

Vista 2035 East Palo Alto General Plan

Policy	Health and Equity
10.7	Other mobility strategies. Implement the strategies in the Transportation Element that improve air quality. These include transit, walking, biking, and Transportation Demand Management strategies.
Policy	Parks, Open Space, and Conservation
6.2	New tree planting. Prioritize the planting of new trees on sites designated as sensitive receptors (e.g., schools, health centers) or that are in close proximity to sources of air pollution such as freeways and heavily traveled road corridors.

Ravenswood/ 4 Corners Transit Oriented Development Specific Plan

Various policies in the Specific Plan have been adopted for the purpose of avoiding or mitigating air quality impacts resulting from planned development within the Plan Area including the following:

Policy	Land Use and Community Character
6.3	Ensure that a Health Risk Assessment is prepared in accordance with BAAQMD permit requirements for facilities producing new potentially hazardous air emissions in the Plan Area. If the health risk assessment concludes that an unacceptable risk would be posed to nearby sensitive receptors, including schools, ensure adequate mitigation is provided to reduce the emissions to the extent possible.

4.4.1.3 *Existing Conditions*

Existing Air Pollutant Levels

The San Francisco Bay Area Air Basin, within which the project site is located, has non-attainment status for ground level ozone, fine particulate matter (PM_{2.5}), and respirable particulate matter (PM₁₀). The San Francisco Bay Area Air Basin has attainment or undetermined status for all other regional criteria pollutants for which the US EPA and CARB have set standards. The nearest official monitoring station which monitors all of the criteria pollutants and ozone precursors is located at 158 East Jackson Street in San José, approximately 15-miles southeast of the site.¹¹ Pollutant monitoring results for the years 2016 to 2018 at the San José monitoring station are shown in Table 4.4-2. The station monitors ozone, carbon monoxide, nitrogen oxide, PM₁₀ and PM_{2.5} levels.

¹¹ BAAQMD, Meteorology and Measurement Division. 2017 Air Monitoring Plan. July 1, 2018. Accessed October 6, 2019. http://www.baaqmd.gov/~media/files/technical-services/2017_network_plan_20180701-pdf.pdf?la=en. There is a BAAQMD monitoring station located at 897 Barron Avenue, Redwood City approximately four miles west of the site. This station monitors ground-level ozone, nitrous oxide, carbon monoxide and PM_{2.5}. The station does not monitor PM₁₀.

Table 4.4-2: Ambient Air Quality Standards Violations and Highest Concentrations				
Pollutant	Standard	Days Exceeding Standard		
		2017	2018	2019
SAN JOSÉ STATION				
Ozone	State 1-hour	4	0	2
	Federal 8-hour	4	0	2
Carbon Monoxide	Federal 8-hour	0	0	0
Nitrogen Dioxide	State 1-hour	0	0	0
PM ₁₀	Federal 24-hour	0	0	0
	State 24-hour	6	0	4
PM _{2.5}	Federal 24-hour	6	15	0
Source: BAAQMD. Air Pollution Summaries (2017 – 2019). Available at: https://www.baaqmd.gov/about-air-quality/air-quality-summaries				

As part of an effort to attain and maintain ambient air quality standards for O₃ and PM₁₀, BAAQMD has established thresholds for significance for these air pollutants and their precursors. These thresholds are for O₃ precursor pollutants (ROG and NO_x), PM₁₀, and PM_{2.5}, and apply to both construction period and operational period impacts (refer to Table 4.4-3).

Sensitive Receptors

The closest sensitive receptors to the project site are residences located on Illinois Street, approximately 380 feet west of the project site. EPACENTER, located at 1950 Bay Road approximately 650 feet southwest of the site, hosts children ages 13 and older during daytime hours.

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.4.2.1 Thresholds of Significance

Impacts from the Project

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of East Palo Alto has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and PM_{2.5}. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.4-3, below.

Table 4.4-3: BAAQMD Air Quality Significance Thresholds			
Pollutant	Construction Thresholds	Operation Thresholds	
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Annual Average Emissions (tons/year)
Criteria Air Pollutants			
ROG, NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	Single Source	Combined Cumulative Sources	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual PM _{2.5}	0.3 µg/m ³	0.8 µg/m ³ (average)	

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. **(Less than Significant Impact)**

Proposed Project

The most recent clean air plan is the 2017 CAP. The proposed project would not conflict with the 2017 CAP because it would have emissions below BAAQMD thresholds, is considered urban infill,

and would be located near transit (local/regional bus routes). Because the project would not exceed BAAQMD significance thresholds, it is not required to incorporate project-specific control measures listed in the 2017 CAP. For these reasons, implementation of the project would not inhibit BAAQMD or partner agencies from continuing progress toward attaining state and federal air quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities, as described within the 2017 CAP. **(Less than Significant Impact)**

On-Site Wastewater Treatment Facility Option

As discussed above regarding the proposed project, the on-site wastewater treatment facility option would not conflict with the 2017 CAP because it would have emissions below BAAQMD thresholds and is infill development located near transit. Because the on-site wastewater treatment facility option would not exceed BAAQMD significance thresholds, it is not required to incorporate project-specific control measures listed in the 2017 CAP. For these reasons, implementation of the on-site wastewater treatment facility option would not inhibit progress toward attaining state and federal air quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities, as described within the 2017 CAP. **(Less than Significant Impact)**

Impact AIR-2: The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(Less than Significant Impact with Mitigation Incorporated)**

Construction

Criteria Pollutants

Construction of the project would involve demolition of existing structures and pavement and site grading, trenching, paving, building construction, and application of architectural coatings. The duration of project construction would be approximately 15 months. Construction-related automobiles, trucks, and heavy equipment are a primary concern with regard to criteria pollutant emissions as a result of diesel particulate matter.

Table 4.4-4: Construction Criteria Pollutant Emissions				
Scenario	ROG	NO_x	PM₁₀ Exhaust	PM_{2.5} Exhaust
Average Daily Construction Emissions Per Year (pounds/day)				
2021 (175 construction workdays)	1.18	12.22	0.62	0.52
2022 (183 construction workdays)	8.38	12.86	0.61	0.51
<i>BAAQMD Thresholds (lbs/day)</i>	<i>54</i>	<i>54</i>	<i>82</i>	<i>54</i>
Threshold Exceeded?	No	No	No	No
Source: Illingworth & Rodkin, Inc. <i>JobTrain Air Quality & Greenhouse Gas Assessment, East Palo Alto</i> . February 17, 2021.				

As shown in Table 4.4-3, ROG, NO_x, PM₁₀ exhaust, and PM_{2.5} exhaust emissions associated with construction would not exceed the BAAQMD significance thresholds and, therefore, would not result in a significant criteria pollutant impact.

Fugitive Dust

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soil. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if best management practices are implemented to reduce the emissions.

Impact AIR-1: Ground disturbing activities associated with project construction could generate fugitive dust emissions. **(Significant Impact)**

Mitigation Measure: The following mitigation measure, which is consistent with the Basic Construction Mitigation Measures identified in the BAAQMD CEQA Air Quality Guidelines to reduce impacts from construction-related fugitive dust to a less than significant level, shall be implemented.

MM AIR-1.1: During construction period ground disturbance, the project contractor shall implement the following measures recommended by BAAQMD to control dust and exhaust:

- Exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- Haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- Visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweeps at least once per day. The use of dry power sweeping is prohibited.
- Vehicle speeds on unpaved surfaces shall be limited to 15 miles per hour (mph)
- Roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be posted for construction workers at all access points.
- Construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

- Post a publicly visible sign with the telephone number and contact at the City of East Palo Alto regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD’s phone number shall also be included to ensure compliance with applicable regulations.

With implementation of MM AQ-1.1, dust emissions during construction of the proposed project would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

On-Site Wastewater Treatment Facility Option

If connection to the existing EPASD system is not feasible, the project would install a pre-manufactured on-site wastewater treatment facility in the southwest corner of the project site to serve the proposed office building. Construction of the on-site wastewater treatment facility option would take approximately 2.5 to three months to complete, overlapping with construction of the office building. Project construction emissions in combination with construction of the on-site wastewater treatment facility option are show in Table 4.4-5, below.

Table 4.4-5: On-site Wastewater Treatment Facility Construction Emissions				
Year	ROG	NOx	PM₁₀ Exhaust	PM_{2.5} Fugitive
Average Daily Construction Emissions Per Year (pounds/day)				
2021 (40 construction work days)	1.51	14.56	0.76	0.70
<i>BAAQMD Thresholds (pounds per day)</i>	<i>54</i>	<i>54</i>	<i>82</i>	<i>54</i>
Exceed Thresholds?	No	No	No	No
Source: Illingworth & Rodkin, Inc. <i>Addendum Letter to Air Quality and GHG Assessment 2535 Pulgas Avenue (JobTrain), East Palo Alto, California.</i> May 3, 2021.				

As shown in Table 4.4-5, construction activities associated with the on-site wastewater treatment facility option would not exceed BAAQMD significance thresholds for ROG, NOx, PM₁₀ exhaust, or PM_{2.5} exhaust emissions and, therefore, would not result in a significant criteria pollutant impact.

Because the on-site wastewater treatment facility option would be constructed at the same time as the proposed office building (if this option is selected), construction activities associated with the on-site wastewater treatment facility option would implement MM AIR-1.1 to ensure fugitive dust emissions are less than significant. **(Less than Significant Impact with Mitigation)**

Operation

Criteria Pollutants

Operational air emissions from the project would be generated primarily from vehicles driven by project employees and vendors. Operational air emissions would also be generated by a 100-kW

diesel emergency generator. CalEEMod was used to estimate emissions from operation of the proposed project. Table 4.4-6 below shows the operational emissions of the project at occupancy in 2023.

Table 4.4-6: 2023 Operational Period Emissions (tons/year)				
Scenario	ROG	NOX	PM₁₀	PM_{2.5}
2023 Daily Project Operational Emissions	0.94	0.63	0.90	0.25
2023 Daily Existing Operational Emissions	0.11	0.11	0.21	0.05
Net Daily Emissions	0.83	0.52	0.69	0.20
<i>BAAQMD Thresholds</i>	<i>10</i>	<i>10</i>	<i>15</i>	<i>10</i>
Exceed Threshold?	No	No	No	No
Net 2023 Annual Project Operational Emissions ¹	4.54	2.85	3.78	1.08
<i>BAAQMD Threshold</i>	<i>54</i>	<i>54</i>	<i>82</i>	<i>54</i>
Exceed Threshold?	No	No	No	No
¹ Assumes 365-day operation. Source: Illingworth & Rodkin, Inc. <i>JobTrain Air Quality & Greenhouse Gas Assessment, East Palo Alto</i> . February 17, 2021.				

As shown in Table 4.4-6, the project would not exceed the BAAQMD significance thresholds for operational emissions. **(Less than Significant Impact)**

On-Site Wastewater Treatment Facility

The on-site wastewater treatment facility would not include combustion sources that would emit criteria pollutants during operation. Thus, operational emissions associated with the on-site wastewater treatment facility option would be less than significant, same as the proposed project. **(Less than Significant Impact)**

Impact AIR-3: The project would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact)**

Construction

Proposed Project

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. Construction exhaust emissions 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 DPM and PM_{2.5}. The health risk assessment of project construction activities (refer to Appendix A) evaluated potential health effects of sensitive receptors at nearby residences and identified a maximally exposed individual (MEI) for construction emissions of DPM and PM_{2.5}. As shown in Figure 4.4-1, the MEI would be the occupant of a single-family

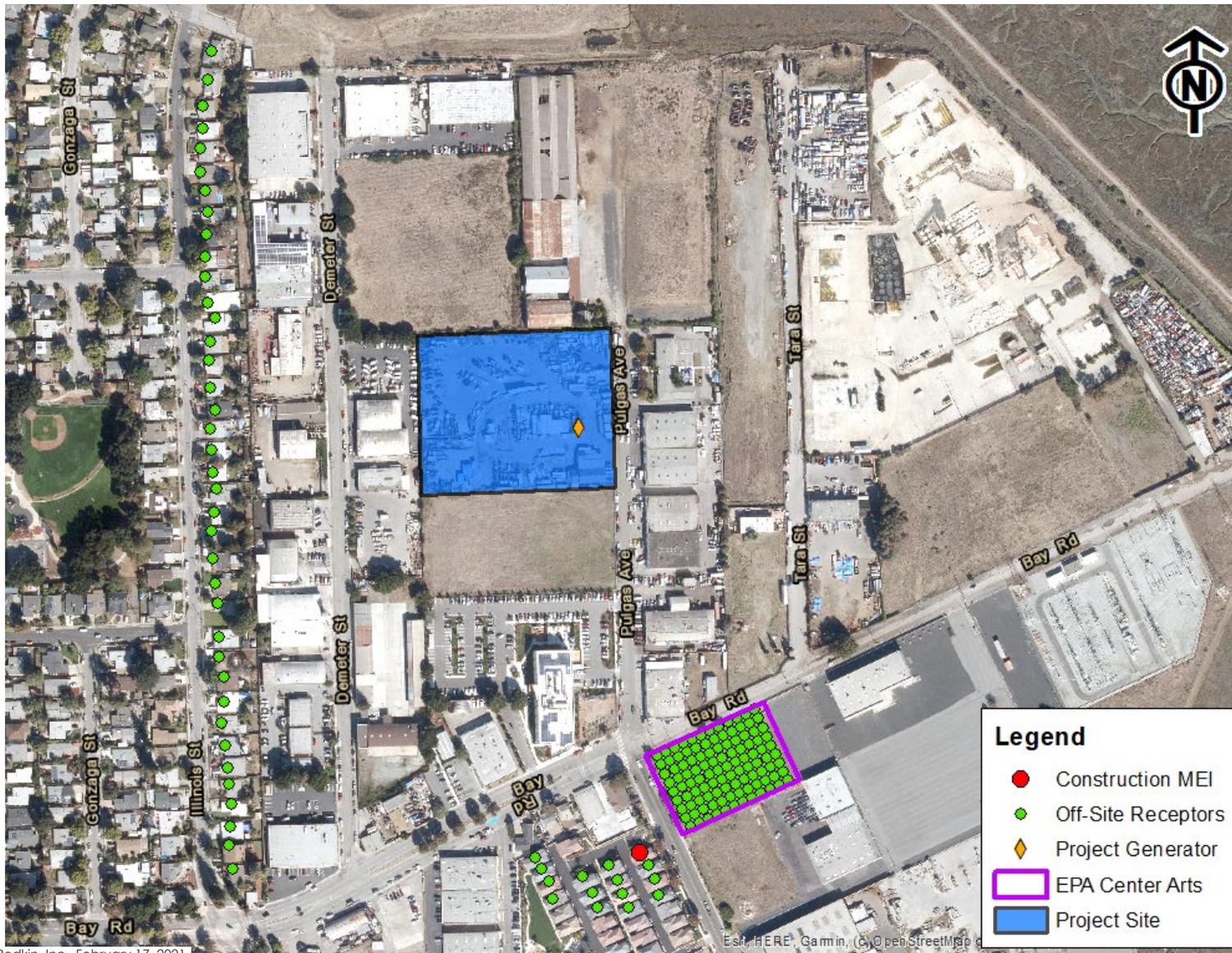
residence to the south of the project site on Pulgas Avenue. The results of the health risk assessment for project construction activities are summarized in Table 4.4-7, below.

Table 4.4-7: Construction Risk Impacts of Proposed Project at MEI			
Source	Cancer Risk* (per million)	Annual PM_{2.5}* (µg/m³)	Hazard Index
Residential MEI – Single Family Residence on Pulgas Avenue			
Project Construction (unmitigated)	6.20 (infant)	0.04	<0.01
<i>BAAQMD Single-Source Threshold</i>	<i>>10.0</i>	<i>>0.3</i>	<i>>1.0</i>
Exceed Threshold?	No	No	No
Most Affected Nearby Child – EPA Center Arts Child Receptor			
Project Construction (unmitigated)	3.22 (child)	0.03	<0.01
<i>BAAQMD Single-Source Threshold</i>	<i>10.0</i>	<i>0.3</i>	<i>1.0</i>
Exceed Threshold?	No	No	No
Source: Illingworth & Rodkin, Inc. <i>JobTrain Air Quality & Greenhouse Gas Assessment</i> , East Palo Alto. February 17, 2021.			

As shown in Table 4.4-7, the project would not exceed the BAAQMD single-source thresholds for increased cancer risks or maximum PM_{2.5} concentrations and would not exceed health hazards indexes for project related construction activities affecting the MEIs. Therefore, impacts would be less than significant. **(Less than Significant Impact)**

On-Site Wastewater Treatment Facility

A construction health risk assessment was also completed for the project with the on-site wastewater treatment facility option. The potential health effects of construction activities (refer to Appendix A) on sensitive receptors at nearby residences and the identified maximally exposed individual (MEI) were calculated. The results of the assessment for project construction are summarized in Table 4.4-8 below.



LOCATION OF CONSTRUCTION MEI AND NEARBY TAC AND PM_{2.5} SOURCES

FIGURE 4.4-1

Table 4.4-8: Construction Risk Impacts of On-Site Wastewater Treatment Facility at MEI			
Source	Cancer Risk* (per million)	Annual PM_{2.5}* (µg/m³)	Hazard Index
Residential MEI – Single Family Residence on Pulgas Avenue			
On-Site Wastewater Treatment Option Construction (unmitigated)	1.32 (infant)	0.01	<0.01
Project Construction (unmitigated)	6.20 (infant)	0.04	<0.01
Total Project	7.55 (infant)	0.05	<0.02
<i>BAAQMD Single-Source Threshold</i>	<i>10.0</i>	<i>0.3</i>	<i>1.0</i>
Exceed Threshold?	No	No	No
Most Affected Nearby Child – EPA Center Arts Child Receptor			
On-Site Wastewater Treatment Option Construction (unmitigated)	0.64 (child)	0.02	<0.01
Project Construction (unmitigated)	3.22 (infant)	0.03	<0.01
Total Project	3.90 (infant)	0.05	<0.02
<i>BAAQMD Single-Source Threshold</i>	<i>10.0</i>	<i>0.3</i>	<i>1.0</i>
Exceed Threshold?	No	No	No
Source: Illingworth & Rodkin, Inc. Addendum Letter to Air Quality and GHG Assessment 2535 Pulgas Avenue (JobTrain), East Palo Alto, California. May 3, 2021.			

As shown in Table 4.4-8, construction of the on-site wastewater treatment facility option in combination with the proposed project would not exceed the BAAQMD single-source thresholds for increased cancer risks or maximum PM_{2.5} concentrations and would not exceed health hazards indexes for project related construction activities affecting the MEIs. Therefore, impacts would be less than significant. **(Less than Significant Impact)**

Operation

Proposed Project

The project would include one diesel powered emergency generator. Operation of a diesel generator would be a source of TAC emissions and is expected to operate for a maximum of 50 hours per year of non-emergency operation under normal conditions. The generator engine would be required to meet EPA emission standards and CARB’s Stationary Diesel Airborne Toxics Control Measure, consume commercially available low sulfur diesel fuel, and obtain permits from the BAAQMD. As part of the BAAQMD permit requirements, the engine emissions would be required to meet BAAQMD Best Available Control Technology for toxics and pass the toxic risk screening level of less than ten in a million. Sources of air pollutant emissions complying with all applicable BAAQMD regulations are not considered to have a significant air quality community risk impact.

The emissions from operation of the generator were calculated using the CalEEMod model, the results of which are included in Appendix A. Table 4.4-9, shows the operational risk impacts of the proposed project at the off-site MEI.

Table 4.4-9: Operation Risk Impacts at the Off-Site MEI			
Source	Cancer Risk (per million)	Annual PM_{2.5} (µg/m³)	Hazard Index
Project Generator	0.03 (infant)	<0.01	<0.01
<i>BAAQMD Single-Source Threshold</i>	<i>>10.0</i>	<i>>0.3</i>	<i>>1.0</i>
Exceed Threshold?	No	No	No
Most Affected Nearby Child – EPA Center Arts Child Receptor			
Project Generator	0.04 (child)	<0.01	<0.01
<i>BAAQMD Single-Source Threshold</i>	<i>>10.0</i>	<i>>0.3</i>	<i>>1.0</i>
Exceed Threshold?	No	No	No
Source: Illingworth & Rodkin, Inc. JobTrain Air Quality & Greenhouse Gas Assessment, East Palo Alto. February 17, 2021.			

As shown in Table 4.4-9, operational emissions from the proposed emergency diesel generator would be below the BAAQMD significance threshold for diesel generators and, therefore, less than significant. **(Less than Significant Impact)**

On-Site Wastewater Treatment Facility

As noted under Impact AIR-2 above, the on-site wastewater treatment facility option would not include any combustion sources that would be considered a source of toxic air contaminants. Thus, when combined with the proposed office building, operation of the on-site wastewater treatment facility option would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact)**

Impact AIR-4: The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(Less than Significant Impact)**

Proposed Project

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. However, the odors would be localized and temporary and would not affect off-site sensitive receptors (more than 380 feet west and southwest of the site). For these reasons, implementation of the proposed project would not result in significant long-term or short-term odor impacts, affecting a substantial number of people. **(No Impact)**

On-Site Wastewater Treatment Facility

The on-site wastewater treatment facility option would include installation of pre-manufactured wastewater treatment equipment within an enclosed structure on-site. Construction of the on-site wastewater treatment facility option would generate localized emissions of diesel exhaust during construction. However, the odors would be localized and temporary and would not affect off-site sensitive receptors (more than 380 feet west and southwest of the site). During operation, the wastewater treatment facility would utilize modern technology designed to minimize the release of odors. No evaporative lagoons, exposed treatment water, or biosolid piles would be present on-site which would emit odors. Prevailing winds in the project vicinity originate from the north-northwest direction. The nearest sensitive receptors are located approximately 450 feet west and 650 feet south of the project site. Based on the wind direction and distance between the on-site wastewater treatment facility and nearest receptors, any odors from the on-site treatment facility would not likely reach the receptors 450 feet west of the project site and would likely disperse to levels that would not be objectionable to those sensitive receptors located 650 feet south of the project site. For these reasons, implementation of the on-site wastewater treatment facility option would not result in significant long-term or short-term odor impacts, affecting a substantial number of people. **(Less than Significant Impact)**

4.4.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (*BIA v. BAAQMD*), effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of East Palo Alto has policies that address existing air quality conditions affecting a proposed project.

In addition to evaluating health impacts from project construction, a health risk assessment was completed to assess the impact existing TAC sources would have on the proposed child daycare (new sensitive receptor). The same TAC sources identified above were used in this health risk assessment, these include mobile sources (traffic on high volume roadways) and stationary sources. The results of the health risk assessment are summarized in Table 4.4-10.

Table 4.4-10: Impacts from Combined Sources to Project Site Receptors			
Source	Cancer Risk (per million)	Annual PM _{2.5} (µg/m ³)	Hazard Index
Bay Road, 22606 ADT	0.22 (child)	0.03	<0.01
Pulgas Avenue, 15372 ADT	0.03 (child)	<0.01	<0.01
West Bay Sanitary District (Facility ID #21311, generators), Project Site 200 feet	0.25	--	--
Cal Spray Inc (Facility ID #610, Spray booth & abrasives blasting), Project Site 400 feet	--	<0.01	<0.01
Sobrato Center for Community Services Mitigated Construction Emissions – project site 5 feet north	<10.0	<0.3	<1.0
<i>BAAQMD Single-Source Threshold</i>	<i>>10.0</i>	<i>>0.3</i>	<i>>1.0</i>
Exceed Threshold?	No	No	No

Cumulative Total	<10.50	<0.35	<1.03
<i>BAAQMD Cumulative Source Threshold</i>	<i>>100</i>	<i>>0.8</i>	<i>>10.00</i>
Exceed Threshold?	No	No	No
Source: Illingworth & Rodkin, Inc. <i>JobTrain Air Quality & Greenhouse Gas Assessment, East Palo Alto</i> . February 17, 2021.			

As shown in Table 4.4-10, community risk impacts from the existing TAC sources and future nearby developments upon the project site would not exceed the single-source or cumulative-source thresholds.

4.5 BIOLOGICAL RESOURCES

The following discussion is based, in part, on an Arborist Report prepared by Tree Management Experts on November 20, 2020. This report is attached as Appendix B to this Initial Study.

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To “take” a listed species, as defined by the State of California, is “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.¹² Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control

¹² United States Department of the Interior. “Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take.” Accessed April 15, 2021. <https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf>.

Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Local

Vista 2035 East Palo Alto General Plan

Various policies in the City’s General Plan have been adopted for the purpose of avoiding or mitigating impacts to biological resources resulting from planned development within the City including the following:

Policy	Parks, Open Space, and Conservation
4.2	Human activities. Protect wildlife from adverse impacts caused by human activities.
4.3	Don Edwards NWR management. Coordinate with federal agencies and neighboring cities to manage the Don Edwards San Francisco Bay National Wildlife Refuge in a manner consistent with the Conservation Plan, including: <ul style="list-style-type: none">• Increased survey efforts on native fauna and flora• Additional improvements to tidal marsh areas• Enhanced visitor service and expanding the volunteer program• Adopt the 15 Comprehensive Conservation Plan
4.4	Light Pollution. Require that new buildings located adjacent to Baylands Nature Preserve or Ravenswood Open Space Preserve shield any site lighting from the Bay.
4.5	Predation. Ensure that new development and landscaping adjacent to tidal marshes and other Bayfront areas avoids tall perches for raptors or other predatory birds. Protect the salt-marsh harvest mouse from feral cat predation.
4.6	Native Species. Encourage or require the use of native and/or non-invasive plants in privately built landscaping or new open spaces near natural open space areas, in order to provide foraging, nesting, breeding, and migratory habitat for wildlife. Discourage use of herbicides and fertilizers.
4.7	Interagency coordination. Coordinate with other public agencies such as the San Francisquito Creek Joint Powers Authority, Army Corps of Engineers, National Fish and Wildlife Service, and other similar entities on construction or development activities occurring within or adjacent to the City.
6.2	New tree planting. Prioritize the planting of new trees on sites designated as sensitive receptors (e.g., schools, health centers) or that are in close proximity to sources of air pollution such as freeways and heavily trafficked road corridors.

Ravenswood 4 Corners Transit Oriented Development Specific Plan

The Specific Plan includes Bird-Safe Building Standards. These standards provide development requirements that are intended to reduce the number of bird strikes against buildings. The standards apply to development located less than 300 feet from an open space that meet the following criteria:

- The open space has an area of at least two acres.
- The open space is open water or wetlands, or it is dominated by vegetation, including vegetated landscaping.

City of East Palo Alto Municipal Code

Section 6420 of the City’s Municipal Code states that it is unlawful for any person to destroy or remove or cause to be destroyed or removed, any protected tree upon any private or public property in the City without first having obtained a permit to do so. The removal of trees with a main stem or trunk that measures 40 inches in circumference (12.7 inches in diameter) two feet above the natural grade and the removal of all street trees planted in the public right-of-way requires the issuance of a Tree Removal permit from the City’s Planning and Housing Division. The conditions of the permit require mitigation at a 3:1 ratio, or less for the removal of trees protected by this ordinance (referred to as “ordinance-size trees”).

In addition, the removal of any tree that existed at the time of an approval granted under the City’s subdivision or zoning ordinance and required to be preserved as part of such approval, and any tree required to be planted as a condition of any development granted by the City requires a permit, although tree trimming does not require authorization by the City. Furthermore, the following activities are exempt from the permitting process:

- If the condition of a tree presents an immediate hazard to life or property, it may be restored without a permit on order of the city manager, the city building inspector, or the city director of planning.
- Employees of the city may without a permit take such action with regard to trees on city-owned property as may be necessary to maintain safety.
- Public utilities subject to the jurisdiction of the state public utilities commission may without a permit take such action as may be necessary to comply with the safety regulations of the commission and may be necessary to maintain a safe operation of their facilities.
- Where removal of a tree has been authorized as part of any development approval granted by the City, no permit shall be required for removal of such tree.

4.5.1.2 Existing Conditions

On-site Habitats

The Ravenswood/4 Corners Transit Oriented Development Specific Plan EIR (Specific Plan EIR) identifies the project site as urban landscape. According to the Specific Plan EIR, typical ruderal vegetation within the urban setting includes wild radish, yellow star thistle, Italian thistle, black mustard, and non-native annual grasses.

The urban setting provides some habitat value for urban-adapted bird species, such as house finch, mourning dove, American robin (*Turdus migratorius*), and Brewer's blackbird (*Euphagus cyanocephalus*).

Special-Status Species

Special-Status Plan Species

The Specific Plan EIR evaluated the potential occurrence of 21 special-status plan species that are documented in the greater plan area by the California Natural Diversity Database (CNDDDB) and determined that the following four species have the potential to occur in the Specific Plan Area: California seablite, alkali milk vetch, Point Reyes Bird Beak, and Congdon's tarplant. The entire project site is covered by paved storage areas and/or structures and, therefore, special-status plant species are not expected to occur on the site.

Special-Status Animal Species

The Specific Plan EIR evaluated the potential occurrence of 10 special-status species that are documented in the greater project area by the CNDDDB. The following animal species were determined to potentially occur in the project area: the burrowing owl, western snowy plover, saltmarsh common yellowthroat, Alameda song sparrow, California black rail, California Ridgway's rail, California least tern, pallid bat, salt marsh harvest mouse, and salt marsh wandering shrew. The entire project site is covered by paved storage areas and/or structures and, therefore, special-status animal species are not expected to occur on the site.

Migratory Wildlife Corridors

Generally, the project site does not function as a movement corridor. Although the northern coastal salt marsh to the east of the project site, located within the Ravenswood Open Space Preserve, provides valuable habitat for large numbers of birds, including several special-status species, the site is not located along movement pathways between high-quality habitats. Additionally, existing fencing around the project site and the presence of extensive urban and suburban land uses surrounding the site do not allow for movement of wildlife species through the project site.

On-site Trees

The project site is located in a developed, urban area and contains existing industrial buildings, paved storage areas, and minimal landscaping. Landscaping at the site consists of trees and shrubs adjacent to the existing buildings and along the project perimeter. The arborist report (refer to Appendix B) completed for the project site identified 14 trees on or immediately adjacent the site. Of the 14 trees, eight are considered protected trees under the East Palo Alto Tree Preservation and Management Regulations. No other natural biotic communities or habitat areas are present. The nearest wetland area (Ravenswood Open Space Preserve) is located approximately 900 feet west of the project site.

Conservation Plan

The project site is not within the boundaries of an adopted or pending Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact BIO-1: The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. **(Less than Significant Impact with Mitigation Incorporated)**

Special-Status Plant Species

The project site is developed with industrial buildings, paved vehicle storage areas, and 14 trees. Special-status plant species that are known to occur in the project area would not occur on the project site because suitable habitat, such as saltwater marshes, vernal pools, and grasslands, are absent from the project site. As identified in the Specific Plan EIR, the site supports urban habitats and therefore, special-status species would not be affected during construction of the proposed project or on-site wastewater treatment facility option. **(Less than Significant Impact)**

Special-Status Animal Species

The project site is developed with industrial buildings, paved vehicle storage areas, and 14 trees. Suitable habitat for most of the special-status animal species known to occur in the project area is not present on the project site. However, nesting birds may be present in on-site trees or in mature trees adjacent to the project site prior to or during project construction. Nesting birds, including urban adapted raptors, are protected under the provisions of the MBTA and the CDFG Code 3503.5. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or could otherwise lead to nest abandonment. Nest abandonment and/or loss of reproductive effort caused by disturbance are considered “take” by the CDFG, and, therefore, would constitute a significant impact.

Impact BIO-1: Construction of the proposed project and on-site wastewater treatment facility option could result in incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, resulting in a significant impact to nesting birds. **(Significant Impact)**

Mitigation Measures: The project and on-site wastewater treatment facility option would implement the following measures to avoid impacts to nesting migratory birds. With incorporation of these measures, the project would result in a less than significant impact to nesting birds.

MM BIO-1.1: Avoidance: The project applicant shall schedule demolition and construction activities to avoid the nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1st through August 31st (inclusive), as amended.

MM BIO-1.2: Nesting Bird Surveys: if it is not possible to schedule demolition and construction between September 1st and January 31st (inclusive), pre-construction surveys of all potentially suitable nesting habitat on and adjacent to the project site shall be completed by a qualified ornithologist to ensure that no nests are disturbed during project implementation. This survey shall be completed no more than 15 days prior to initiation of construction activities during the early part of the breeding season

(February 1st through April 31st inclusive) and no more than 30 days prior to initiation of these activities during the late part of the breeding season (May 1st through August 31st inclusive). During this survey, the ornithologist shall inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests.

MM BIO-1.3: Buffer Zones: if an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with the California Department of Fish and Wildlife, shall determine the extent of a construction free buffer zone to be established around the nest, typically 250 feet, to ensure that raptor or migratory bird nests shall not be disturbed during project construction.

MM BIO-1.4: Reporting: Prior to any tree removal, or approval of any grading permits, (whichever occurs first), the ornithologist shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the City's Director of Community and Economic Development or the Director's designee.

Implementation of the mitigation measures MM BIO-1.1 through MM BIO-1.4 would reduce potential impacts to migratory birds and raptors to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

Impact BIO-2: The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(Less than Significant Impact)**

The project site is developed with industrial buildings, paved storage areas, and minimal landscaping. There is no riparian habitat/sensitive natural community on or adjacent to the site. The nearest riparian habitat/sensitive natural community are wetlands located approximately 620 feet north of the project site. Therefore, the proposed project and on-site wastewater treatment facility option would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. **(Less than Significant Impact)**

Impact BIO-3: The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(Less than Significant Impact)**

The project site is developed with industrial buildings, paved storage areas, and minimal landscaping. There are no wetlands on the site. The nearest wetlands are located approximately 620 feet north of the project site. Therefore, development of the proposed project and on-site wastewater treatment facility option would not impact wetlands. **(Less than Significant Impact)**

Impact BIO-4: The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. **(Less than Significant Impact)**

Proposed Project

The proposed four-story office building would have glass facades. It has been well documented that glass windows and building facades can result in injury or mortality of birds due to birds' collision with these surfaces. Because birds do not perceive glass as an obstruction the way humans do, they may collide with glass when the sky or vegetation is reflected in glass (e.g., they see the glass as sky or vegetated areas); when transparent windows allow birds to perceive unobstructed flight routes through the glass (such as at corners); and when the combination of transparent glass and interior vegetation (such as in planted atria) result in attempts by birds to fly through glass to reach that vegetation. The majority of avian collisions with buildings occur within the first 60 feet of the ground, where birds spend the majority of their time engaging in foraging, territorial defense, nesting, and roosting activities, and where vegetation is most likely to be reflected in glazed surfaces.

The bird species with the greatest potential to collide with the proposed four-story office building would consist primarily of the common, urban-adapted species that currently use the site and adjacent parcels.

As noted previously, the Ravenswood Specific Plan contains Bird-Safe Building Standards which apply to projects located less than 300 feet from an open space that meets the following criteria:

- The open space has an area of at least two acres.
- The open space is open water or wetlands, or is dominated by vegetation, including vegetated landscaping.

The project site is bordered by two vacant lots (one to the northwest, and one to the south) both of which have an area greater than two acres and are dominated by vegetation. Vacant, vegetated lots over two acres in size are also located within 300 feet west and northwest of the site, across Pulgas Avenue. Thus, the project would be required to comply with the following Bird-Safe Building Standards as a condition of approval.

Condition of Approval: The proposed project shall implement the following standards for reducing impacts to bird collision.

Bird Safe Glazing Treatments

- A. Bird-safe glazing treatments shall be used within the façade collision zone such that no more than 10 percent of a building façade consists of untreated glazing.
- B. Bird-safe glazing treatments shall be used on the entirety of a façade collision zone's¹³ glazing.
- C. Bird-safe glazing treatments may include any of the following:
 - a. Fritting
 - b. Netting

¹³ Façade collision zone is defined as the portion of a building that is most likely to sustain bird strikes from local and migrant birds. This portion includes the building façade, beginning at grade and extending upwards for 60 feet. It also includes glass facades that are adjacent to landscaped roofs with an area of at least two acres, and that extend upwards at least 60 feet from the roof level. Source: City of East Palo Alto. *Ravenswood/4 Corners TOD Specific Plan*. February 2013.

- c. Permanent stencils
 - d. Frosted glass
 - e. Exterior screens
 - f. physical grids placed on the exterior of glazing
 - g. Ultraviolet (UV) patterns visible to birds
- D. Bird-safe glazing treatments shall include vertical elements that are at least one-quarter inch wide, with a minimum spacing of four inches. In addition, treatments shall include horizontal elements that are at least one-eighth inch wide with a maximum spacing of two inches.

On-Site Wastewater Treatment Facility Option

The on-site wastewater treatment facility option would include construction and operation of a buffer/emergency storage tank, wastewater treatment plant, sludge collector, and recycled water storage tank in the southwest corner of the site. While the design of the wastewater treatment facility was not available at the time of this analysis, it is assumed that all four components would be made of solid metal or similar materials and would have a maximum height of 23 feet above grade. Wastewater treatment facilities do not typically include glass or other transparent or reflective materials. Thus, the on-site wastewater treatment facility option would not result in injury or mortality of birds due to birds' collision with these surfaces.

With implementation of the above standard conditions of approval, the proposed project and on-site wastewater treatment facility option would not result in substantial bird collisions, significantly impact movement, or have a significant impact on movement of migratory birds. **(Less than Significant Impact).**

Impact BIO-5: The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact)**

The arborist report completed for the project site identified 14 trees on or immediately adjacent the site. These 14 trees vary in condition with the majority of trees in good to poor condition and not suitable for preservation. Of the 14 trees, eight are considered protected trees under the East Palo Alto Tree Preservation and Management Regulations. The project proposes removal of all on-site trees and street trees along the project frontage. Out of the trees proposed to be removed, eight are protected trees. There are no Heritage Trees on or adjacent to the site that would be impacted by the project. As shown in Figure 3.2-4 above, the proposed project would plant 140 new trees, including 10 street trees, which exceeds the tree replacement ratios in Municipal Code Section 18.28.040.

If the on-site wastewater treatment facility option is constructed, the project would plant approximately 130 new trees, including 10 street trees, which also exceeds the tree replacement ratios in Municipal Code Section 18.28.040. For these reasons, development of the proposed project and on-site wastewater treatment facility option would not conflict with any ordinance protecting biological resources and would not result in a significant impact to trees and the community forest. **(Less than Significant Impact)**

Impact BIO-6: The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(No Impact)**

The project site is not located within an adopted or pending habitat conservation plan or natural community conservation plan. Therefore, development of the proposed project and on-site wastewater treatment facility option would not conflict with the provisions of an adopted habitat conservation or natural community conservation plan. **(No Impact)**

4.6 CULTURAL RESOURCES

The following discussion is based in part on an Archaeological Literature Search and Initial Native American Consultation letter prepared by Holman & Associates on February 10, 2020. This report is on file at the City of East Palo Alto.

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.¹⁴

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance.” The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource’s eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

¹⁴ California Office of Historic Preservation. “CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6.” March 14, 2006.

Senate Bill 18

The intent of SB 18 is to aid in the protection of traditional tribal cultural places through local land use planning by requiring city governments to consult with California Native American tribes on projects which include adoption or amendment of general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.). SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease, and the county coroner be notified.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

Vista 2035 East Palo Alto General Plan

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating impacts to cultural resources resulting from planned development within the City, including the following:

Policy	Parks, Open Space, and Conservation
9.1	Archaeology, paleontology, and natural resources. Protect areas of important archaeological paleontological and natural resources.
9.7	Construction impacts. Suspend development activity when archaeological resources are discovered during construction. The project sponsor will be required to retain a qualified archaeologist to oversee the handling of resources in coordination with appropriate local and State agencies and organizations and local Native American representatives, as appropriate.

Ravenswood/ 4 Corners Transit Oriented Development Specific Plan

Various policies in the Ravenswood Specific Plan have been adopted for the purpose of avoiding or mitigating cultural resources impacts resulting from planned development within the Plan Area including the following:

Policy	Cultural Resources
1.1	Ensure that City, State, and Federal historic preservation laws, regulations, and codes are implemented, including State laws related to archaeological resources, to ensure that adequate protection of historic and prehistoric resources.
1.3	Require preparation of a project-specific Archaeological Resources Assessment (ARA) by a professional Archaeologist for any construction that will impact native soils in the parts of the Plan Area known to be archaeologically sensitive, that are within 200-foot buffer of known historic and prehistoric resources, as recorded on the supplemental figure Archaeological Sensitive Zones on file with the City. The ARA will provide background context, identify any archaeological resources, and provide an evaluation using the criteria of the California Register of Historic Resources. ARA recommendations must be followed to avoid and minimize damage to these resources. These may include archeological testing, data recovery, and archaeological monitoring during construction.
1.4	Recognize Native American human remains may be encountered at unexpected locations impose a requirement on all development permits and tentative sub-division maps that upon their discovery during construction, development activity will cease until professional archaeological examination confirms that the burial is human. If the remains are determined to be Native, applicable State laws shall be implemented. A professional Archeologist with expertise in human remains must be retained to review, identify, and evaluate the discovery. The County Coroner and Native American Heritage Commission must be notified, and the remains treated in accordance with State law.

4.6.1.2 Existing Conditions

Historic Resources

Historic resources are generally 50 years or older in age and include, but are not limited to, buildings districts, structures, sites, objects, and areas. According to the Phase I Environmental Site Assessment (see Appendix D) prepared for the project, the project site was used for agricultural purposes until the early 1980's when the project site was cleared and the existing structures and vehicle storage yard were constructed. Thus, all on-site structures are less than 50 years old. The project site contains two one-story wood frame industrial buildings, accessory structures, paved parking areas, and fencing associated with the current vehicle storage use. The site does not contain any resources listed on or eligible for listing on the NRHP or the CRHP; nor does it contain any resources listed on the City of East Palo Alto's Historic Resources Inventory Report.¹⁵

Four structures were recorded adjacent to the project site. None of these structures were determined eligible for or are listed in federal, state, or local registers and have since been demolished.

¹⁵ City of East Palo Alto. *City of East Palo Alto Historic Resources Inventory Report*. February 1994.

Archaeological Resources

A records search at the Northwest Information Center of the California Historical Resources Information System (CHRIS) was completed on December 20, 2019 to identify all recorded archaeological sites on and within one-quarter-mile of the project site. No resources have been recorded on the site. The closest recorded Native American archaeological site is the University Village site, located approximately 400 feet northwest of the site. Archaeological resources were encountered at the village in 1951 during road construction and related trenching efforts.

Historic-era maps were evaluated to identify the potential for historic archaeological resources in the project site. Based on the review of historical land use patterns, there is no indication that specific historic archaeological deposits exist within the site.

4.6.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Cause a substantial adverse change in the significance of an archaeological resource as pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact CUL-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **(No Impact)**

The project site is comprised of wood framed industrial buildings, accessory structures, paved storage areas, and fencing constructed during or after the 1980's. The existing development onsite, which is less than 50 years in age, is not considered a historic resource. Therefore, the proposed project and on-site wastewater treatment facility option would not impact historic resources. **(No Impact)**

Impact CUL-2: The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact with Mitigation Incorporated)**

No archaeological resources have been recorded on the project site. The nearest recorded archaeological resource is the University Village site, approximately 400 feet from the project site. Due to the proximity of the site to this known resource, the site is considered to have high potential

for Native American archaeological deposits and cultural materials. Construction of the proposed office building and on-site wastewater treatment facility option would require excavation to a maximum depth of approximately three feet bgs which could result in impacts to unrecorded archaeological resources.

Impact CUL-1: Ground disturbing activities associated with construction of the proposed project and on-site wastewater treatment facility option could disturb previously unrecorded archaeological resources. **(Significant Impact)**

Mitigation Measures: The following mitigation measures shall be implemented to reduce impacts to archaeological resources and/or human remains that may be present on the site.

MM CUL-1.1: The following mitigation measures are based on the recommendations in the archaeological assessment and based on tribal consultation completed pursuant to AB 52. Implementation of these mitigation measures would reduce impacts to archaeological resources to a less than significant level:

- Prior to issuance of the Grading Permit, the project applicant shall submit evidence that an Archaeological Monitoring Contractor Awareness Training was held prior to ground disturbance. The training shall be facilitated by the project archaeologist in coordination with a Native American representative from Tamien Nation registered with the Native American Heritage Commissions for the City of East Palo Alto and that is traditionally and culturally affiliated with the geographic area as described in Public Resources Code Section 21080.3.
- An archaeological and Native American cultural resources monitor from Tamien Nation shall be retained and present during removal of the existing building foundations and during all ground disturbing activities of the project.
- In the event that archaeological resources are exposed during construction, work within 50 feet of the find shall cease until a qualified archaeologist and Native American representative from Tamien Nation can assess the find and provide recommendations for further treatment, if warranted. Construction and potential impacts to the area(s) within a radius determined by the archaeologist and the Native American representative from Tamien Nation shall not recommence until the assessment is complete.
- If further treatment is warranted, then a research design and treatment plan tailored to the resources identified shall be prepared by a qualified archaeologist in consultation with a Native American representative from Tamien Nation. Once the research design and treatment plan is approved by the City, archaeological testing of the resource can begin. Testing shall be commensurate with the level of proposed impacts and determined in consultation with a Native American representative. After field testing, an evaluation report shall be prepared documenting the fieldwork, analyzing the cultural materials recovered, defining the resource boundaries on the

project site, and evaluating the resource per the California Register of Historic Resources.

With implementation of the above mitigation measures, impacts to archaeological resources during project construction activities would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impact CUL-3: The project would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact with Mitigation Incorporated)**

Human remains are often associated with prehistoric occupation sites. Due to the proximity of the project site to the University Village site (approximately 400 feet), there is potential for project ground-disturbing activities to disturb human remains. Disturbance of human remains would constitute a significant impact under CEQA.

Impact CUL-2: Ground disturbance during construction of the proposed project and on-site wastewater treatment facility option could disturb human remains. **(Significant Impact)**

Mitigation Measures: The following mitigation measures shall be implemented under the proposed project and on-site wastewater treatment facility option to reduce potential impacts to human remains.

MM CUL-2.1: If human remains are encountered during project construction activities, all work in the vicinity shall be halted and the San Mateo County Coroner contacted. In the event that the County Coroner determines the human remains are Native American, notification of the Native American Heritage Commission (NAHC) is required, who shall appoint a Most Likely Descendant (MLD) (PRC Section 5097.98). The qualified archaeologist, project sponsor, and MLD shall make all reasonable efforts to develop an agreement for treatment. The agreement shall incorporate ‘best practices’ as identified by the NAHC. A final report shall be prepared by the project archaeologist in consultation with the MLD and approved by the City of East Palo Alto. Work on the project may proceed upon City approval.

With implementation of the mitigation measures listed above, construction of the proposed project and on-site wastewater treatment facility option would have a less than significant impact on human remains. **(Less than Significant Impact with Mitigation Incorporated)**

4.7 ENERGY

The following discussion is based, in part, on an Air Quality and Greenhouse Gas Emissions Assessment and Addendum prepared by Illingworth & Rodkin, Inc. in February and May 2021, respectively. These reports are attached as Appendix A to this Initial Study.

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. In 2008, Executive Order S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years, and the 2016 Title 24 updates went into effect on January 1, 2017.¹⁶ Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.¹⁷

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. The most recent update to CALGreen went into effect on January 1, 2017,

¹⁶ California Building Standards Commission. "Welcome to the California Building Standards Commission." Accessed February 6, 2018. <http://www.bsc.ca.gov/>.

¹⁷ California Energy Commission (CEC). "2016 Building Energy Efficiency Standards." Accessed February 6, 2018. <http://www.energy.ca.gov/title24/2016standards/index.html>.

and covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.¹⁸

Local

Vista 2035 East Palo Alto General Plan

Various policies in the City’s General Plan have been adopted for the purpose of avoiding or mitigating energy use impacts resulting from planned development within the City including the following:

Policy	Parks, Open Space, and Conservation
7.1	Citywide building energy efficiency. Promote and encourage citywide building energy efficiency through strategies that may include the following: <ul style="list-style-type: none">• Retrofits of buildings with energy-efficient technology• High energy performance in new buildings, in excess of CALGreen when possible.
7.4	Renewable energy. Encourage the use of renewable energy in the City, including solar and wind in new and existing development.
8.11	Green building certification. Require that new residential, commercial, or mixed-use buildings over 20,000 square feet earn LEED Silver certification (or equivalent) including meeting the minimum CALGreen code requirements.
8.12	Green waste management practices. Support ongoing green waste recycling efforts to facilitate composting opportunities for residents and businesses in order to reduce surface ozone pollution and offset greenhouse gas emissions and provide soil nutrients.

Ravenswood/ 4 Corners Transit Oriented Development Specific Plan

Various policies in the Ravenswood Specific Plan have been adopted for the purpose of avoiding or mitigating energy impacts resulting from planned development within the Plan Area including the following:

¹⁸ California Air Resources Board. “The Advanced Clean Cars Program.” Accessed April 6, 2018. <https://www.arb.ca.gov/msprog/acc/acc.htm>.

Policy Land Use and Community Character

- 4.6 Verify that Green Building standards are part of every development project application, and that these standards would reduce energy-related GHG emissions beyond 15 percent from those that would occur under the most recent Title 24 Building Code requirement (Tier 1 standard)
-

Policy Transportation and Traffic

- 1.2 Implement the Specific Plan’s proposed network of off-street pedestrian paths, which can help promote walking by providing more direct pedestrian connections between sites and buildings than could be offered by the street system. In addition, encourage developers to follow Specific Plan’s guidelines regarding pedestrian connections between sidewalks and building entrances.
-

City of East Palo Alto Climate Action Plan

The City of East Palo Alto Climate Action Plan includes a prioritized list of actions for reducing the City’s GHG emissions. To achieve the City’s GHG reduction goal of 15 percent below 2005 levels by 2020, the Climate Action Plan includes objectives and measures related to energy use in buildings, transportation and land use, waste, and municipal operations. The Climate Action Plan notes that energy efficiency is the most cost-effective measure for GHG reductions and has co-benefits. Continued implementation of the transportation-oriented development (TOD) in the Ravenswood Specific Plan and encouraging walking and biking are two of the actions listed in the Plan that would also reduce energy use.

City of East Palo Alto Building Electrification and Electric Vehicle Infrastructure Reach Codes Ordinance

City Council adopted the City of East Palo Alto Building Electrification and Electric Vehicle Infrastructure Reach Codes Ordinance on October 20, 2020. The ordinance includes requirements for electrification, solar, and EV infrastructure on all new residential and commercial buildings and other non-residential buildings within the city.

4.7.1.2 Existing Conditions

Total energy usage in California was approximately 7,875 trillion British thermal units (Btu) in the year 2018, the most recent year for which this data was available.¹⁹ Out of the 50 states, California is ranked second in total energy consumption and 46th in energy consumption per capita. The breakdown by sector was approximately 18 percent (1,440 trillion Btu) for residential uses, 19 percent (1,510 trillion Btu) for commercial uses, 23 percent (1,847 trillion Btu) for industrial uses, and 39 percent (3,078 trillion Btu) for transportation.²⁰ This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

¹⁹ United States Energy Information Administration. “State Profile and Energy Estimates, 2018.” Accessed January 28, 2021. <https://www.eia.gov/state/?sid=CA#tabs-2>.

²⁰ United States Energy Information Administration. “State Profile and Energy Estimates, 2018.” Accessed January 28, 2021. <https://www.eia.gov/state/?sid=CA#tabs-2>.

Electricity

Electricity in San Mateo County in 2019 was consumed primarily by the commercial sector (64 percent), with the residential sector consuming 36 percent. In 2019, a total of approximately 4,325 GWh of electricity was consumed in San Mateo County.²¹

Peninsula Clean Energy (PCE) is a public and locally controlled electricity provider for the County of San Mateo. Electricity provided by PCE is delivered through PG&E transmission lines. Commercial and residential customers in San Mateo County are included in the PCE service area and can choose to have 50 to 100 percent of their electricity supplied from carbon-free and renewable sources. Customers are automatically enrolled in the ECOplus plan, which generates its electricity from 85 percent carbon-free sources, with at least 50 percent from renewable sources. Customers have the option to enroll in the ECO100 plan, which generates its electricity from 100 percent carbon-free, renewable sources.²²

Natural Gas

PG&E provides natural gas services within the City of East Palo Alto. In 2018, approximately one percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.²³ In 2018, residential and commercial customers in California used 34 percent of the state's natural gas, power plants used 35 percent, the industrial sector used 21 percent, and other uses used 10 percent. Transportation accounted for one percent of natural gas use in California. In 2018, San Mateo County used approximately 1.7 percent of the state's total consumption of natural gas.²⁴

Fuel for Motor Vehicles

In 2019, 15.4 billion gallons of gasoline were sold in California.²⁵ The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 24.9 mpg in 2019.²⁶ Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of

²¹ California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed January 28, 2021. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.

²² Peninsula Clean Energy. "Frequently Asked Questions." Accessed April 15, 2021. <https://www.peninsulacleanenergy.com/faq/>. 2) Peninsula Clean Energy.

²³ California Gas and Electric Utilities. 2019 *California Gas Report*. Accessed April 15, 2021. https://www.socalgas.com/regulatory/documents/cgr/2019_CGR_Supplement_7-1-19.pdf.

²⁴ California Energy Commission. "Natural Gas Consumption by County." Accessed April 15, 2021. <http://ecdms.energy.ca.gov/gasbycounty.aspx>.

²⁵ California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed February 3, 2021. <https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist>.

²⁶ United States Environmental Protection Agency. "The 2020 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." January 2021. <https://www.epa.gov/sites/production/files/2021-01/documents/420r21003.pdf>

35 miles per gallon by the year 2020, was updated in March 2020 to require all cars and light duty trucks achieve an overall industry average fuel economy of 40.4 mpg by model year 2026.^{27,28}

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact EN-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. **(Less than Significant Impact)**

Construction

Proposed Project and On-Site Wastewater Treatment Facility

Project construction would consume energy during site preparation, grading, excavation, trenching, and paving; however, the project and on-site wastewater treatment facility option would not waste or use energy inefficiently. Construction processes are generally designed to be efficient in order to save money. That is, equipment and fuel are not typically used wastefully on the site because of the added expense associated with renting the equipment, as well as maintenance and fuel. Compared to construction in outlying, undeveloped areas, the proposed project would save energy by constructing in an urbanized area that is proximate to roadways, construction supplies, and workers. In addition, construction of the proposed project and on-site wastewater treatment facility option includes several measures to improve the efficiency of the construction process, including participating in the City’s recycling construction and demolition materials program, restricting equipment idling times to five minutes or less, and requiring the project to post signs on-site reminding workers to shut off idling equipment (see mitigation measure MM AIR-1.1:). **(Less than Significant Impact)**

²⁷ United States Department of Energy. *Energy Independence & Security Act of 2007*. Accessed April 15, 2021. <http://www.afdc.energy.gov/laws/eisa>.

²⁸ Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007*. Accessed April 15, 2021. <http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>.

Operation

Proposed Project

Operation of the proposed project would consume energy for multiple purposes, including building heating and cooling, lighting, and appliance use. Energy would also be consumed vehicles (e.g., teachers, students, office workers, etc.) traveling to and from the project site. The net increase in energy use resulting from the proposed project compared to existing on-site use is summarized in Table 4.7-1.

Table 4.7-1: Annual Energy Use of Existing and Proposed Development			
	Electricity (kWh)	Natural Gas (kBtu)	Gasoline (gallons)
Existing Uses	34,020	111,375	22,141
Proposed Project	1,388,050.9	3,303,250	95,382
Project Net Increase	1,354,030.9	3,191,875	73,241
<p>Note: the estimated gasoline demand is based on the estimated VMT of 551,300 for existing uses and 2,375,002 for the project, and the average fuel economy of 24.9 mpg.</p> <p>kWh = kilowatt per hour</p> <p>kBtu = kilo-British thermal unit</p> <p>Illingworth & Rodkin, Inc. <i>JobTrain Office Project Air Quality & Greenhouse Gas Assessment</i>. February 17, 2021.</p>			

As shown in Table 4.7-1, operation of the proposed project would increase energy demand at the project site compared to existing conditions. Operation of the proposed project, however, would not represent a wasteful or inefficient use of energy resources because the project is required to comply with Title 24 and CALGreen requirements to reduce energy consumption, and comply with the City’s Reach Code requirements for all electric building operations, rooftop solar panels, and electric vehicle infrastructure. Additionally, the project would implement a TDM plan designed to achieve a vehicle trip reduction of at least 25 percent²⁹ and would include the following green building features that reduce energy demand during building operations:

- CarbonCure (alternative concrete mix that sequesters carbon),
- Solar panels on the roof,
- Water efficient landscaping with irrigation design,
- On-site stormwater management, bioretention swales,
- Bicycle parking spaces,
- Electric vehicle charging stations,
- LED light fixtures,
- Low flow indoor water fixtures,

²⁹ On June 1, 2021, the East Palo Alto City Council approved a TDM Ordinance Update which requires all projects approved by the City beginning in January 2022 to achieve a vehicle trip reduction of at least 40 percent. The proposed project would be required to comply with the City’s updated TDM Ordinance if approved in or after January 2022.

- Variable refrigerant flow HVAC system,
- High performance façade design which incorporates both acoustical and thermal design elements.

Furthermore, consistent with General Plan and Ravenswood Specific Plan policies and the City’s Green Building standards, the proposed development would achieve at least LEED Silver certification and recycle green waste and compost. For these reasons, the project would not result in a wasteful use of energy or conflict with state or local plans for renewable energy or energy efficiency. **(Less than Significant Impact)**

On-Site Wastewater Treatment Facility Option

Operation of the on-site wastewater treatment facility would consume energy for pumping wastewater to the facility and operating the treatment facility equipment. Operation of an on-site wastewater treatment facility provides efficiencies when compared to municipal wastewater treatment facilities due to the shortened distance that wastewater needs to travel to reach the treatment plant. The energy demand estimates for the proposed project includes energy related to pumping and treatment of wastewater at a municipal wastewater treatment facility, which would be offset by the on-site wastewater treatment facility option. The measures included in the proposed project and listed above for the proposed project would also reduce energy use under the on-site wastewater treatment facility option (e.g., solar panels). For these reasons, the on-site wastewater treatment facility would not result in a wasteful use of energy or conflict with state or local plans for renewable energy or energy efficiency. **(Less than Significant Impact)**

Impact EN-2: The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

The project and on-site wastewater treatment facility option would be consistent with the policies described in Section 4.9.1.1. In addition, the proposed project and on-site wastewater treatment option would comply with Title 24 and CALGreen, would implement a TDM plan, and the green building measures listed above including generating renewable energy on-site from rooftop solar panels. For these reasons, the project and on-site wastewater treatment facility option would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

4.8 GEOLOGY AND SOILS

The following discussion is based in part on a Geotechnical Evaluation prepared by Ninyo & Moore, Inc. in May 2020. This report is attached as Appendix C to this Initial Study.

4.8.1 Environmental Setting

4.8.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The CBC prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Vista 2035 East Palo Alto General Plan

Various policies in the City’s General Plan have been adopted for the purpose of avoiding or mitigating geology and soils impacts resulting from planned development within the City including the following:

Policy	Safety and Noise
1.1	Construction Requirements. Apply the proper development engineering and building construction requirements to avoid or mitigate risks from seismic and geologic hazards.
1.2	Robust Seismic Guidance. Utilize and enforce the most recent State guidance for seismic and geologic hazards when evaluating development proposals.
1.3	Licensed Geologist. Require that a State licensed engineering geologist prepare and/or review development proposals involving grading, unstable soils, and other hazardous conditions. Incorporate recommendations of the geologist into design plans, potentially including building modifications and open space easements.

Ravenswood/ 4 Corners Transit Oriented Development Specific Plan

A policy in the Specific Plan has been adopted for the purpose of avoiding or mitigating geology and soils impacts resulting from planned development within the Plan Area. The policy includes the following:

Policy	Land Use and Community Character
9.3	Require preparation of a geotechnical report calculating the building load and placement of fill for each development. Verify that environmental review of this report includes an assessment of flood risks to the building itself and the impacts on neighboring flood risks to other structures from displacement of flood waters. Require the report to consider the cumulative flood risks to other structures from buildings in addition to other known, planned, and reasonably foreseeable development.

The Ravenswood Specific Plan also identifies five mitigation measures that shall be utilized in site planning and building designs in the Specific Plan Area to reduce geologic and seismic hazards (mitigation measures GEO-1 through GEO-5).

City of East Palo Alto Municipal Code

Title 15 (Building and Construction) of the City of East Palo Alto Municipal Code includes the currently adopted Building Code as well as requirements in Chapter 15.48 for excavation, grading, filling, and clearing. In accordance with the Municipal Code, procedures for the issuance, administration, and enforcement of a building and grading permits are employed in order to protect health and safety, which includes the reduction or elimination of the hazards of undue settlement, erosion, siltation, and flooding, or other special conditions.

4.8.1.2 *Existing Conditions*

The City of East Palo Alto is located on the San Francisco Peninsula. The Peninsula is bounded by the Pacific Ocean to the west and the San Francisco Bay to the east.

On-Site Topography and Soils

The project site is situated on an alluvial fan on the western shore of San Francisco Bay at an elevation of approximately 11 feet above mean sea level (amsl). On-site topography is generally flat with a slight downward slope to the northeast toward San Francisco Bay which is located approximately 0.25-mile east of the project site. There are no steep slopes on or adjacent to the project site subject to landslide hazards.

The project site is underlain by marine sediments and metamorphic and igneous rocks of Mesozoic and Cenozoic age, approximately 1,200 to 1,300 feet bgs. Soils underlying the project site are classified as Botella-Urban land complex with zero to five percent slopes.³⁰ Urban land is comprised of disturbed and human transported material. The Botella complex soil at the site are mostly comprised of clay loam from zero-to five-feet bgs.³¹ On-site soils have a low expansive potential.³²

Groundwater

Groundwater at the project site fluctuates. Testing conducted for the proposed project revealed the current depth to groundwater at the project site ranges from approximately 6.5 – 8.4 feet bgs; however, historic groundwater levels have been recorded at a depth of 4.7 feet bgs. Fluctuations in groundwater levels occur due to many factors including seasonal fluctuations and underground drainage patterns. Therefore, the design level geotechnical report assumes a design groundwater level of between 4.7 to 8.4 feet bgs.

Seismicity and Seismic Hazards

The San Francisco Bay Area is considered to be one of the most seismically active regions in the United States. The nearest active faults to the project site include the Monte-Vista Shannon (seven miles southwest of the site), San Andreas (eight miles west of the site), and Hayward (approximately 10.5 miles east of the site). The site is not located within a state designated Alquist Priolo Earthquake

³⁰ United States Department of Agriculture. Web Soil Survey. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed January 2, 2020.

³¹ Ibid.

³² Ninyo & Moore. *Geotechnical Evaluation, Job Training Center, 2535 Pulgas Avenue, East Palo Alto, California*. May 28, 2020.

Fault Zone and no known faults cross the site.³³ The site could, however, experience strong ground shaking during a moderate to severe earthquake.

Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loose water-saturated soils from a solid state to a liquid state during ground shaking. During ground shaking, such as during earthquakes, cyclically induced stresses may cause increased pore water pressures within soil voids, resulting in liquefaction. Liquefied soils may lose shear strength that may lead to large shear deformations and/or flow failure under moderate to high shear stresses, such as beneath foundations or sloping ground. Soils most susceptible to liquefaction are loose, non-cohesive soils that are saturated and are bedded with poor drainage, such as sand and silt layers bedded with a cohesive cap. The project site located within a State-designated liquefaction hazard zone and has been identified as having very high susceptibility for liquefaction hazards.³⁴

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as the steep bank of a stream channel. The nearest waterway to the project site is San Francisco Bay, approximately 0.25-mile east of the site. The project site is relatively flat and is not adjacent to a creek or any other unsupported face. For these reasons, the potential for lateral spreading at the site is low.

Paleontological Resources

Paleontological resources are the fossilized remains of organisms from prehistoric environments from in geologic strata. These are valued for the information they yield about the history of the earth and its past ecological settings. According to the Specific Plan EIR, Holocene-age deposit which may contain fossils underlie the Plan Area, including the project site.

³³ State of California Seismic Hazard Zones. Palo Alto Quadrangle. October 18, 2006. Available at: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/PALO_ALTO_EZRIM.pdf. Accessed January 2, 2020

³⁴ Ibid.; Ninyo & Moore. *Geotechnical Evaluation, Job Training Center, 2535 Pulgas Avenue, East Palo Alto, California*. May 28, 2020.

4.8.2

Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
- Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact GEO-1: The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides.
(No Impact)

Ground Surface Rupture

Ground surface displacement closely follows the trace of geologically young faults. The project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known active or potentially active faults exist on the site. Therefore, the potential for ground surface rupture to occur at the site from a known active fault is very low. Additionally, the proposed project and on-site wastewater treatment facility option would not exacerbate ground surface rupture in the project area. Therefore, there would be no CEQA impact associated with ground surface rupture. **(No Impact)**

Seismicity

The project site is located within a seismically active region and the potential exists for a large earthquake to induce strong to very strong ground shaking at the site. Ground shaking could damage structures and threaten future occupants of the proposed project. The project would not exacerbate ground shaking in the project area. Therefore, there would be no CEQA impact associated with seismicity. General Plan Safety and Noise Policies 1.1 through 1.3 would be incorporated into the project and on-site wastewater treatment facility option to address the effects of ground shaking on the project site. Additionally, in conformance with the certified Specific Plan EIR, the project and on-site wastewater treatment facility option would implement the following, previously approved standard measures to reduce hazards associated with seismically induced ground shaking and expansive fill on the site.

Standard Measures for Projects in the Specific Plan Area

- All structures shall be designed using sound engineering judgment and the latest California Building Code (CBC) requirements at a minimum. Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead and live loads. Structures shall be able to do all of the following:
 - a) Resist minor earthquakes without damage
 - b) Resist moderate earthquakes without structural damage but with some nonstructural damage
 - c) Resist major earthquakes without collapse but with some structural as well as nonstructural damage
- The foundation shall be designed to compensate for effects of liquefaction, differential settlement, and lateral spreading due to earthquakes. The foundations shall be designed by a

qualified structural engineer using soil design parameters developed by qualified geotechnical consultants and verified by the City Building Division.

- Earthwork activities, including remedial grading, shall be performed using the recommendations provided by a qualified geotechnical consultant, and the foundation shall be designed by a qualified structural engineer using soil design parameters developed by a qualified geotechnical consultant to ensure that the underlying substrate is capable of withstanding the load. Existing fills may need to be removed and replaced with engineering fills.
- Earthwork and foundations shall be designed to compensate for effects of expansive soils. Fill placement and foundation design criteria shall be developed by a qualified geotechnical consultant and verified by the City Building Division.

With implementation of the geotechnical evaluation recommendations, General Plan and Ravenswood Specific Plan policies, and Specific Plan EIR measures, there would be no CEQA impact associated with seismicity. **(No Impact)**

Liquefaction

The project site is located within a State designated liquefaction hazard zone.³⁵ Additionally, the site contains discontinuous layers of potentially liquefiable sands.³⁶ Therefore, the site is susceptible to liquefaction and liquefaction induced differential settlement during seismic events. The proposed project and on-site wastewater treatment facility option would not modify groundwater levels or otherwise exacerbate the existing risk of liquefaction. Therefore, there would be no CEQA impact associated with liquefaction. City of East Palo Alto General Plan policies would be incorporated into the project to address the effect of liquefaction on the project. **(No Impact)**

Landslides

The project site is flat and does not contain steep slopes or other features that would result in a landslide or collapse. **(No Impact)**

Impact GEO-2: The project would not result in substantial erosion or the loss of topsoil. **(Less than Significant Impact)**

Grading and construction activities associated with the proposed project and on-site wastewater treatment facility option would expose soil to the erosive forces of wind and water. As discussed in Section 4.3 Air Quality and Section 4.9 Hydrology and Water Quality, implementation of mitigation measures and standard measures in conformance with existing regulations would reduce the potential for substantial erosion and loss of topsoil during construction and post-construction periods to a less than significant level. **(Less than Significant Impact)**

³⁵ California Geologic Survey. *Earthquake Zones of Required Investigation, 2535 Pulgas Avenue, East Palo Alto, California*. Accessed December 18, 2020. <https://maps.conservation.ca.gov/cgs/EQZApp/app/>

³⁶ Ninyo & Moore. *Geotechnical Evaluation, Job Training Center*. May 28, 2020.

Impact GEO-3: The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. **(No Impact)**

Due to the flat topography of the project site and surrounding area, there are no existing slope instability or landslide related hazards on or adjacent to the site. The proposed project and on-site wastewater treatment option would not cause or exacerbate an unstable soil hazard; therefore, there would be no CEQA impact associated with unstable soil hazards. **(No Impact)**

Impact GEO-4: The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. **(No Impact)**

Soils on the project site have low expansion potential. The proposed project and on-site wastewater treatment facility option would not exacerbate the expansion potential of on-site soils. Therefore, there would be no CEQA impact. City of East Palo Alto General Plan Safety and Noise Policies 1.1 through 1.3 would be incorporated into the project to address the effect of expansive soil on the project. **(No Impact)**

Impact GEO-5: The project would not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. **(No Impact)**

As noted in Section 3.2.7, Sanitary Sewer, the project would be served by the existing EPASD wastewater system or an on-site wastewater treatment facility. Under the on-site wastewater treatment facility option, the wastewater collected and treated on-site would be used throughout the site and within the office building for non-potable purposes. No septic systems are proposed on-site; therefore, the proposed project and on-site wastewater treatment facility option would not result in soils impacts due to the installation of septic tanks or alternative wastewater disposal systems. **(No Impact)**

Impact GEO-6: The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact with Mitigation Incorporated)**

There are no unique geologic features at the project site. The Holocene-age deposits that underlie the project site can contain paleontological resources. Therefore, although unlikely, the proposed project and on-site wastewater treatment facility option could disturb currently unknown paleontological resources during construction.

Impact GEO-1: Although unlikely, construction of the proposed project and on-site wastewater treatment facility option paleontological resources could disturb paleontological resources. **(Significant Impact)**

Mitigation Measure: Consistent with Specific Plan EIR mitigation measure CULT-1, the proposed project would implement the following mitigation measure:

MM GEO-1: If paleontological resources are encountered during the grading or excavation, all construction activities within 50 feet shall stop and the City of East Palo Alto shall be notified. A qualified paleontologist shall inspect the findings within 24 hours of discovery. If it is determined that the proposed development could damage unique paleontological resources, mitigation shall be implemented in accordance with Public Resources Code Section 21083.2 and Section 15126.4 of the CEQA Guidelines. Possible mitigation under Public Resources Code Section 21083.2 requires that reasonable efforts be made for resources to be preserved in place or left undisturbed. If preservation in place is not feasible, data recovery through excavation shall be conducted with a data recovery plan in place. Therefore, when considering these possible mitigations, the City shall have a preference for preservation in place.

With implementation of the mitigation measure identified above, construction of the proposed project and on-site wastewater treatment facility option would not result in a significant impact to paleontological resources. **(Less than Significant Impact with Mitigation Incorporated)**

4.8.3 Non-CEQA Effects

On December 17, 2015, the California Supreme Court issued an opinion in “CBIA vs. BAAQMD” holding that CEQA is primarily concerned with the impacts of a project on the environment and generally does not require agencies to analyze the impact of existing conditions on a project unless the project could exacerbate the existing environmental hazards or risks. Except for the possibility of erosion and/or disturbance of unknown paleontological resources during construction, the proposed project and on-site wastewater treatment facility option would not exacerbate existing geology and soil hazards on or adjacent to the project site and, therefore, would not result in a geology and soils impact. Nevertheless, the City has policies and regulations that address existing conditions affecting a proposed project. The City has, therefore, included planning considerations relating to these policies and regulations for information only.

City of East Palo Alto General Plan policies and Ravenswood Specific Plan policies (specifically Safety and Noise policies 1.1 through 1.3 in the General Plan and Land Use Community Character Policy 9.3 in the Specific Plan) would be incorporated into the project to address the effect of geology and soil conditions on the project. In conformance with the certified Ravenswood Specific Plan EIR and current standard practices in the City of East Palo Alto, the project proposes to implement the following, previously approved mitigation measures to reduce hazards associated with seismically-induced ground shaking and expansive fill on the site.

Standard Permit Condition for Projects in the Specific Plan Area:

- All structures shall be designed using sound engineering judgment and the latest California Building Code (CBC) requirements as a minimum. Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead and live loads. The code-prescribed lateral forces are generally substantially smaller than the expected peak forces that would be associated with a major earthquake. Therefore, structures shall be able to do all of the following:

- a. Resist minor earthquakes without damage.
 - b. Resist moderate earthquakes without structural damage but with some nonstructural damage.
 - c. Resist major earthquakes without collapse but with some structural as well as nonstructural damage.
- The foundation shall be designed to compensate for effects of liquefaction, differential settlement, and lateral spreading due to earthquakes. The foundations shall be designed by a qualified structural engineer using soil design parameters developed by qualified geotechnical consultants and verified by the City Building Division.
 - Earthwork activities, including remedial grading, shall be performed using the recommendations provided by a qualified geotechnical consultant, and the foundation shall be designed by a qualified structural engineer using soil design parameters developed by a qualified geotechnical consultant and verified by the City Building Division.
 - Improvements on areas of soft Bay Mud and artificial fill must be designed with under the guidance of suitably qualified geotechnical consultants to ensure that the underlying substrate is capable of withstanding the load. Existing fills may need to be removed and replaced with engineered fills.
 - Earthwork and foundations shall be designed to compensate for effects of expansive soils. Fill placement and foundation design criteria shall be developed by qualified geotechnical consultants and verified by the City Building Division.

With implementation of the geotechnical evaluation recommendations, General Plan and Specific Plan policies and Specific Plan EIR measures, the proposed project would not expose people or structures to potential substantial adverse effects due to seismic ground shaking or seismic-related ground failure, including liquefaction.

4.9 GREENHOUSE GAS EMISSIONS

The following discussion is based in part on an Air Quality and Greenhouse Gas Emissions Assessment and addendum prepared by Illingworth & Rodkin, Inc. in February and May 2021, respectively. These reports are attached as Appendix A to this Initial Study.

4.9.1 Environmental Setting

4.9.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO₂ equivalents (CO₂e). The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO₂ and N₂O are byproducts of fossil fuel combustion.
- N₂O is associated with agricultural operations such as fertilization of crops.
- CH₄ is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and SF₆ emissions are commonly created by industries such as aluminum production and semiconductor manufacturing.

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes, and drought; and increased levels of air pollution.

4.9.1.2 *Regulatory Framework*

State

Assembly Bill 32

Under the California Global Warming Solutions Act, also known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of CO₂e (MMTCO₂e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO₂e.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per-capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2040. Plan Bay Area 2040 establishes a course for reducing per-capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 CAP (prepared by BAAQMD) includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The

guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Vista 2035 East Palo Alto General Plan

Various policies in the City’s General Plan have been adopted for the purpose of avoiding or mitigating greenhouse gas emissions impacts resulting from planned development within the City including the following:

Policy	Parks, Open Space, and Conservation
8.1	Climate Action Plan. Implement and regularly update the City’s Climate Action Plan (CAP). Update the City’s Greenhouse Gas Inventory and associated implementation actions matrix every 2 to 3 years, and the overall CAP framework document every 5 to 10 years.
8.4	Reducing GHG emissions. In consulting with applicants and designing new facilities, prioritize the selection of green building design features that enhance the reduction of GHG emissions.
8.11	Green building certifications. Require that new residential, commercial, or mixed-use buildings over 20,000 square feet earn LEED Silver certification (or equivalent) including meeting the minimum CALGreen code requirements.
8.12	Green waste management practices. Support ongoing green waste recycling efforts and facilitate composting opportunities for residents and businesses in order to reduce surface ozone pollution and offset greenhouse gas emissions and provide soil nutrients.

Ravenswood/4 Corners Transit Oriented Development Specific Plan

Various policies in the Specific Plan have been adopted for the purpose of avoiding or mitigating greenhouse gas emissions impacts resulting from planned development within the Specific Plan area including the following:

Policy	Land Use and Community Character
4.6	Verify that Green Building standards are part of every development project application, and that these standards would reduce energy-related GHG emissions beyond 15 percent from those that would occur under the most recent Title 24 Building Code requirements (Tier 1 standards).
4.7	Ensure that all new development adheres to this Specific Plan’s development standards, as well as its design standards and guidelines.

In addition to the policies listed above, the Specific Plan includes requirements for Green Building Components, such as use of cool roofing materials and recycling of construction waste, as design standards.

City of East Palo Alto Final Climate Action Plan

On December 2011, the City of East Palo Alto adopted the City of East Palo Alto Final Climate Action Plan Twenty-Three Actions to Address Our Changing Climate. This document includes goals and actions that the City of East Palo Alto can take to reduce their GHG emissions. The City’s

emissions reduction goal is to reduce GHG emissions 15 percent below the baseline 2005 levels by 2020. This climate action plan is considered a qualified GHG Reduction Strategy.

City of East Palo Alto Building Electrification and Electric Vehicle Infrastructure Reach Codes Ordinance

City Council adopted the City of East Palo Alto Building Electrification and Electric Vehicle Infrastructure Reach Codes Ordinance on October 20, 2020. The ordinance includes requirements for electrification, solar, and EV infrastructure on all new residential and commercial buildings and other non-residential buildings within the city.

4.9.1.3 Existing Conditions

Existing development on the project site includes two industrial buildings, accessory structures, and paved storage areas. GHG emissions are generated by the vehicle trips to and from the project site and energy used to operate the existing industrial buildings. Emissions from existing development on-site are estimated to be 207 MT CO_{2e} in 2023 and 187 MT CO_{2e} in 2030.

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact GHG-1: The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

GHG emissions associated with development of the proposed project and on-site wastewater treatment facility option would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational GHG emissions associated with project traffic, energy, water usage, and solid waste disposal. GHG emissions from the proposed project and on-site wastewater treatment facility option are discussed below and were analyzed using the methodology recommended in the BAAQMD CEQA Air Quality Guidelines.

Construction Emissions

Proposed Project

GHG emissions associated with project construction were computed to be 508 MT of CO₂e for the total construction period. These emissions are from on-site operations of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions; however, BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. Because construction would be temporary (approximately 15 months) and would not result in a permanent increase in emissions, the project would not interfere with the implementation of AB 32 or SB 32.

BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable. Best management practices that would be incorporated into construction of the project include, but are not limited to, using at least 10 percent local building materials and recycling or reusing at least 50 percent of construction waste or demolition materials. In accordance with General Plan Policy 4.4, the project would divert 80 percent of its construction waste away from landfills, which would exceed the minimum construction waste diversion best management practices. **(Less than Significant Impact)**

On-Site Wastewater Treatment Facility Option

GHG emissions associated with construction of the on-site wastewater treatment facility option were computed to be 94 MT of CO₂e for the total construction period. These emissions would be from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction related GHG emissions; however, BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. Because construction would be temporary (approximately 2.5 to three months) and would not result in a permanent increase in emissions, the on-site wastewater treatment facility option would not interfere with the implementation of AB 32 or SB 32.

BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable. Best management practices that would be incorporated into construction of the project include, but are not limited to, using at least 10 percent local building materials and recycling or reusing at least 50 percent of construction waste or demolition materials. In accordance with General Plan Policy 4.4, the on-site wastewater treatment facility would divert 80 percent of its construction waste away from landfills, which would exceed the minimum construction waste diversion best management practices. **(Less than Significant Impact)**

Operational Emissions

Proposed Project

The CalEEMod model and project vehicle trip generation rates were used to predict annual GHG emissions associated with operation of the proposed project. The project’s operational GHG emissions were calculated based on estimates of emissions from several sources, including energy consumption, vehicle trips, solid waste generation, and water usage. As shown in Table 4.9-1, with implementation of the TDM Plan, the net annual emissions resulting from operation of the proposed project was estimated to be 914 MT of CO_{2e} assuming operations would begin in 2023 and 848 MT CO_{2e} in 2030. Based on the proposed project’s service population of 440 employees,³⁷ the project is estimated to result in a GHG emissions of 2.55 and 2.35 MT CO_{2e}/ year/ service population in 2023 and 2030, respectively.

Table 4.9-1: Annual Project GHG Emissions				
Source Category	Existing Land Use		Proposed Project	
	2023	2030	2023	2030
Area	0	0	0	0
Energy Consumption	16	16	266	266
Mobile	185	165	799	714
Solid Waste Generation	3	3	44	44
Water Usage	3	3	11	11
Total	207	187	1,120	1,035
Net Emissions			914 MT CO _{2e} /year	848 MT CO _{2e} /year
<i>Significance Threshold</i>				<i>660 MT CO_{2e}/year</i>
Service Population Emissions (MT CO _{2e} /year/service population)			2.55	2.35
<i>Significance Threshold</i>				<i>2.8 in 2030</i>
Exceeds Threshold?				No
Notes: yr = year, MT = metric tons, CO _{2e} = carbon dioxide equivalent, SP = service population				

To be considered significant, the project must exceed the GHG service population significance threshold (e.g., “Substantial Progress” efficiency metric). The project’s 2030 per capita emissions would not exceed the “Substantial Progress” efficiency metric of 2.8 MT CO_{2e}/ year/ service population. Therefore, operation of the proposed project would not generate significant GHG

³⁷ Assuming that the project would accommodate four office employees per 1,000 square feet. Illingworth & Rodkin, Inc. *JobTrain Office Project Air Quality and Greenhouse Gas Emissions Assessment, East Palo Alto, California*. February 17, 2020.

emissions that would result in a significant impact on the environment. **(Less than Significant Impact)**

On-Site Wastewater Treatment Facility Option

As noted in Section 4.7, Air Quality, the on-site wastewater treatment facility would not include any combustion sources and, therefore, would not emit GHG emissions. Except for a small number of trips for maintenance and removal of solid waste, the on-site wastewater treatment facility option would not itself produce vehicle trips or mobile GHG emissions separate from the proposed office building. For these reasons, operation of the on-site wastewater treatment facility option would not generate significant GHG emissions that would result in a significant impact on the environment. **(Less than Significant Impact)**

Impact GHG-2: The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

CARB Climate Change Scoping Plan

The CARB Scoping Plan provides a framework for state government to lower GHG emissions statewide in order to reach GHG reduction goals and local governments, with their land use decisions, play a role in these efforts. The proposed project and on-site wastewater treatment facility option would comply with requirements of the City-adopted CALGreen Building Code requirements, including high-efficiency water fixtures, water-efficient irrigation systems, energy-efficient electrical systems and fixtures, and on-site wastewater recycling. While the measures in the Scoping Plan are not generally directly applicable to individual land use projects, the energy efficiency and water conservation and reuse included in the proposed project and on-site wastewater treatment facility option would be consistent with the intent of this statewide plan to reduce GHG emissions through 2030.

Plan Bay Area and 2017 CAP

The proposed project and on-site wastewater treatment facility option, which is infill development within an identified PDA, would not conflict with the latest clean air and GHG reduction plan efforts.³⁸ The estimated emissions are below the BAAQMD GHG efficiency thresholds. The project would provide employment in an area with more housing than jobs and would not be a substantial source of emissions of methane or other super-GHGs. The project is generally consistent with the employment assumptions for development contained within the City's General Plan, Plan Bay Area, and the 2017 CAP. For these reasons, the proposed project would not conflict with Plan Bay Area or the 2017 CAP.

³⁸ Metropolitan Transportation Commission. "Priority Development Areas (Plan Bay Area 2040)". Last updated July 27, 2020. Accessed at: https://opendata.mtc.ca.gov/datasets/56ee3b41d6a242e5a5871b043ae84dc1_0?geometry=-122.311%2C37.451%2C-121.985%2C37.499

East Palo Alto General Plan, Specific Plan, and Climate Action Plan

The project proposes development of the site in conformance with energy, transportation, water conservation, and waste reduction policies and regulations of the City of East Palo Alto. Consistent with the General Plan Parks, Open Space, and Conservation Policy 8.4, the project includes the following green building features that reduce GHG emissions:

- CarbonCure (alternative concrete mix that sequesters carbon)
- Solar panels on the roof
- Water efficient landscaping with irrigation design
- On-site stormwater management, bioretention swales
- Bicycle parking spaces
- Electric vehicle charging stations
- LED light fixtures
- Low flow indoor water fixtures
- Variable refrigerant flow HVAC system
- High performance façade design which incorporates both acoustical and thermal design elements
- Performance based building energy modeling
- Exterior lighting will be specified to meet LEED/USGBC light pollution reduction guidelines

The proposed development would achieve at least a LEED Silver certification, consistent with General Plan Parks, Open Space and Conservation Policy 8.11. Consistent with the General Plan Parks, Open Space, and Conservation Policy 8.12 and Infrastructure, Services, and Facilities Policy 4.4, the project would recycle green waste and compost, and would divert 80 percent of construction waste away from landfills.

Consistent with Ravenswood Specific Plan Land Use and Community Character Policies 4.6 and 4.7, the project would comply with the City's Green Building standards and the Specific Plan's design standards and guidelines.

The City's Climate Action Plan GHG emissions reduction goals are applicable to projects that will be constructed and operational prior to 2021. Since the project would be constructed and operational subsequent to 2020, the project is subject to the GHG emissions target based on the state's reduction goals for projects constructed and operational after 2020 and before 2031. However, the project would be consistent with the City's Climate Action Plan measures that reduce emissions. These include Measure TL-1.2 encouraging development within the Ravenswood Specific Plan area, which is accessible to transit. The project would also comply with Measures W-2.2 and W-3.1, which requires residents and businesses to participate in recycling and composting (which reduces methane emissions in landfills).

Additionally, if the on-site wastewater treatment facility option is selected, wastewater generated by the proposed project would be collected, treated, and reused on-site for building non-potable uses as well as landscape irrigation. On-site wastewater reuse is generally consistent with the City's Climate Action Plan Measures E-1.1 and E-1.2 calling for the City to promote water efficiency in new

development and General Plan Policy 2.8 encouraging implementation of municipal water conservation and efficiency measures in new developments.

City of East Palo Alto Reach Code

The proposed project would be required to comply with the City's Reach Code requirements. According to the City's Reach Code, all new office buildings are required to be all electric, include rooftop solar panels covering at least 15 percent of the roof area, and provide EV charging stations meeting the required ratio of charging stations per parking spaces provided.

Through conformance with the goals, policies, and development standards in the General Plan and Ravenswood Specific Plan and measures in the City's Climate Action Plan, the project and on-site wastewater treatment facility option would not conflict with local applicable plans adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

4.10 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based in part on a Phase I Environmental Site Assessment and Phase II Subsurface Investigation prepared by Ninyo & Moore in November 2019 and January 2020, respectively. In addition, this discussion is based in part on a hazardous materials memorandum prepared by ARUP in May 2021. These reports are attached as Appendix D to this Initial Study.

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, and the Resource Conservation and Recovery Act. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous

substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).³⁹

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The San Mateo County Department of Environmental Health reviews CalARP risk management plans as the CUPA.

Asbestos-Containing Materials

Friable asbestos is any asbestos containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by Cal/OSHA Lead in Construction Standard, CCR Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Local Regulations

Comprehensive Land Use Plan for Palo Alto Airport

The project site is approximately one-mile northwest of the Palo Alto Airport; the closest airport to the site. The Palo Alto Airport Comprehensive Land Use Plan (CLUP) is intended to safeguard the general welfare of inhabitants within the Airport vicinity and aircraft occupants.⁴⁰ The CLUP is also intended to ensure that surrounding new land uses do not affect the Airport's continued operation.

Vista 2035 East Palo Alto General Plan

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating hazards and hazardous materials impacts resulting from planned development within the Plan Area including the following:

³⁹ CalEPA. "Cortese List Data Resources." Accessed May 24, 2021. <https://calepa.ca.gov/sitecleanup/corteselist>.

⁴⁰ Santa Clara County Airport Land Use Commission. *Palo Alto Airport – Comprehensive Land Use Plan*. Amended November 2016.

Policy	Health and Equity
4.2	Pollutants. Continue to work with state, federal, regional, and local agencies to eliminate and reduce concentrations of regulated legacy pollutants.
4.4	Agricultural Pesticides. Reduce exposure to legacy pesticides, particularly in areas previously under agricultural use, and whenever possible work with landowners and developers to eliminate concentrations of pesticides from soil and groundwater.

Policy	Parks, Open Space, Conservation
9.8	Soil Quality. Require soil testing for contaminants on sites that have historically, or currently, been exposed to chemical releases. If contamination does exist, require remediation strategy to reduce or eliminate contamination on site.

Policy	Safety and Noise
4.1	Contamination. Avoid or minimize risk to the community from exposure to contaminated soils or groundwater.
4.2	Management of Hazardous Materials. Continue to cooperate with federal, State, and county agencies to effectively regulate the management of hazardous materials and hazardous wastes.
4.5	Airport Land Use Plan. Coordinate with the Santa Clara County ALUC and Palo Alto Airport Comprehensive Land Use Plan (CLUP) and consider the CLUP in making any land use decisions in airport influence area.
5.4	Emergency Access Routes. Ensure the City’s designated system of emergency access routes is coordinated with regional activities for both emergency operations and evacuation.

Ravenswood/ 4 Corners Transit Oriented Development Specific Plan

Various policies in the Ravenswood Specific Plan have been adopted for the purpose of avoiding or mitigating hazards and hazardous materials impacts resulting from planned development within the Plan Area including the following:

Policy	Land Use and Community Character
6.4	Follow the regulations pertaining to siting of new schools in California described in Public Resources Code Section and Education Code Section 17123 to identify facilities within a one quarter mile radius of a proposed school site that might emit hazardous air emissions and require a Health Risk Assessment to ensure these emissions do not pose an unacceptable risk to the school, or if there is no suitable alternatives site, that these risks are mitigated to the extent possible and publicly acknowledged.
7.1	For all new development, or substantial renovation or redevelopment (greater than 20 percent of assessed valuation) of the sites in Subareas II and III (as defined by Figure 4.8-3 in the Specific Plan EIR), in the 4 Corners area, or on the southside of bay Road, require a Phase I Environmental Site Assessment (ESA), and, if recommended by the Phase I ESA, a Phase II ESA to include soil and groundwater sampling and analysis. Share the results of the Phase I/ II ESA with appropriate regulatory agencies to enable an appropriate remediation plan to be developed. The remediation plan may include soil and groundwater cleanup, engineering controls such as vapor barriers or venting systems, and institutional controls such as deed restrictions, or activity use restrictions.

- 8.1 Prohibit land uses that encourage a very high concentration of people or negatively affect air navigation as described in the Airport Land Use Control Plan (ALUCP) or are in excess of maximum heights recommended in the ALUCP, from the Traffic Pattern Zone of the Plan Area. Evaluate development applications on properties in this zone for their adherence to these regulations.
-

City of East Palo Alto Municipal Code

Chapter 8.34, Hazardous Materials, and Chapter 8.40, Hazardous Materials: Toxic Waste Disposal, in the City of East Palo Alto's Municipal Code seek to protect the citizens of East Palo Alto through prevention and control of unauthorized discharges of hazardous materials and establish performance standards for all activities involving storage of hazardous materials.

East Palo Alto Hazard Mitigation Plan

In 2016, the City of East Palo Alto, in coordination with the County of San Mateo, adopted a local Multi-Jurisdictional Hazard Mitigation Plan (HMP). The HMP is designed to conform to requirements of the Federal Disaster Mitigation Plan of 2000, which requires all cities counties, and special districts to adopt an HMP to receive disaster mitigation funding from FEMA.

City of East Palo Alto Emergency Operations Plan

The City of East Palo Alto adopted its Emergency Operations Plan (EOP) in January 2011. The City of East Palo Alto Emergency Operations Plan (EOP) defines the scope of preparedness and incident management activities necessary for the City and multi-jurisdictional partners. The EOP describes organizational structures, roles and responsibilities, policies, and protocols for providing emergency support. The EOP facilities response and short-term recovery activities (which set the stage for successful long-term recovery). It drives decisions on long-term preparedness and mitigation efforts, or risk-based preparedness measures directed at specific hazards. The EOP is flexible enough for use in all emergencies. It also describes the purpose of the plan, situation and assumptions, concept of operations, organization and assignment or responsibilities, administration and logistics, plan development and maintenance, and authorities and references. It contains functional sections (EOC Checklists), hazard-specific appendices (Event Specific Checklists), and a glossary. It identifies pre-designated jurisdictional and/ or functional area representatives to the EOC Emergency Response Team to facilitate responsive and collaborative incident management.⁴¹

4.10.1.2 Existing Conditions

Historic Uses of the Project Site

The project site was previously used for agricultural purposes between approximately 1939 and the early 1980s. Development at the project site consisted of several agricultural and residential buildings in 1940 and by the early 1950s agricultural hot houses were developed throughout the site. In the early 1980s, the site was sold, the hot houses were demolished, and the site was redeveloped with the current storage yard and office space for Touchatt Trucking Company.

⁴¹ City of East Palo Alto. *Emergency Operations Plan*. January 2011.

On-site Sources of Contamination

The Phase I ESA prepared for the proposed project identified two recognized environmental conditions at the project site, two underground storage tanks (UST), and noted that the project site is included on Geotracker database for a leaking underground storage tank (LUST).⁴²

Historic uses of the project site for agricultural and industrial purposes have resulted in contamination of on-site soils with pesticides and petroleum hydrocarbons. Previous investigations of the site and adjacent parcels noted that on-site soils were impacted by DDD/DDE/DDT and other insecticides/fungicides/pesticides/herbicides in shallow soil.⁴³ Furthermore, during a Phase I ESA conducted for the project site in 2015 by Ninyo & Moore, a grease and oil separator containing sludge was identified on the project site. Sludge testing results revealed high levels of petroleum hydrocarbons in the sludge indicating a need for additional soil and groundwater testing for petroleum hydrocarbons on the project site in the vicinity of the oil and grease separator.

A review of regulatory records for the project site indicated that two USTs were previously present and used for waste oil and diesel fuel storage. Stained soils were identified, indicating a release of motor vehicle oil in the northwest and north-central portions of the site. In 1989, the stained soils, USTs, and associated piping were excavated, and soil and groundwater were tested in 1990. No heavy metal contamination was detected, and the site was granted a case closure status in 1996.

Based on the historic uses at the site and former presence of USTs on-site, the Phase I ESA concluded that a Phase II Subsurface investigation was necessary to determine whether site groundwater, soil, and soil vapor has been affected by historic uses. A Phase II Subsurface Investigation including testing of soils, soil vapors, and groundwater was prepared for the site on January 17, 2020. The Phase II concluded on-site soil and groundwater have been impacted by petroleum hydrocarbons (TPHd and TPHmo) and on-site soils have been impacted by pesticides (Organophosphorus compounds), but on-site soil vapor has not been affected by VOCs.

Off-site Conditions

Several hazardous materials facilities were identified within the project area, including the adjacent parcel to the south (2519 Pulgas Avenue), which is associated with an ongoing Site Cleanup Program Case No. 41S0302. According to the RWQCB, 2519 Pulgas Avenue and the adjacent property to the south (currently occupied by Ravenswood Family Health Center) were historically part of the Iwasaki Nursery and are impacted by pesticide contaminated soils. A case was opened for both parcels in February 2008 and split by addresses; 2519 Pulgas Avenue is the active portion of the case, and the southern portion (Ravenswood Family Health Center) of the property was granted a closure in 2015. In addition, three underground storage tanks (USTs) were installed at 2519 Pulgas Avenue for storage of diesel fuel and gasoline. State Water Resources records indicate a gasoline leak from one of the USTs occurred, potentially affecting groundwater. In November 1992, a remediation case was opened and clean-up activities including removal of all three USTs were completed in May 1997, when a case closure status was issued.

⁴² The Geotracker Database is a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

⁴³ Ninyo & Moore. *Phase II Subsurface Investigation for 2519 and 2535 Pulgas Avenue, East Palo Alto, California*. January 17, 2020

Due to the distance between the off-site listed facilities and the project site, their location relative to the regional groundwater flow direction, media affected, and/or case status, none of the off-site listed facilities are expected to affect the project site.

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

Proposed Project

Operation of the proposed office building would use and store cleaning supplies and maintenance chemicals in small quantities. No other hazardous materials would be used or stored on-site. The small quantities of cleaning supplies and materials would not pose a risk to site users or adjacent land uses. For these reasons, operation of the proposed office project would not result in hazardous materials being transported, used, or disposed of in quantities that would result in a significant hazard to the public. **(Less than Significant Impact)**

On-Site Wastewater Treatment Facility Option

Operation of the on-site wastewater treatment facility option would involve the transport, use and disposal of hazardous materials. Hazardous materials associated with the on-site wastewater treatment facility include chemicals used to achieve treatment, operation, and maintenance requirements of the facility such as Calcium Carbonate, Ammonium Chloride, Magnesium Hydroxide, Sodium Hypochlorite, Sodium Hydroxide, Sodium Dodecyl Sulfate, and Citric Acid. Based on the size of the on-site wastewater treatment facility proposed under this option, it is estimated that approximately 300 pounds of Calcium Carbonate, 50 pounds of Ammonium Chloride, 55 gallons each of Magnesium Hydroxide and Sodium Hypochlorite, and 25 gallons of Sodium Hydroxide would be stored on-site. Sodium Dodecyl Sulfate and Citric Acid are used for cleaning the wastewater treatment facility and would be brought to the site as needed. In addition, approximately 50 pounds of waste solids would be generated by the wastewater treatment facility and stored on-site until hauled away. The transport, storage, use, and disposal of these materials would be conducted in accordance with local, state, and federal laws and regulations including double containment of chemicals to prevent spills and leaks, emergency eye wash and shower stations, and separation of chemical storage areas for incompatible chemicals that may have an exothermic reaction. Operation in accordance with local, state, and federal laws would ensure that the transport, storage, use, and disposal of chemicals associated with the on-site wastewater treatment facility option does not create a significant hazard to the public or environment. **(Less than Significant Impact)**

Impact HAZ-2: The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(Less than Significant Impact with Mitigation Incorporated)**

Construction

Construction of the proposed project and on-site wastewater treatment facility option may include the temporary transport, storage, and use of potentially hazardous materials including fuels, lubricating fluids, cleaners, or solvents. The project and on-site wastewater treatment facility option may involve removal of potentially contaminated soils during grading and excavation. Due to the age of the

existing on-site structures, constructed after 1978, asbestos and lead based paint are not anticipated to occur at the project site.

As noted in Section 4.12.1.2 above, although previous remediation activities have been completed on-site to address USTs on the project site, on-site groundwater is impacted by petroleum hydrocarbons and on-site soils are contaminated with residual pesticides. Thus, ground disturbing activities associated with construction could result in exposure of construction workers, nearby sensitive receptors, and/or the environment to contaminated soils and groundwater.

Impact HAZ-1: Ground disturbance during construction of the proposed project and on-site wastewater treatment facility option could expose construction workers, nearby sensitive receptors, and/or the environment to contaminated soils and groundwater.

Mitigation Measure: The following mitigation measures are based on the recommendations in the Phase II Subsurface Investigation. The following mitigation measures would be required to reduce the potential impacts related to exposure of construction workers, nearby sensitive receptors, and/or the environment to hazardous materials to a less than significant level.

MM HAZ-1.1: Prior to development of the project site, the project applicant shall submit plans demonstrating the following to the Department of Community and Economic Development for review and approval.

- Site Management Plan (SMP) shall be prepared, and Health and Safety Plan (HSP) shall be prepared. Any contaminated soils found in concentrations above established thresholds shall be removed and disposed of according to California Hazardous Waste regulations or the contaminated portions of the site shall be capped beneath the proposed development under the regulatory oversight of the Department of Toxic Substances Control (DTSC). The contaminated soil removed from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site. Components of the SMP shall include, but shall not be limited to:
 - A detailed discussion of the site background;
 - Preparation of a HSP
 - Notification procedures if previously undiscovered significantly impacted soil or free fuel product is encountered during construction;
 - On-site soil reuse guidelines based on the California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region's reuse policy;
 - Sampling and laboratory analyses of excessive soil requiring disposal at an appropriate off-site waste disposal facility; and
 - Soil stockpiling protocols
- The HSP shall include, but shall not be limited to, the following elements, as applicable:

- Provisions for personal protection and monitoring exposure to construction workers;
- Procedures to be undertaken in the event that contamination is identified above action levels or previously unknown contamination is discovered;
- Emergency procedures and responsible personnel.
- The SMP, including the HSP, shall be provided to the Director of Community and Economic Development prior to issuance of a demolition or grading permit.

With implementation of MM HAZ-1.1, impacts associated with release of hazardous materials into the environment during construction of the proposed project and on-site wastewater treatment facility option would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impact HAZ-3: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **(Less than Significant Impact)**

The closest school to the project site is Costano Elementary School, approximately 0.28-mile northwest of the project site. The project site is not located within one-quarter mile of any off-site proposed or existing school. Operation of the proposed office building would only include handling of cleaning chemicals in small quantities and would not generate hazardous waste or use hazardous materials. Operation of the on-site wastewater treatment facility option would include transport, use and disposal of chemicals used in the wastewater treatment process, however, as discussed under Impact HAZ-1 above, these activities would be conducted in accordance with applicable local, state, and federal regulations and, therefore, would not result in a significant impact. As a result, implementation of the proposed project would not result in a hazardous materials impact to any nearby school. **(Less than Significant).**

Impact HAZ-4: The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. **(Less than Significant Impact with Mitigation Incorporated)**

The project site is listed on the Geotracker database, which is one of the hazardous waste or substance lists updated annually per Section 65962.5 of the Government Code. As discussed in Section 4.12.1, above, although the site has a clean-up status of Completed- Case Closed as of January 18, 1996,⁴⁴ based on recent soil and ground water testing onsite, residual pesticide and petroleum hydrocarbon contamination is present in on-site soil and groundwater. Therefore, grading and earthwork activities and/or future operation of the project and on-site wastewater treatment facility option could expose construction workers, future site users, and/or adjacent workers in the

⁴⁴ State Water Resources Control Board. Geotracker database: 2535 Pulgas Avenue, East Palo Alto, California. Accessed July 22, 2020. https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608100546

vicinity of the site to hazardous materials during project construction. Implementation of MM HAZ-1.1 described above, would be required to reduce these potential hazardous material impacts to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impact HAZ-5: The project would not be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(No Impact)**

The project site is approximately one-mile northwest of Palo Alto Airport and there are no private airports in the vicinity of the site. The project site is not located within the ALUC's Airport Influence Area and development on the site does not require airspace safety review by the FAA. Therefore, the proposed project and on-site wastewater treatment facility option would not result in aircraft safety hazards and would not result in a substantial safety hazard for people residing or working in the project area. **(No Impact)**

Impact HAZ-6: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(No Impact)**

The City of East Palo Alto adopted its EOP in January 2011.⁴⁵ The project site does not provide emergency access or facilities and is not identified or referred to in the EOP. For these reasons, the proposed project and on-site wastewater treatment facility option would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. **(No Impact)**

Impact HAZ-7: The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. **(No Impact)**

The project site is not located within a designated Very High Fire Hazard Severity Zone.⁴⁶ The proposed project and on-site wastewater treatment facility option, therefore, would not expose people or structures to a risk of loss, injury or death involving wildland fires. **(No Impact)**

⁴⁵ City of East Palo Alto. *Emergency Operations Plan*. January 2011.

⁴⁶ California Department of Forestry and Fire Protection. *San Mateo County – Very High Fire Hazard Severity Zones in LRA*. November 2008. California Department of Forestry and Fire Protection. *San Mateo County – Fire Hazard Severity Zones in SRA*. November 2007.

4.11 HYDROLOGY AND WATER QUALITY

The following discussion is based in part on a Flood Displacement Memorandum prepared by BKF in November 2020. This report is attached as Appendix E to this Initial Study.

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Federal and State

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Statewide Construction General Permit

The SWRCB has implemented a National Pollutant Discharge Elimination System (NPDES) General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3.

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in 2015 to regulate stormwater discharges from municipalities and local agencies (co-

permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo.⁴⁷ Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g., rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures be properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimized size threshold, drain into tidally influenced areas or directly into the Bay, or drain into hardened channels, or if they are infill projects in subwatersheds or catchment areas that are greater than or equal to 65 percent impervious.

Dam Safety Act

Dam failure is the uncontrolled release of impounded water behind a dam. Flooding, earthquakes, blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, and terrorism can all cause a dam to fail.⁴⁸ Because dam failure that results in downstream flooding may affect life and property, dam safety is regulated at both the federal and state levels. In accordance with the state Dam Safety Act, dams are inspected regularly, and detailed evacuation procedures have been prepared for each dam.

San Mateo County mapped areas susceptible to the failure of dams located in or near the County. The County identified the Searsville Dam, which impounds a creek tributary to San Francisquito Creek, as posing a potential dam failure hazard to the lower reaches of San Francisquito Creek, which forms the boundary of East Palo Alto and Palo Alto.⁴⁹ The project site, however, is not within the Searsville Dam Inundation Zone.

Construction Dewatering Waste Discharge Requirements

Each of the RWQCBs regulate construction dewatering discharges to storm drains or surface waters within its Region under the NPDES program and Waste Discharge Requirements.

⁴⁷ MRP Number CAS612008

⁴⁸ State of California. 2013. *2013 State Hazards Mitigation Plan*. Accessed April 14, 2021. <https://www.caloes.ca.gov/schools-educators/plan-prepare/hazard-mitigation-planning/state-hazard-mitigation-plan#:~:text=The%202018%20California%20State%20Hazard,Mitigation%20Team%20members%20and%20stakeholders.&text=FEMA%20approved%20California's%202018%20SHMP%20on%20September%2028%2C%202018.>

⁴⁹ City of East Palo Alto. *Vista 2035 East Palo Alto General Plan*. October 2016.

Local

Vista 2035 East Palo Alto General Plan

Various policies in the City’s General Plan have been adopted for the purpose of avoiding or mitigating hydrology and water quality impacts resulting from planned development within the City, including the following:

Policy	Infrastructure, Services, and Facilities
1.1	NPDES compliance. Ensure compliance with all NPDES requirements for litter control, dumping, pollutants of control, business operations, and new/re-development.
1.2	On-site stormwater management. Encourage development projects to manage stormwater on-site to reduce burdens on the City’s stormwater system. Whenever possible, stormwater should be infiltrated, evaporated, reused, or treated on-site in other ways to improve stormwater quality and reduce flows into the storm drain system.
1.3	Stormwater infrastructure for new development. Require development projects to pay for their share of new stormwater infrastructure or improvements necessitated by that development.
1.4	Stormwater re-use and recycling. Encourage innovative ways of capturing and reusing stormwater for non-drinking purposes to reduce the use of potable water, including the creation of a recycled water system and installation of purple pipe in private and public projects.
1.5	Collaborative stormwater management. Encourage collaborative, integrated stormwater management between multiple property owners and sites.
1.8	Stormwater best practices. Encourage the use of best practices in stormwater treatment, retention, and quality and quantity control into flood control efforts, ensuring that flood control measures do not have negative ecological impacts on stormwater runoff.
1.9	Stormwater and flooding. Integrate stormwater management efforts with floor control efforts, seeking synergies and innovative strategies for stormwater treatment to reduce flood risks and volumes.
1.12	Ravenswood stormwater management. All new projects in the Ravenswood TOD/ 4 Corners Specific Plan Area must follow the stormwater policies established in Goal LU-9; Hydrological Context in the plan. Guidance in the Specific Plan supersedes policies from this General Plan.
2.11	Groundwater recharge. Working with regional partners, explore options for groundwater recharge and prohibit new private groundwater wells.
2.12	Maximizing infiltration. Consider requiring all new development to provide roof catchment systems, irrigated landscaping, and permeable pavements (where feasible), or other means to enhance on-site infiltration of stormwater runoff or landscape irrigation water.
Policy	Safety and Noise
2.1	Flood Insurance Program. Continue to participate in the National Flood Insurance Program and FEMA’s voluntary programs, such as the Community Rating System.
2.2	Flood related to sea level rise. Consider expanding boundaries of development control particularly where sea level rise could worsen flooding above predicted conditions.
2.3	Development in floodways. Continue to control development in the floodway and floodway fringe.

- 2.4 Floodplain Management Ordinance. Continue to enforce and consider strengthening the City's Floodplain Management Ordinance.
-

Ravenswood/ 4 Corners Transit Oriented Development Specific Plan

Various policies in the Ravenswood Specific Plan have been adopted for the purpose of avoiding or mitigating hydrology and water quality impacts resulting from planned development within the Plan Area including the following:

Policy	Land Use and Community Character
9.1	Ensure that new development in the Specific Plan area maximizes the amount of area available for groundwater recharge by requiring features such as roof catchment systems, irrigated landscaping, and permeable pavements (where feasible), or other means to enhance on-site infiltration of stormwater runoff or landscape irrigation water. Ensure all applicable projects under the Specific Plan comply with Provision C.3 of the Regional Municipal NPDES Permit and incorporate Low Impact Development measures to ensure that runoff is not increased.
9.2	As per Chapter 15.52 of Municipal Code, ensure that at the time a project is proposed in the Plan Area that each proposed new structure in the 100-year flood plain as identified in the current Flood Insurance Rate Map (FIRM) is elevated so that the bottom of the lowest floor is one foot above the base flood elevation (BFE) for residential structures, flood-proofed to 1 BFE for nonresidential structures, or granted a Variance pursuant to the procedures outlined in Section 15.52080 (a) to (k).
9.3	Require preparation of a geotechnical report calculating the building load and placement of fill for each development. Verify that environmental review of this report includes an assessment of flood risks to the building itself and the impacts on neighboring structures from displacement of flood waters. Require the report to consider the cumulative flood risks to other structures from the building in addition to other known, planned, and reasonably foreseeable development.

City of East Palo Alto Municipal Code

Chapter 15.52, Flood Plain Management, in the City of East Palo Alto's Municipal Code seeks to promote the health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas of East Palo Alto by establishing development standards and review process for development projects within identified flood hazard zones.

4.11.1.2 Existing Conditions

Water Quality

The project site is developed with industrial buildings and paved storage areas. Stormwater runoff from the project site enters the City's storm drain system which discharges to the San Francisco Bay. The project site and surrounding area are not located in an area of San Mateo County subject to the MRP hydromodification controls.⁵⁰

⁵⁰ San Mateo Countywide Water Pollution Prevention Program. *HM Control Map*. March 2009

Groundwater

Groundwater testing conducted for the proposed project revealed current groundwater levels at depths ranging from approximately three to six feet bgs.⁵¹ Groundwater found within the Ravenswood Specific Plan Area may be brackish due to the proximity of the San Francisco Bay. Additionally, groundwater located beneath the site contains contamination from historical uses as discussed in Section 4.13, Hazards and Hazardous Materials.

Stormwater Drainage

As discussed in Section 4.21, Utilities and Service Systems, stormwater in the City of East Palo Alto drains into two major drainage systems, the Runnymede Storm Drain System and the O'Connor Storm Drain System. Due to its proximity to the San Francisco Bay, portions of the drainage systems are influenced by tides. Many of the streets in the Ravenswood Specific Plan Area do not have storm drains, and those that do are unable to handle stormwater (or tidal flows) during peak events, resulting in flooding during 10- and 50-year storm events.

Approximately two-thirds of the City's storm drains drain into the Runnymede Storm Drain System outfall, including stormwater originating on the project site. A drainage ditch originating at the terminus of the storm drain at Runnymede Street receives water from the storm drain and transports it to the detention basin at the O'Connor Pump station, where it is pumped into San Francisquito Creek and ultimately flows into San Francisco Bay.

One hundred percent (168,180 square feet) of the project site is covered by impervious surfaces (i.e., paved storage areas and/or structures).

Flooding

Based on the current FIRM prepared by the FEMA for the project area, approximately two thirds of the project site is located in Zone AE while the remaining one third of the project site is located in Zone X.⁵² Zone AE is defined as having an 11-foot base flood elevation during a 100-year flood event. Zone X is outside the 100-year flood hazard zone.⁵³

Flooding due to Dam Failure

San Mateo County has mapped areas susceptible to dam failure.⁵⁴ The Tsunami and Dam Inundation Zones map in the General Plan shows that the project site is not located within the Searsville Dam Inundation Zone.

⁵¹ Ninyo & Moore. *Phase I Environmental Site Assessment Report for 2519 and 2535 Pulgas Avenue East Palo Alto, California*. November 27, 2019.

⁵² Federal Emergency Management Agency. Flood Insurance Rate Map, *Map Number 06081C0307F*. April 05, 2019.

⁵³ Federal Emergency Management Agency. "Flood Zones." Accessed January 3, 2019.

⁵⁴ City of East Palo Alto. *Vista 2035 East Palo Alto General Plan*. October 2016.

Seiches, Tsunamis, and Mudflows

Coastal and shoreline portions of California must consider the potential for tsunamis and seiches. Tsunamis, like the surges generated by the March 11, 2011 Tōhoku earthquake in northeast Japan, resulting in substantial damage to harbors in Crescent City and Santa Cruz. East Palo Alto’s position within San Francisco Bay limits the potential for tsunami damage, but sea surges may impact areas of the City directly adjacent to the Bay.

Seiches are earthquake-induced waves within an enclosed or partially enclosed body of water like a lake or reservoir. San Francisco Bay is partially enclosed with outlets to San Pablo Bay and the Pacific Ocean and is relatively shallow with a mean depth of approximately 27.6 feet. Geologic-induced seiche events have not been documented in San Francisco Bay and meteorological effects are quickly dissipated due to the connection with the Pacific Ocean.⁵⁵ The Tsunami and Dam Inundation Zones map in the Vista 2035 General Plan shows that the project site would not be inundated by floodwaters from a tsunami or seiche.

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

Sea Level Rise

The Bay Conservation and Development Commission (BCDC) have mapped areas throughout the Bay region susceptible to inundation from potential sea level rise scenarios.⁵⁶ Even under the low sea level rise scenario (16 inches), substantial bayside portions of East Palo Alto would be at risk of inundation if no inundation protections are implemented. The Sea Level Rise map in the General Plan shows that portions of the project site would be inundated under a condition with approximately two feet of sea level rise.

4.11.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁵⁵ Metropolitan Transportation Commission and Association of Bay Area Governments. *Plan Bay Area 2040 Draft Environmental Impact Report*. April 2017.

⁵⁶ City of East Palo Alto. *Vista 2035 East Palo Alto General Plan*. October 2016.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Less than Significant Impact)**

Construction Water Quality Impacts

Implementation of the proposed project and on-site wastewater treatment facility option would require excavation, paving, and grading of the project site, which can result in temporary impacts to surface water quality. Grading and construction activities would expose soil to the erosive forces of wind and water, increasing the potential for sedimentation downstream of the site, including San Francisco Bay.

The proposed project and on-site wastewater treatment facility option would disturb more than one acre and therefore, would be required to comply with the NPDES Construction General Permit. Additionally, operation of the on-site wastewater treatment facility would require a separate NPDES permit from the State Water Resources Control Board. Per the requirements of the NPDES Construction General Permit, the proposed project and on-site wastewater treatment facility option would implement the following standard measures to reduce the impacts to water quality from construction activities:

Standard Condition of Approval: Consistent with the NPDES Construction General Permit, the following standard measures will be implemented to prevent stormwater pollution and minimize erosion and sedimentation during construction:

- The proposed project will file a Notice of Intent (NOI) with the SWRCB and prepare a SWPPP prior to commencing construction. The project's SWPPP shall include measures for:
 - Soil stabilization,
 - Sediment control,
 - Sediment tracking control,
 - Wind erosion control, and
 - Non-stormwater management and waste management and disposal control.
- BMPs shall be implemented for reducing the volume of runoff and pollution in runoff to the maximum extent practicable during excavation, grading, and construction. All measures shall be included in the project's SWPPP and printed on construction documents, contracts, and project plans. The following erosion and sediment control measures, based upon Best Management recommendations by the RWQCB, shall be implemented by the project to reduce potential construction-related water quality impacts:
 - Stormwater inlet protection consisting of burlap bags filled with drain rock shall be installed around storm drain inlets to keep sediment and other debris out of the storm drainage system.
 - All exposed or disturbed soil surfaces shall be watered at least twice daily to control dust, as necessary.
 - Earthmoving or other dust-producing activities shall be suspended during periods of high winds.
 - Stockpiles of soil or other materials subject to wind erosion shall be watered or covered.
 - All trucks hauling soil, sand, and other loose materials shall be watered or covered, and all trucks will be required to maintain at least two feet of freeboard.
 - All paved access roads, parking areas and staging areas adjacent to the construction site shall be swept daily with water sweepers.
 - Vegetation in disturbed areas shall be replanted as quickly as possible.

According to the Preliminary Geotechnical Investigation prepared for the project, groundwater is present at the project site between 4.7 and 8.4 feet bgs. As noted under Section 4.10, Geology and Soils, the proposed project and on-site wastewater treatment facility option would involve excavation to a maximum depth of approximately three feet below the current ground surface.⁵⁷ Therefore, construction dewatering would not be required.

With implementation of the standard measure in conformance with the Construction General Permit, construction of the proposed project and on-site wastewater treatment facility option would not result in a significant water quality impact. **(Less than Significant Impact)**

⁵⁷ Depth of excavation was calculated based on maximum excavation required of five feet, minus two feet of fill to be added to achieve required flood elevation. Therefore, excavation would not exceed three feet below current ground surface levels.

Post-Construction Water Quality Impacts

One hundred percent (168,180 square feet) of the project site is covered by impervious surfaces (i.e., paved storage areas and/or structures). Implementation of the proposed project and on-site wastewater treatment facility option would reduce impervious surfaces at the project site by 29,205 square feet. Therefore, project and on-site wastewater treatment facility option would add and/ or replace over 10,000 square feet of impervious surfaces and be subject to the Municipal Regional Permit (MRP). In conformance with the MRP, stormwater runoff from the impervious surfaces on the site would be directed to flow through planters for treatment prior to entering the City's storm drainage system. The flow through planters would be used to treat the runoff generated by hardscape areas such as sidewalks and the parking lot.

The project, designed and constructed in compliance with the MRP, would not result in significant post-construction water quality impacts. **(Less than Significant Impact)**

Impact HYD-2: The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. **(No Impact)**

The proposed project and on-site wastewater treatment facility option would include excavation to a maximum depth of three feet to accommodate the construction of the proposed office building foundation and two feet for the proposed on-site wastewater treatment facility foundation. As noted above, groundwater occurs at the project site between 4.7 and 8.4 feet bgs. Therefore, groundwater would not be encountered during construction and dewatering would not be required. Furthermore, the project site is entirely covered by impervious surfaces (i.e., paved storage areas and/or structures) and, therefore, does not provide groundwater recharge. For these reasons, the proposed project and on-site wastewater treatment facility option would not interfere with on-going groundwater recharge activities such that it would impede sustainable groundwater management of the basin. **(No Impact)**

Impact HYD-3: The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. **(Less than Significant Impact)**

Stormwater Runoff

Development of the proposed project and on-site wastewater treatment facility option would reduce impervious surfaces on the project site, which would increase the rate and volume of stormwater runoff from the site. During the large storm events, the increased rate and volume of stormwater runoff, if not controlled could result in erosion and siltation downstream of the project site. As described above, the project and on-site wastewater treatment facility option would be subject to the

construction general permit and MRP and, therefore, would implement standard stormwater control measures that would reduce and/or avoid the potential for project-generated runoff to result in erosion, siltation and/or flooding. Development of the proposed project and on-site wastewater treatment facility option in conformance with the MRP, would not result in significant on- and or off-site erosion and siltation impacts through alteration of the existing site drainage pattern. For these reasons, the proposed project and on-site wastewater treatment facility would not substantially alter the existing drainage pattern of a site or create or contribute runoff which would exceed existing stormwater drainage capacity. **(Less than Significant Impact)**

Flood Flows

As noted in Section 4.13.1 above, the northeastern portion of the project site is located within a 100-year flood hazard zone, Zone AE and the remaining portion of the site is located in Zone X, which is outside the 100-year flood hazard zone. Flooding at the project site is the result of a high tide event in the San Francisco Bay overtopping the levees in the project area.

The proposed project and on-site wastewater treatment facility would place fill and concrete within the designated 100-year flood hazard zones in order to elevate the first-floor elevations above 100-year flood levels (13 feet amsl). A Flood Displacement Memorandum prepared for the proposed project concluded that because flood flows in the project vicinity are the result of tidal events, the addition of fill on the project site would not change the depth or extent of flood flows. Additionally, because the flood hazard zone terminates within the project site, when tidal flood flows recede, the water would flow north, similar to existing conditions without the proposed project. The on-site wastewater treatment facility option would be located outside of the 100-year flood zone, in the southwest corner of the site and, therefore, would not impede or redirect flood flows. The proposed project and on-site wastewater treatment facility option would be required to comply with the standard construction measures identified in Municipal Code Chapter 15.52.070, Provisions for flood hazard reduction, to reduce hazards from construction within a flood zone. For these reasons, the proposed project and on-site wastewater treatment facility would not substantially alter the existing drainage pattern of a site, create or contribute runoff which would exceed existing stormwater drainage capacity, or impede or redirect flood flows. **(Less than Significant Impact)**

Impact HYD-4: The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(Less than Significant Impact)**

100-Year Flood Hazard Zone

The project site is partially located within a 100-year flood hazard zone, Zone AE, with onsite flood depths up to 11 feet above msl. If the on-site wastewater treatment facility option is selected, the wastewater treatment facility would be located in the portion of the project site outside of the 100-year flood hazard zone. Consistent with the City's Floodplain Management Ordinance, the finished floor elevation of the proposed office building would be at least 13 feet amsl and above the 100-year base flood elevation for Zone AE. As discussed above, the project would not affect the depth, extent, or duration of flood flows. For these reasons, the project would not risk pollutant release due to flooding. **(Less than Significant Impact)**

Tsunami/ Seiche Zone

As discussed in Section 4.13.1, the project site is not located within a tsunami inundation zone. Additionally, based on the General Plan EIR, no substantial seiche event would occur unless a major seismic event were to cause seiche effects in the San Francisco Bay. The Ravenswood Open Space Preserve (wetland area) is located between the San Francisco Bay and the project site. The open space wetland has natural wave attenuating functions which reduces the risks of inundation at the site due to a seiche. **(Less than Significant Impact)**

Sea Level Rise

As previously stated, the Sea Level Rise map in the General Plan shows portions of the project site would be inundated with approximately two feet of sea level rise and the entire site would be inundated with approximately four feet of sea level rise. The proposed office building would be elevated to 13 feet amsl to avoid 100-year flood hazards, which would also elevate the buildings above flooding caused by sea level rise. The on-site wastewater treatment facility, if constructed, would be located outside of the 100-year flood hazard zone. Flooding of surrounding streets due to sea level rise could affect access to the site. The project, however, would not exacerbate sea level rise or its effects. Therefore, development of the proposed project and on-site wastewater treatment facility option would not result in significant impacts from inundation caused by projected sea level rise. **(Less than Significant Impact)**

Impact HYD-5: The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(No Impact)**

Basin Plan

The Basin Plan for the San Francisco Bay area provides a framework for state and local governments to meet water quality objectives and criteria to protect the beneficial uses of local aquifers, streams, marshes, and San Francisco Bay. As noted above, the project would implement BMPs to prevent stormwater pollution and minimize potential erosion and sedimentation during construction and post-construction periods, consistent with the NPDES Construction General Permit and the MRP. These measures are consistent with General Plan Infrastructure, Services, and Facilities Policies 1.1-1.8 and 1.12. For these reasons, the project would not conflict with this plan to protect the beneficial uses of water resources. **(No Impact)**

East Palo Alto Groundwater Management Plan

The City of East Palo Alto prepared a Groundwater Management Plan (GMP) for the portion of the San Mateo subbasin underlying the City in 2015. The GMP is the guiding document for how the City will ensure groundwater basins within its jurisdiction are managed sustainably. The project site is not located within or adjacent to a groundwater recharge pond or facility.⁵⁸ Implementation of the proposed project and on-site wastewater treatment facility option would not interfere with actions set forth in the GMP regarding groundwater recharge, transport, and/or quality. Therefore, the proposed

⁵⁸ City of East Palo Alto. *2015 Groundwater Management Plan*. Figure 13. August 2015.

project and on-site wastewater treatment facility option would not preclude the implementation of GMP. **(No Impact)**

4.12 LAND USE AND PLANNING

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

Palo Alto Airport – Comprehensive Land Use Plan

The project site is approximately one-mile northwest of the Palo Alto Airport, the closest airport to the site. The site is not located within the CLUP’s Airport Influence Area nor any airport safety zones.

Vista 2035 East Palo Alto General Plan and Zoning Ordinance

Local land use is governed by the City’s General Plan, which in turn provides the basis for the City’s Zoning Ordinance, precise plans, and design guidelines. The current General Plan and the City’s Zoning Ordinance are described below.

Vista 2035 East Palo General Plan

The City’s General Plan represents the East Palo Alto Community’s statement of its core values and vision for its future. The current General Plan was adopted by the City Council in October 2016 and provides the City with a guide for future land use decisions within the City. The General Plan divides the City into land use designations, which specify the type of development that could occur throughout the City that would be consistent with the City’s values and vision.

Various policies in the City’s General Plan have been adopted for the purpose of avoiding or mitigating land use impacts resulting from planned development within the City including the following:

Policy	Land Use and Urban Design
1.1	Balanced land uses. Create a balanced land use pattern to support a jobs-housing balance, minimize traffic and vehicle miles traveled, reduce greenhouse gas emissions, and promote a broad range of housing choices, retail businesses, employment opportunities, cultural venues, educational institutions, and other supportive land uses.
1.3	Coherent pattern of land uses. Ensure that new development occurs in a unified and coherent pattern that avoids conflicts between uses and promotes job creation and fiscal stability, creating a high-quality environment for East Palo Alto residents.
1.4	Unique neighborhoods, districts, and corridors. Enhance the unique character and identity of the City’s neighborhoods, districts and corridors through land use and design decisions. Allow policies and programs to be focused on each unique area of the City.
13.6	Adjacent neighborhoods and uses. Ensure that new development throughout the Plan Area maintains or improves the character of any adjacent neighborhoods, including the following: <ul style="list-style-type: none">• Require project proponents to design all new development so that it responds to the scale, grain, and character of existing nearby development.

- Ensure that new development not adversely affect the Ravenswood Open Space Preserve and Palo Alto Baylands Natural Preserve.
 - Maintain adequate separation between potentially incompatible land uses.
- 14.3 Create community spaces. When developing large parcels, seek opportunities to provide shared community open spaces and streets.
-

City of East Palo Alto Zoning Ordinance

As a long-range planning document, the General Plan outlines long-term visions, policies, and actions designed to shape future development within East Palo Alto. The Zoning Ordinance serves as an implementing tool for the General Plan by establishing detailed, parcel-specific development regulations and standards in each area of the City. Although the two are distinct documents, the General Plan and Zoning Ordinance are closely related, and State law mandates that zoning regulations be consistent with the General plan maps and policies. The project site is zoned Ravenswood Employment Center (REC).

Ravenswood/4 Corners Transit Oriented Development Specific Plan

The Ravenswood Specific Plan encompasses an approximately 350-acre area in the City of East Palo Alto that is generally bounded to the west by University Avenue, to the north by the rail line, to the east by the baylands, and to the south by Weeks Street. The Specific Plan is intended to serve as the primary document and reference guide for the future development and redevelopment of Ravenswood and 4 Corners.⁵⁹ In addition to providing the community and decision makers with clear documentation of the vision for the Specific Plan area, the Specific Plan is intended to provide clear policy and regulatory framework by which future development projects and public improvements will be reviewed. The Specific Plan area has been divided into land use districts that are intended to capture the community's desires for Ravenswood/ 4 Corners.

The Ravenswood Specific Plan includes development standards and design criteria that have been adopted to function along with the standards in the Municipal Code to limit land use conflicts and provide for compatibility with surrounding properties and neighborhoods. Considerations that are intended to mitigate or address potential adverse effects to adjacent developments or neighborhoods from traffic, noise, odors, visual nuisances, or other similar effects may include, but are not limited to, the placement or orientation of buildings and entryways, parking areas, buffers, and the addition of landscaping, walls, or both.

⁵⁹ City of East Palo Alto. *Ravenswood/ 4 Corners TOD Specific Plan*. February 2013.

4.12.1.2 Existing Conditions

Project Site

The approximately 3.86-acre site is currently developed with two single-story wood frame buildings, approximately six accessory structures, and uncovered, paved areas used for equipment and vehicle storage by the current occupant, Touchatt Trucking.

Surrounding Area

Surrounding land uses include light industrial uses and a vacant lot to the north, and commercial and light industrial uses to the east, west, and south (refer to Figure 3.1-3). The Bay Trail and the Ravenswood Open Space Preserve are located approximately 0.20-mile northeast of the project site. The nearest residential uses are located approximately 380 feet west of the project site on Illinois Street.

General Plan Land Use Designation

The existing General Plan land use designation for the project site is *General Industrial*. The *General Industrial* designation provides for industrial or manufacturing activities that may occur inside or outside of an enclosed building. Allowed land uses include industrial manufacturing, wholesaling, and storage, research laboratory, professional office, and medical office uses. The maximum FAR is 1.0 and the maximum height allowed within this land use designation is three stories or 30 feet.

Zoning

Consistent with the existing General Plan land use designation, the project site is zoned Ravenswood Employment Center (REC). The Ravenswood Employment Center (REC) zoning district is intended to support the development of a variety of job-creating uses, including high quality research and development facilities as well as nonprofit uses and performing arts centers. Businesses that produce goods, distribute merchandise, or repair equipment are also permitted within this zoning district provided that they do not negatively affect surrounding uses or properties.

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact LU-1: The project would not physically divide an established community. **(No Impact)**

The proposed office project and on-site wastewater treatment facility option do not include features (e.g., construction of a new railway, freeway, aqueducts, etc.) that would physically divide an established community within the City. **(No Impact)**

Impact LU-2: The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

General Plan, Zoning, and Specific Plan Consistency

As described in Section 3.2, Proposed Project, the project proposes to construct a four-story office building on the site with a maximum height of 78-feet and an FAR of 1.0. The first two floors of the office building would be occupied by JobTrain, a nonprofit job training business and the upper two floors would be occupied by commercial office tenants. A 2,380-square-foot children's play area and 7,600-square-foot carpentry area are proposed on the ground floor. The children's play area would serve the children of JobTrain students and the carpentry area would be used by JobTrain for carpentry classes. The proposed nonprofit business and office uses, as well as the children's play area and carpentry area would be allowed under the existing General Plan land use designation and zoning district assigned to the site. Additionally, although the height of the proposed office building would exceed the maximum height allowed in the General Industrial zoning district, the project is proposing a variance. As noted in Section 4.3 Aesthetics, prior to approval of the variance, the project would require Design Review approval to confirm consistency with General Plan development standards and ensure that the proposed building would not be out of character or inconsistent with the policies or development standards for urban design and community character in the Ravenswood/4 Corners TOD Specific Plan. Assuming this request is approved, the proposed project would be consistent with the General Industrial designation and Ravenswood Employment Center zoning district.

The Ravenswood Specific Plan includes policies that address several key environmental issues in the area, including development on contaminated sites, noise, and transportation. The project's consistency with Specific Plan policies related to hazardous materials contamination, noise, and transportation are discussed in Sections 4.7, 4.13, 4.16, and 4.20 of this Initial Study.

Section 18.22.040 of the Zoning Ordinance contains requirements for ground-mounted mechanical equipment that are applicable to the on-site wastewater treatment facility option. Specifically, this section of the Zoning Ordinance requires ground-mounted mechanical equipment to be screened from view of the public rights-of-way and or public property and comply with the setback requirements of the site.

As noted in Section 3.2.7, Sanitary Sewer, the exact design of the on-site wastewater treatment facility option has not been determined at the time of this Initial Study. If the on-site wastewater treatment facility option is selected by the project, screening would be installed around the perimeter

of the on-site wastewater treatment facility. Final design of the on-site wastewater treatment facility would be reviewed for consistency as part of the Site Development Permit review process at which time development standards would be identified to ensure consistency with Section 18.22.040 of the Zoning Ordinance. Consistency with Zoning Ordinance regulations related to noise generated by ground-mounted mechanical equipment is discussed in Section 4.16 Noise of this Initial Study. For these reasons, the proposed project and on-site wastewater treatment facility option would not cause a significant environmental impact due to a conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (**Less than Significant Impact**)

4.13 NOISE

The following discussion is based in part on a Noise and Vibration Assessment and Addendum prepared by Illingworth & Rodkin, Inc. in February and May 2021, respectively. These reports are attached as Appendix F to this Initial Study.

4.13.1 Environmental Setting

4.13.1.1 *Background*

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq} , DNL, or CNEL.⁶⁰ These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

⁶⁰ L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq} .

4.13.1.2 *Regulatory Framework*

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in Table 4.13-1 below. There are established criteria for frequent events (more than 70 events of the same source per day), occasional events (30 to 70 vibration events of the same source per day), and infrequent events (less than 30 vibration events of the same source per day). These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 4.13-1: Groundborne Vibration Impact Criteria			
Land Use Category	Groundborne Vibration Impact Levels (VdB inch/sec)		
	Frequent Event	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Source: Federal Transit Administration. *Transit Noise and Vibration Assessment Manual*. September 2018.

State and Local

California Green Building Standards Code

For commercial uses, CALGreen (Section 5.507.4.1 and 5.507.4.2) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} or greater noise contour for a freeway or expressway, railroad, or industrial or stationary noise source. The state requires interior noise levels to be maintained at 50 dBA $L_{eq(1-hr)}$ or less during hours of operation at a proposed commercial use.

Vista 2035 East Palo Alto General Plan

Various policies in the City’s General Plan have been adopted for the purpose of avoiding or mitigating noise and vibration impacts resulting from planned development within the City, including the following:

Policy Safety and Noise

6.1 Noise standards. Use the Interior and Exterior Noise Standards (Table 10-1) for transportation noise sources. Use the City’s Noise Ordinance for evaluating non-transportation noise sources when making planning and development decisions. Require that applicants demonstrate that the noise standards will be met prior to project approval.

Land Use	Noise Standard	
	Interior ^{1,2}	Exterior
Residential – Single family, multifamily, duplex, mobile home.	CNEL 45 dB	CNEL 65 dB ³
Residential – Transit lodging, hotels, motels, nursing home, hospitals	CNEL 45 dB	CNEL 65 dB
Private offices, church sanctuaries, libraries, board rooms, conference rooms, theaters, auditoriums, concert halls, meeting halls, etc.	L _{eq(12)} 45 dBA	•
Schools	L _{eq(12)} 45 dBA	L _{eq(12)} 67 dBA
General offices, reception, clerical, etc.	L _{eq(12)} 50 dBA	•
Bank lobby, retail store, restaurant, typing pool, etc.	L _{eq(12)} 55 dBA	•
Manufacturing, kitchen, warehousing, etc.	L _{eq(12)} 65 dBA	•
Parks, playgrounds	-	CNEL 65 dB
Golf courses, outdoor spectator sports, amusement parks	•	CNEL 70 dB
Notes:		
1. Noise standard with windows closed.		
2. Indoor environment excluding bathrooms, toilets, closets, and corridors.		
3. Outdoor environment limited to rear yard of single-family homes, multi-family patios, and balconies (with a depth of six feet or more) and common recreation areas.		
4. Outdoor environment limited to playground areas, picnic areas, and other areas of frequent human use.		

- 6.2 **Compatibility standards.** Utilize noise/ land use compatibility standards and the Noise Ordinance as guides for future development decisions.
- 6.3 **Noise control.** Provide noise control measures, such as berms, walls, and sound attenuating construction in areas of new construction or rehabilitation.
- 7.1 **Noise ordinance.** Continually enforce and periodically review the City’s Noise Ordinance for adequacy (including requiring construction activity to comply with established work schedule limits). Amend as needed to address community needs and development patterns.
- 7.2 **CEQA acoustical analysis.** Require an acoustical analysis to evaluate measures for noise generating projects that are likely to cause the following criteria to be exceeded or to cause a significant adverse community response:
- Cause the Ldn/CNEL at noise-sensitive uses to increase by 3 dBA or more and exceed the “normally acceptable” level.
 - Cause the Ldn/ CNEL at noise-sensitive uses to increase 5 dBA or more and remain “normally acceptable.”
- 7.7 **Site development review.** Utilize site design review to identify potential noise impacts on new development, especially from nearby transportation sources. Encourage the use of noise barriers (walls, berms, or landscaping), setbacks and/ or other buffers.
- 7.11 **Construction noise.** The City shall require that contractors use available noise suppression devices and techniques and limit construction hours near residential uses. Reasonable noise reduction measures shall be incorporated into the construction plan and implemented during all phases of construction activity to minimize the exposure of neighboring properties. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would:
- Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months.

For such large or complex projects, construction noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses. A typical construction noise logistics plan would include, but not be limited to, the following measures to reduce construction noise levels as low as practical:

- Limit construction activity to weekdays between 7:00 a.m. and 7:00 p.m. and Saturdays and holidays between 9:00 a.m. and 7:00 p.m., with no construction Sundays;⁶¹
- Utilize ‘quiet’ models of air compressors and other stationary noise sources where technology exists;
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;

⁶¹ Per Municipal Code Section 15.040125B(3) an exception to the permitted construction hours may be granted by Planning Commission.

- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent land uses;
- Locate staging areas and construction materials as far away as possible from adjacent land uses;
- Prohibit all unnecessary idling of internal combustion engines;
- If impact pile driving is proposed, multiple-pile drivers shall be considered to expedite construction. Although noise generated by multiple pile drivers would be higher than the noise generated by a single pile driver, the total duration of pile driving activities would be reduced;
- If impact pile driving is proposed, temporary noise control blanket barriers shall shroud pile drivers or be erected in a manner to shield the adjacent land uses. Such noise control blanket barriers can be rented and quickly erected;
- Designate a “disturbance coordinator” who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented; and
- Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction.

City of East Palo Alto Municipal Code

Chapter 8.52, Noise Control, in the City of East Palo Alto’s Municipal Code seeks to protect the citizens of East Palo Alto from unnecessary, excessive, and annoying noise, to maintain quiet in areas where noise levels are low, and to implement programs to reduce unacceptable noise. The regulations limit the amount of noise that may be created as measures at the exterior of any dwelling unit, school, hospital, church, or public library. Table 4.13-2 below provides the Municipal Code’s exterior noise standards. Additionally, Chapter 8.52 limits the creation of noise that results in excessive noise levels within any dwelling unit. Table 4.13-2 below provides the standards for interior noise in dwelling units. Exemptions to these standards are provided for special events and construction activities not taking place between 8:00 PM and 7:00 AM.

Table 4.13-2: Exterior Noise Level Standards			
Category	Cumulative Numbers of Minutes in Any 1- Hour Time Period	Noise Level Standards, dBA	
		Daytime (7:00 AM – 10:00 PM)	Nighttime (10:00 PM – 7:00 AM)
1	30	55	50
2	15	60	55
3	5	65	60
4	1	70	60
5	0	75	70

Sources: City of East Palo Alto Municipal Code. 2019.
Notes:

1. In the event the measured background noise level exceeds the applicable noise level standard in any category above, the applicable standard shall be adjusted in five dBA increments so as to encompass the background noise level.

2. Each of the noise level standards specified above shall be reduced by five dBA for simple tone noises, consisting primarily of speech or music, or for recurring or intermittent impulsive noises.
3. If the intruding noise source is continuous and cannot reasonably be stopped for a period of time whereby the background noise level can be measured, the noise level measured while the source is in operation shall be compared directly to the noise level standards in this table.

Table 4.13-3: Interior Noise Level Standards

Category	Cumulative Numbers of Minutes in Any 1- Hour Time Period	Noise Level Standards, dBA	
		Daytime (7:00 AM – 10:00 PM)	Nighttime (10:00 PM – 7:00 AM)
1	5	45	40
2	1	50	45
3	0	55	50

Sources: City of East Palo Alto Municipal Code. 2019.

Notes:

1. In the event the measured background noise level exceeds the applicable noise level standard in any category above, the applicable standard shall be adjusted in five dBA increments so as to encompass the background noise level.
2. Each of the noise level standards specified above shall be reduced by five dBA for simple tone noises, consisting primarily of speech or music, or for recurring or intermittent impulsive noises.
3. If the intruding noise source is continuous and cannot reasonably be stopped for a period of time whereby the background noise level can be measured, the noise level measured while the source is in operation shall be compared directly to the noise level standards in this table.

Section 15.04.125 of the City’s Municipal Code limits construction activity to the hours of 7:00 AM to 6:00 PM Monday through Friday and 9:00 AM to 5:00 PM on Saturdays. No construction activity is allowed on Sundays or national holidays.⁶²

4.13.1.3 Existing Conditions

The noise environment at the project site is currently dominated by vehicular traffic noise along nearby roadways, such as Bay Road and Pulgas Avenue, and noise generated by the industrial uses at the surrounding sites. Aircraft overflights associated with nearby airports (i.e., Palo Alto Airport, Moffett Federal Airfield, San Francisco International Airport, and Norman Y. Mineta San José International Airport) also contribute to the existing noise environment.

Due to the Shelter-In-Place restrictions implemented by the State of California at the time of preparing this Initial Study, traffic volumes and resulting noise levels along the surrounding roadways were substantially reduced and not representative of typical conditions. Therefore, noise data contained in the East Palo Alto General Plan, the East Palo Alto General Plan Update Draft EIR, and measurements from prior projects were reviewed to establish existing ambient noise levels in the project area. A summary of the noise levels from these prior studies is included in Table 4.13-4 below.

⁶² Per Municipal Code Section 15.040125B(3) an exception to the permitted construction hours may be granted by Planning Commission.

Table 4.13-4: Summary of Existing Noise Levels				
Noise Measurement Location	Date, Time	dBA CNEL	Daytime dBA L_{eq}	Nighttime dBA L_{eq}
General Plan Noise Element Noise Contour				
Approximate location of Project Site		55 to 60		
East Palo Alto General Plan Update Draft EIR – Noise Measurements				
LT-12, Jack Farrell Park (165 feet from centerline of Illinois Street, 340 feet east of centerline of Fordham Street)	4/23/2015 – 4/28/2015		50-61	44 to 60
Development Project – Noise Measurements				
LT-1, 15-feet from centerline of Bay Road at 2020 Bay Road	04/20/2017 – 04/24/2017	63 on weekdays 60-61 on weekends	50 to 70	42 to 57
LT-2, 40 feet north of the centerline of Bay Road and 125 feet west of the centerline of Pulgas Avenue	04/20/2017 – 04/24/2017	71 on weekdays 67 to 69 on weekends	59 to 73	51 to 68
LT-3, 30 feet from centerline of Pulgas Avenue at 530 Pulgas Avenue	04/05/2017 – 04/06/2017	66	61 to 68	49 to 60
Source: Illingworth & Rodkin, Inc. 2535 Pulgas Avenue Noise Report. February 18, 2021.				



NOISE MEASUREMENT LOCATIONS

FIGURE 4.13-1

4.13.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.13.2.1 Project Impacts

Impact NOI-1:	The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Less than Significant Impact with Mitigation Incorporated)
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Construction Noise

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

General Plan Safety and Noise Policy 7.11 states that a significant construction noise impact would occur if substantial noise-generating construction activity (such as building demolition, grading, excavation, pile driving, or use of impact equipment, or building framing) occurred within 500 feet of residential uses or 200 feet of commercial or office uses for more than 12 months.

Construction activities associated with the proposed project and on-site wastewater treatment facility option would occur between 7:00 a.m. and 3:30 p.m. on weekdays, consistent with the City’s allowed

construction hours.⁶³ The total construction period would be 15 months and would result in construction activities within approximately 300 feet of Ravenswood Family Health Center and approximately 380 feet of the nearest residences on Illinois Street. Therefore, project construction activities would result in a significant noise impact.

Impact NOI-1: Ground disturbance during construction of the proposed project and on-site wastewater treatment facility option would occur for more than 12 months and be located within 500 feet of residential uses, resulting in a significant noise impact.

Mitigation Measure: Consistent with General Plan Policy 7.11, the applicant shall implement the following standard noise control measures during project construction.

MM NOI-1.1: The following measures shall be implemented during construction.

- Limit construction activity to weekdays between 7:00 a.m. and 7:00 p.m. and Saturdays and holidays between 9:00 a.m. and 7:00 p.m., with no construction on Sundays;⁶⁴
- Utilize "quiet" models of air compressors and other stationary noise sources where such technology exists;
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent land uses;
- Locate staging areas and construction material areas as far away as possible from adjacent land uses;
- Prohibit all unnecessary idling of internal combustion engines;
- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem are implemented.
- Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction.

⁶³ As noted in Section 4.13.1, Environmental Setting, above, the General Plan allows for construction activities to occur on weekdays between 7:00 a.m. and 7:00 p.m. and Saturdays and holidays between 9:00 a.m. and 7:00 p.m., with no construction Sundays. The City's Municipal Code limits construction activity to the hours of 7:00 AM to 6:00 PM Monday through Friday and 9:00 AM to 5:00 PM on Saturdays. No construction activity is allowed on Sundays or national holidays.

⁶⁴ The project proposes construction within the City's permitted construction hours. Should extended construction hours be requested, an exception may be granted by Planning Commission per Municipal Code Section 15.040125B(3).

With implementation of mitigation measures MM NOI-1.1, temporary construction noise impacts from the proposed project and on-site wastewater treatment facility option would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Operational Noise

Office Building Mechanical Equipment Noise

Noise-sensitive uses in the project area include the Ravenswood Family Health Center and residences which are located approximately 300 feet south 380 feet west of the project site, respectfully. Since mechanical equipment could run during the daytime and nighttime hours, the exterior noise thresholds at the property line of these sensitive uses would be 55 dBA L_{50} between 7:00 a.m. and 10:00 p.m. and 50 dBA L_{50} between 10:00 p.m. and 7:00 a.m.

Commercial office buildings typically include various mechanical equipment such as air conditioners, exhaust fans, chillers, pumps, and air handling equipment. The most substantial noise-generating equipment would likely be large exhaust fans and building air conditioning units. The proposed project would include HVAC units, an emergency generator, and a solar panel system. The proposed solar panel system would be located on the rooftop of the proposed building. Noise levels generated by solar panel systems including transformers are generally low, approximately 64 dBA at a distance of three feet. Noise levels from commercial HVAC equipment typically range from 50 to 60 dBA L_{eq} at a distance of 50 feet. Operation of generators would result in noise levels ranging from 76 to 78 dBA at five feet. The rooftop mechanical penthouse where mechanical equipment would be located is approximately 350 feet from the property line of the nearest sensitive receptor. At this distance, and assuming there is no acoustical shielding from the mechanical penthouse screens, noise would be less than 50 dBA L_{eq} at the property line of the nearest sensitive receptor. Furthermore, assuming standard commercial construction materials were used at the Ravenswood Family Health Center, exterior noise levels from the proposed mechanical equipment would be attenuated to less than 40 dBA L_{eq} . For these reasons, operation of the proposed mechanical equipment would not exceed the City's exterior or interior noise thresholds at the nearest sensitive receptors. **(Less than Significant Impact)**

On-Site Wastewater Treatment Facility Option Mechanical Equipment Noise

The on-site wastewater treatment facility option would generate noise from operation of pumps, compressors, fans, electrical equipment, and likely odor control equipment. Major wastewater treatment facilities typically generate noise levels of 85 dBA L_{eq} at five feet. When wastewater treatment facilities are located within a building, the facades typically provide 20 dBA reduction in noise levels. Noise levels at the Ravenswood Family Health Center and the nearest residences would be 31 and 27 dBA L_{eq} , respectively, assuming the equipment would be housed indoors. Therefore, exterior noise levels at the nearby noise-sensitive receptors would be below 50 dBA L_{eq} , and interior noise levels at the nearest noise-sensitive receptors would be below 40 dBA L_{eq} . For these reasons, operation of the on-site wastewater treatment facility option would not result in a significant noise impact at the nearest noise-sensitive receptors. **(Less than Significant Impact)**

Outdoor Activity Noise

The proposed job training center includes an outdoor carpentry area and an outdoor play area. Both areas would be located to the west of the proposed building and would be surrounded by fences with heights of 10 feet and seven feet, respectively.

As discussed in Section 3.2, above, the carpentry class would include use of carpentry tools such as saws, hammers, jigsaws, etc. The classes would last approximately 11 weeks with approximately three to four weeks spent inside in a classroom and seven to eight weeks spent outside for hands-on training. The classes would occur between the hours of 8:30 a.m. and 3:15 p.m. Noise measurements from a previous study at a carpenters training center indicates that typical noise levels intermittently range from 55 to 65 dBA at a distance of approximately 75 feet with circular saws contributing the majority of this noise. At a distance of approximately 300 feet (the distance to the nearest sensitive receptor), noise levels would be 53 dBA or less.

The proposed outdoor play area would serve up to 24 kids during the daytime while job training classes are in session. While the noise levels would vary based on the occupancy at any given time, noise measurements from similar uses indicated that playground activity could generate hourly average noise levels up to 65 dBA L_{eq} at 50 feet. At approximately 300 feet (the distance to the nearest sensitive receptor), noise levels from the outdoor play area would be 49 dBA or less, which would meet the City's 55 dBA L_{50} threshold during daytime hours.

Based on the above calculations, it is estimated that operational noise from proposed outdoor carpentry and play areas would not generate noise levels exceeding City limits at the property line of the nearest sensitive receptors. **(Less than Significant Impact)**

Truck Delivery Noise

A loading zone is proposed at the northwest corner of the building, adjacent to the carpentry yard. Large truck deliveries would occur approximately three to four times per year. Based on the infrequent truck deliveries, and distance from the nearest sensitive receptors to the south and west, truck deliveries would not exceed City noise limits at the property line of the nearest sensitive receptors. **(Less than Significant Impact)**

Impact NOI-2: The project would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact with Mitigation Incorporated)**

Construction of the proposed project and on-site wastewater treatment plant option may generate vibration when heavy equipment or impact tools (e.g., hoe rams) are used in close proximity to existing buildings. Construction activities would include grading, foundation work, paving, and new building framing and finishing. Pile driving, which can cause excessive vibration, would not be required.

Policy 6.4 of the City's General Plan limits vibration levels to 0.08 in/sec PPV at sensitive historic structures and to 0.30 in/sec PPV at buildings of normal conventional construction to minimize the potential for cosmetic damage. As discussed in Section 4.8 Cultural Resources, there are no historic

resources located on or adjacent to the site. Therefore, groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in a significant vibration impact on the surrounding buildings.

Table 4.13-5 shows the estimated vibration levels at nearby structures resulting from operation of construction equipment at the project site.

Table 4.13-5: Vibration Source Levels for Construction Equipment						
Equipment		PPV at 25 feet (in/sec)	Industrial North (15 ft)	Industrial West (30 ft)	Industrial East (70 ft)	Health Center South (365 ft)
Clam shovel drop		0.202	0.354	0.165	0.065	0.011
Hydromill (slurry wall)	In soil	0.008	0.014	0.007	0.003	0.001
	In rock	0.017	0.030	0.014	0.005	0.001
Vibratory Roller		0.210	0.368	0.172	0.068	0.011
Hoe Ram		0.089	0.156	0.073	0.029	0.005
Large bulldozer		0.089	0.156	0.073	0.029	0.005
Caisson drilling		0.089	0.156	0.073	0.029	0.005
Loaded trucks		0.76	0.133	0.062	0.024	0.005
Jackhammer		0.035	0.061	0.029	0.011	0.002
Small bulldozer		0.003	0.005	0.002	0.001	0.000
<p>Bold = vibration exceeding threshold source: United States Department of Transportation, Office of Planning and Environment. <i>Transit Noise and Vibration Impact Assessment Manual</i>. September 2018; Illingworth & Rodkin, Inc. 2535 Pulgas Avenue, <i>Noise and Vibration Assessment</i>. February 17, 2021.</p>						

As shown in Table 4.13-5, operation of heavy equipment during construction would produce vibration levels up to 0.368 in/sec PPV at the nearest structures (existing industrial building to the north of the project site), potentially resulting in cosmetic damage to the structure. While vibration levels at other structures within 200 feet of the proposed project could be perceptible, use of administrative controls, such as notifying neighbors of scheduled construction activities and scheduling construction activities with the highest potential to produce perceptible vibration during hours with the least potential to affect nearby businesses, perceptible vibration can be kept to a minimum.

Impact NOI-2: Construction-related vibration levels at the existing industrial buildings to the north of the project site would be up to 0.368 in/sec PPV, which would exceed the 0.3 in/sec PPV threshold. **(Significant Impact)**

Mitigation Measure: The following measure shall be implemented during construction of the proposed project and on-site wastewater treatment facility.

NOI-2.1: The proposed project shall incorporate the following measures from the Ravenswood/4 Corners TOD Specific Plan EIR during project construction:

- Avoid using vibratory rollers and tampers near sensitive areas.

With implementation of MM NOI-2.1, impacts related to groundborne vibration at adjacent structures would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impact NOI-3: The project would be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not expose people residing or working in the project area to excessive noise levels. **(Less than Significant Impact)**

The Palo Alto Airport is located approximately one mile south of the project site and there are no private airstrips in the project area. The project site lies within the 55 dBA CNEL noise contour specified in the Palo Alto Airport CLUP. According to Table 4-1 of the Palo Alto Airport CLUP, office buildings located within the 55 dBA CNEL noise contour would be considered generally acceptable.⁶⁵ Further, standard construction materials would achieve a 25 to 30 dBA exterior-to-interior noise reduction with the windows closed. The project and on-site wastewater treatment facility option would not expose people residing or working in the project area to excessive noise levels. **(Less than Significant Impact)**

4.13.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (*BIA v. BAAQMD*), effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of East Palo Alto has policies that address existing noise conditions affecting a proposed project.

Table 10-1 of the City of East Palo Alto General Plan establishes exterior and interior noise thresholds for non-residential uses. The noise thresholds for the proposed office building would be 65 dBA CNEL for exterior noise and 45 dBA $L_{eq(12)}$ for interior noise levels. The City's General Plan does not include thresholds for exterior noise levels at common outdoor use areas of office buildings, such as the proposed carpentry and play areas. Additionally, the 2019 Cal Green Code requires interior noise levels for nonresidential uses to be maintained at or below 50 dBA $L_{eq(1-hr)}$.

Future Exterior Noise

As discussed above, future noise levels at the project site would continue to result primarily from vehicular traffic along nearby roadways such as Bay Road and Pulgas Avenue, and from operation of surrounding industrial uses. Aircraft overflight associated with nearby airports would also continue to affect the noise levels at the project site, however to a lesser extent.

⁶⁵ County of Santa Clara. *Comprehensive Land Use Plan Santa Clara County, Palo Alto Airport*. November 16, 2016. Accessed February 19, 2021.

https://www.sccgov.org/sites/dpd/DocsForms/Documents/ALUC_PAO_CLUP.pdf

Based on projected future noise levels resulting from the proposed project and existing and planned development, exterior noise levels at the proposed outdoor play area would be below 60 dBA CNEL, assuming no attenuation from the proposed seven-foot-tall privacy fence. As mentioned previously, the City does not have an exterior noise level threshold for office buildings because these spaces are not normally areas of frequent human use that would benefit from a lower noise level; therefore, the outdoor activity areas proposed by the project would be compatible with the future noise environment.

Future Interior Noise

The eastern building façade adjacent to Pulgas Avenue would be approximately 30 feet from the centerline of the roadway. Based on the long-term noise measurements taken near the intersection of Pulgas Avenue and Bay Road, noise levels at the eastern building façade would be 64 dBA $L_{eq(1-hr)}$ during the daytime hours. Assuming standard construction materials for commercial uses and inclusion of adequate forced-air mechanical ventilation systems, interior noise levels at the proposed project would be 25 to 30 dBA less than exterior noise levels (depending on if windows are open or closed). Therefore, interior noise levels would not exceed the threshold of 50 dBA $L_{eq(1-hr)}$ for general office uses and 45 dBA $L_{eq(12)}$ for private offices.

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.⁶⁶ The City of East Palo Alto Housing Element and related land use policies were last updated on May 5, 2015.

Regional and Local

Plan Bay Area 2040

Plan Bay Area 2040 is a long-range transportation, land-use, and housing plan intended support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area 2040 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).⁶⁷

ABAG allocates regional housing needs to each city and county within the nine-county San Francisco Bay Area, based on statewide goals. ABAG also develops forecasts for population, households, and economic activity in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Regional Forecast of Jobs, Population, and Housing, which is an integrated land use and transportation plan through the year 2040 (upon which Plan Bay Area 2040 is based).

Vista 2035 East Palo Alto General Plan

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating population and housing impacts resulting from planned development within the City, including the following:

⁶⁶ California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed January 3, 2020. <http://hcd.ca.gov/community-development/housing-element/index.shtml>.

⁶⁷ Association of Bay Area Governments and Metropolitan Transportation Commission. "Project Mapper." <http://projectmapper.planbayarea.org/>.

Policy	Land Use and Urban Design
2.1	Jobs housing balance. Strive for a balanced land use pattern that has a one-to-one ratio of jobs per employed residents.
Policy	Health and Equity
11.2	Displacement. Establish goals for preventing displacement of existing long-time residents and businesses. If feasible, track displacement.
Policy	Economic Development
2.1	Job growth. Promote the establishment, retention and expansion of businesses that provide employment for East Palo Alto’s residents.

4.14.1.2 Existing Conditions

In 2020, the City of East Palo Alto had an approximate population of 28,155.⁶⁸ The ABAG Plan Bay Area Projections 2040 estimates that by 2040, the City’s projected population would be 36,090 residents in 8,675 households.⁶⁹ ABAG is projecting that jobs in the City will increase from approximately 5,810 in 2020 to 6,660 in 2040.⁷⁰

The existing industrial use at the project site is estimated to support approximately 10 jobs.⁷¹

4.14.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

⁶⁸ California Department of Finance. *E-1 Population Estimates for Cities, Counties, and the State – January 1, 2011 and 2020*. April 2020.

⁶⁹ Association of Bay Area Governments. "Plan Bay Area Projections 2040." Accessed December 1, 2020. Available at: <http://projections.planbayarea.org/data>

⁷⁰ Ibid.

⁷¹ Brooks, Lorenzo. Director, Real Estate Development. Personal Communication. January 21, 2021.

Impact POP-1: The project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). **(Less than Significant Impact)**

The proposed project and on-site wastewater treatment facility option would demolish the existing industrial buildings on-site and construct a new 110,000-square-foot office building. Approximately half of the proposed office building would be occupied by JobTrain, a job training organization currently located in Menlo Park. The remaining half of the office building would be leased to commercial tenants as office space. No housing units are proposed by the project or on-site wastewater treatment facility option. Existing job training services would be transferred to the project site from the Menlo Park location. The proposed project and on-site wastewater treatment facility are not anticipated to generate additional jobs beyond those which currently exist in the Menlo Park JobTrain facility. Existing employees at the Menlo Park JobTrain facility are expected to fill these positions, and no population growth is anticipated as a result of the JobTrain component of this project. The remaining office space will be leased to commercial tenants which could result in job and population growth within the City. Based on standard employment ratios established in the Institute of Transportation Engineer's manual, the 110,000-square-foot office space would generate approximately 440 employees.⁷² Therefore, the proposed project would result in a net increase of approximately 430 jobs on the project site.⁷³

For these reasons, the proposed project and on-site wastewater treatment facility option would not directly or indirectly induce substantial unplanned population growth. **(Less than Significant Impact)**

Impact POP-2: The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

Existing development at the project site includes industrial buildings, approximately six accessory structures (e.g., sheds), and paved storage areas. There are no residential uses on the project site. Therefore, demolition of the existing industrial uses on the site and construction of a new 110,000-square-foot office building and optional on-site wastewater treatment facility would not displace existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

⁷² Four employees/ 1,000 square feet of office space assumed. Source: Hexagon Transportation Consultants. *2519 and 2535 Pulgas Avenue Office Development*. December 6, 2019.

⁷³ 8 to 10 existing jobs - 440 new jobs = 430 to 432 jobs

4.15 PUBLIC SERVICES
4.15.1 Environmental Setting
4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property)" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Regional and Local

Countywide Trails Master Plan

The Santa Clara County Trails Master Plan Update is a regional trails plan approved by the Santa Clara County Board of Supervisors. It provides a framework for implementing the County's vision of providing a contiguous trail network that connects cities to one another, cities to the county's regional open space resources, County parks to other County parks, and the northern and southern urbanized regions of the County. The plan identifies regional trail routes, sub-regional trail routes, connector trail routes, and historic trails.

Vista 2035 East Palo Alto General Plan

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating impacts to public services resulting from planned development within the City, including the following:

Policy	Transportation
1.5	Coordination with public safety. Ensure that the Menlo Park Fire Protection District (MPFPD) and the City’s Police Department review construction plans for roadway modifications, internal circulation, and establish, if needed, temporary alternative emergency routes to be used the duration of any construction project. During design review, ensure that roads and driveways are established that meet applicable code requirements for emergency access, including potentially including signal preemption mechanisms. Ensure that the MPFPD reviews related building plans for compliance with the Fire Code and establishes a future inspection schedule for continued compliance. Continue the existing practice of informing the MPFPD and the Police Department of projects and proactively engaging with the MPFPD and the Police Department through the Development Review Committee (DRC) and the plan check process.

Policy	Infrastructure, Services, and Facilities
7.10	Libraries. Coordinate with San Mateo County to provide library services for the community, aiming to provide approximately 750 square feet of equipped and staffed library space per 1,000 residents.
10.3	Fire and emergency services. Continue to coordinate with Menlo Park Fire Protection District (MPFPD) to ensure excellent fire and emergency services.
10.4	Excellent police service. Strive to continuously improve the performance and efficiency of the East Palo Alto Police Department.

Policy	Parks, Open Space, and Conservation
1.1	New parks and open space. Maintain a park standard of 3 acres per 1,000 residents. Undertake a program to add 79 acres of new formalized park spaces, prioritizing the areas of the City currently underserved by parks (Weeks, Kavanaugh, Willow, and Woodland).

Ravenswood/ 4 Corners Transit Oriented Development Specific Plan

Various policies in the Ravenswood Specific Plan have been adopted for the purpose of avoiding or mitigating impacts to public services resulting from planned development within the Plan Area including the following:

Policy	Land Use and Community Character
1.4	Ensure that community facilities such as open space, parks, trails, an expanded library, space for nonprofits, and a community center are provided as new development comes to the Plan Area.
8.3	Ensure that the Menlo Park Fire Protection District (MPFPD) reviews construction plans for roadway modifications, internal circulation, and establish, if needed, temporary alternative emergency routes to be used for the duration of the construction project. During design review, ensure that roads and driveways are established that meet all applicable code requirements for emergency access, including signal preemption mechanisms as discussed in Policy UTIL-1.4. Also, ensure that MPFPD reviews building plans for compliance with the Fire Code and establishes a future inspection schedule for continued compliance. Continue the existing practice of informing the MPFPD of projects and proactively engaging with the MPFPD through the Development Review Committee (DRC) and the plan check process.

4.15.1.2 Existing Conditions

Fire Protection Services

The Menlo Park Fire District (MPFD) provides fire protection and emergency medical services to the City of East Palo Alto as well as the City of Menlo Park and the Town of Atherton.⁷⁴ The MPFD responds to approximately 8,500 emergencies a year with approximately 60 percent of the emergencies being emergency medical incidents.⁷⁵ Additionally, the MPFD is part of the greater San Mateo County boundary drop plan whereby the closest apparatus responds to each emergency services call.

The MPFD has seven stations that are strategically placed to provide the most efficient response times. The closest MPFD station to the project site is Station 2, which is located at 2290 University Avenue approximately 0.8-miles southwest of the site. Station 2 was recently rebuilt with a new fire station approximately three times the size of the original Station 2.⁷⁶

Police Protection Services

The East Palo Alto Police Department (EPAPD) provides police services in the City of East Palo Alto.⁷⁷ The EPAPD patrols four beats in the City. EPAPD headquarters are located at 141 Demeter Street, approximately 0.4-miles northwest of the project site.

Schools

The project site is located within the Ravenswood City Elementary School District and the Sequoia Union High School District.⁷⁸ The Ravenswood City Elementary School District operates five K-8 schools and one middle school.⁷⁹ The closest elementary school to the project site is Costano Elementary School, located at 2695 Fordham Street, approximately 0.28-mile northwest of the project site. Cesar Chavez Ravenswood Middle School is the nearest middle school to the project site, located at 2450 Ralmar Avenue, approximately 0.5-mile west of the project site. The Sequoia Union High School District operates seven high schools and one adult school.⁸⁰ The closest high school to the site is the East Palo Alto Academy, located approximately 0.75-mile southwest of the project site at 1050 Myrtle Street.

⁷⁴ Menlo Park Fire District. "About the Fire District." Accessed January 7, 2021. Available at: <https://www.menlofire.org/about-the-fire-district>.

⁷⁵ Ibid.

⁷⁶ San Jose Mercury News. "Menlo Park: Fire district on track to replace seven stations in 10 years." Accessed December 18, 2020. Available at: <https://www.mercurynews.com/2016/03/16/menlo-park-fire-district-on-track-to-replace-seven-stations-in-10-years/>.

⁷⁷ City of East Palo Alto. "Police Department." Accessed January 7, 2020. Available at <https://www.ci.east-palo-alto.ca.us/police>.

⁷⁸ Great Schools. "School and District Boundaries Map." Accessed January 3, 2020. Available at:

⁷⁹ Ravenswood Elementary School District. "Schools." Accessed January 3, 2020. Available at: <http://www.ravenswoodschools.org/Schools/index.html>.

⁸⁰ Sequoia Union High School District. "Schools." Accessed January 3, 2019. Available at: <https://www.seq.org/SCHOOLS/index.html>

Parks

The City of East Palo Alto owns and maintains eight parks and contains 225 acres of the Don Edwards San Francisco Bay National Wildlife Refuge.⁸¹ Jack Farrell Park, the nearest park to the project site, is located approximately 690 feet west and features a baseball/softball field, grass areas, play structure, picnic tables, and bathrooms.

Libraries

East Palo Alto Library is part of the San Mateo County Libraries system.⁸² East Palo Alto Library is located approximately 0.4-mile west of the site on 2415 University Avenue. Library features include book rentals, computer services, wireless internet, and access to 3D printers.

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<p>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</p>				
1) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.15.3 Thresholds of Significance

Unlike utility services, public services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resources base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery can be provided by a city, county, service, or other special district. Usually, new development will create an incremental increase in the demand for these services. The amount of the demand will vary widely, depending on both the nature of the development (residential vs. industrial, for instance) and the type of services, as well as on the specific characteristics of the development (such as senior housing vs. family housing). The impact of a particular project on public services and facilities is generally a fiscal impact. By increasing the demand for a type of service, a project could cause an eventual increase in the cost of providing the service (more personnel hours to patrol an area, additional fire equipment needed to service a tall

⁸¹ City of East Palo Alto. "City Parks." Accessed January 7, 2021. Available at: <https://www.cityofepa.org/parksrec>.

⁸² San Mateo County Libraries. "East Palo Alto." Accessed January 7, 2021. Available at: <https://smcl.org/locations/1E/>

building, etc.). CEQA requires analysis of fiscal impacts to the extent that increased demand triggers the need for a new facility (such as a school or fire station), since the new facility would have physical effects on the environment.

Impact PS-1: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services. **(Less than Significant Impact)**

The project proposes the construction of a new office building, surface parking, associated site improvements and landscaping on the project site and is considering construction of an optional on-site wastewater treatment facility. Implementation of the proposed project and optional on-site wastewater treatment facility would intensify the use of the project site and increase the demand for fire protection services compared to existing conditions. The Ravenswood Specific Plan EIR concluded that new growth in the Plan Area, including the proposed project, would increase the demand for fire protection and emergency services in East Palo Alto such that new fire protection facilities, personnel, and equipment would be needed, and response times could be reduced. At the time that the Specific Plan EIR was written, the planned rebuild of MPFPD's Fire Station 2 (the fire station serving the project site) had not yet been implemented. The recently rebuilt Fire Station 2 has increased capacity to serve the project area, including the project site. Additionally, the proposed project and on-site wastewater treatment facility option would be constructed in conformance with current California Fire Code standards (adopted by the City as indicated in Chapter 15.58 of the City's Municipal Code) under the review and direction of the MPFPD. For those reasons, development of the project and on-site wastewater treatment facility option would not result in a significant impact to fire protection services. **(Less than Significant Impact)**

Impact PS-2: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services. **(Less than Significant Impact)**

Implementation of the proposed project and on-site wastewater treatment facility would intensify the use of the project site and increase the demand for police protection services compared to existing conditions. As discussed in the General Plan EIR, EPAPD does not have immediate needs to expand existing or construct new police protection facilities. The construction plans for the proposed project and on-site wastewater treatment facility option would be reviewed by the EPAPD to address potential public safety concerns and the project would be required to be maintained in accordance with applicable City policies to promote public and property safety (Economic Development Policy 3.1 and Policy 3.3, and Transportation Policy 1.5). The project and on-site wastewater treatment facility option are consistent with the General Plan and Ravenswood Specific Plan growth assumptions, therefore, consistent with the General Plan EIR. Development of the project and on-site

wastewater treatment facility would not result in a significant impact to police protection services. **(Less than Significant Impact)**

Impact PS-3: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools. **(No Impact)**

Unlike residential development, the proposed office building and optional on-site wastewater treatment facility would not generate students and increase demand on public schools in the project area. Project implementation, therefore, would not impact existing school services or result in the need for new or physically altered schools in the project area. **(No Impact)**

Impact PS-4: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. **(Less than Significant Impact)**

Unlike residential development, the proposed office building and on-site wastewater treatment facility option would not create demand for more parks within the City. While employees of the proposed project may use nearby parks such as the Bay Trail, Cooley Landing, or Jack Farrell Park, usage of these facilities by future employees would not be substantial and require the construction of new parks. Therefore, the proposed project and on-site wastewater would not result in the need for new or physically altered parks in the project area. **(Less than Significant Impact)**

Impact PS-5: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities. **(Less than Significant Impact)**

Unlike residential development, the proposed office building and on-site wastewater treatment facility option would not increase the number of residents in the area. Therefore, the proposed project and on-site wastewater treatment facility option would not increase demand on other City public services and facilities such as libraries. **(Less than Significant Impact)**

4.16 RECREATION
4.16.1 Environmental Setting
4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Regional

Bay Trail Plan

The Association of Bay Area Governments’ Bay Trail Plan proposes development of a continuous regional hiking and bicycling trail around the perimeter of the San Francisco and San Pablo Bays.⁸³ Within the Ravenswood Specific Plan Area, there are two gaps in the Bay Trail: an unimproved section between Weeks Street and Bay Road and a planned section between University Avenue and the northern boundary of the Ravenswood Open Space Preserve.

Vista 2035 East Palo Alto General Plan

Various policies in the City’s General Plan have been adopted for the purpose of avoiding mitigating recreation impacts resulting from planned development within the City, including the following:

Policy	Parks, Open Space, and Conservation
1.1	New parks and open space. Maintain a park standard of 3 acres per 1,000 residents. Undertake a program to add 79 acres of new formalized park spaces, prioritizing the areas of the City currently underserved by parks (Weeks, Kavanaugh, Willow, and Woodland).

Ravenswood/ 4 Corners Transit Oriented Development Specific Plan

Various policies in the Ravenswood Specific Plan have been adopted for the purpose of avoiding or mitigating recreation impacts resulting from planned development within the Plan Area including the following:

⁸³ San Francisco Bay Trail. Bay Trail Plan. Accessed January 6, 2020. Available at: https://baytrail.org/wp-content/uploads/2015/12/San-Francisco-Bay-Trail_-Bay-Trail-Plan-Summary.pdf.

Policy	Land Use and Community Character
1.4	Ensure that community facilities such as open space, parks, trails, an expanded library, space for nonprofits, and a community center are provided as new development comes to the Plan Area.

4.16.1.2 Existing Conditions

As previously stated, the City of East Palo Alto owns and maintains eight parks and contains 225 acres of the Don Edwards San Francisco Bay National Wildlife Refuge.⁸⁴ The park closest to the project site is approximately 690 feet west of the project site. Jack Farrell Park features a baseball/softball field, grass areas, play structure, picnic tables, and bathrooms.

4.16.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact REC-1: The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. **(Less than Significant Impact)**

Impact REC-2: The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **(Less than Significant Impact)**

The proposed office building and on-site wastewater treatment facility option does not include recreational facilities. Employees may use the Bay Trail, Cooley Landing, or Jack Farrell Park during their lunch hour or breaks; however, usage of these facilities by future employees would not be substantial and is not anticipated to result in the deterioration of these facilities. For these reasons, the proposed project and on-site wastewater treatment facility option would not require the construction or expansion of recreational facilities resulting in an adverse physical effect on the environment. **(Less than Significant Impact)**

⁸⁴ City of East Palo Alto. "City Parks." Accessed January 7, 2021. Available at: <https://www.cityofepa.org/parksrec>.

4.17 TRANSPORTATION

The following discussion is based, in part, on a Transportation Impact Analysis prepared by Hexagon Transportation Consultants on December 6, 2019 and a supplemental Transportation Impact Analysis Memorandum prepared by Hexagon on June 2, 2021. These reports are attached as Appendix G to this Initial Study.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including San Mateo County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2040.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle-miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires the replacement of automobile delay—described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion—with VMT as the recommended metric for determining the significance of transportation impacts. The Governor’s Office of Planning and Research (OPR) approved the CEQA Guidelines implementing SB 743 on December 28, 2018. Local jurisdictions are required to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project’s VMT may be significant. Notably, projects located within 0.50 mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Regional and Local

Congestion Management Program

The City/ County Association of Governments of San Mateo County (C/CAG) oversees the area’s Congestion Management Program (CMP), which identifies strategies to respond to future transportation needs, development procedures to alleviate and control congestion, and promotes countywide solutions to congestion issues. State legislation requires that urbanized counties in California prepare a CMP in order to alleviate and control congestion and promotes countywide

solutions to congestion issues. State legislation requires that urbanized counties in California prepare a CMP in order to obtain their share of increased gas tax revenues. The legislation requires that each CMP contain the following elements: 1) a system definition and traffic level of service standard element; 2) a transit service and standard element; 3) a trip reduction and transportation demand management element; 4) a land use impact analysis program element; and 5) a capital improvement element. CCAG is currently in the process of updating the County TDM program.

Vista 2035 East Palo Alto General Plan

Various policies in the City’s General Plan have been adopted for the purpose of avoiding or mitigating transportation/traffic impacts resulting from planned development within the City, including the following:

Policy	Transportation
3.3	Pedestrian network. Create a safe, comfortable, and convenient pedestrian network that focuses on a) safe travel; b) improving connections between neighborhoods and commercial areas, and across existing barriers; c) providing places to sit or gather, pedestrian-scaled street lighting, and buffers from moving vehicle traffic; and d) includes amenities that attract people of all ages and abilities.
4.6	Bicycle parking standards. Require large public and private development projects to provide sufficient bicycle parking, shower, and locker facilities.
6.2	Parking requirements. Maintain efficient parking standards that consider the effect on demand due to various contextual conditions such as parking prices, transportation demand management strategies, transit accessibility, walkability, and bike ability. Study establishing a density bonus program for developments that utilize mechanized parking lifts.
7.1	Automobile Level of Service Standards. Improve the East Palo Alto circulation system roadways in concert with land development to maintain adequate LOS for automobile travel. Automobile LOS performance can be measured using a volume-to-capacity (V/C) ratio. V/C ratios are calculated based on existing or future average daily traffic (ADT) volumes and daily capacity values for various types of roadways. A level of service scale is used to evaluate roadway performance based on V/C ratios. These levels range from “A” to “F”, with LOS A representing free flow conditions and LOS F representing severe traffic congestion. Descriptions of traffic flow for the different levels of service are provided in Table 6-4 Standards for Roadway Level of Service. The performance criteria for evaluating volumes and capacities of the East Palo Alto roadway system is LOS D. At a signalized intersection, an impact is considered significant if it causes operations to degrade from LOS D or better to LOS E or F; or exacerbates LOS E or F conditions by increasing critical delay by >4 seconds and increasing volume to capacity ration (V/C ratio) by 0.01; or increases the V/C ratio by >0.01 at an intersection that exhibits unacceptable operations, even if the calculated LOS is acceptable. At an un-signalized intersection, an impact is considered significant if it: causes operations to degrade from LOS D or better to LOS E or F; or exacerbates LOS E or F conditions by increasing control delay; or causes volumes under project conditions to exceed the Caltrans Peak Hour Volume Warrant Criteria. Where the City determines that proposed development projects will cause LOS standards to be exceeded, appropriate mitigation will be required to improve roadways to meet LOS standards.

- 7.3 Multimodal transportation impact fee. Adopt a transportation impact fee for new development that raises funds for improving all modes of transportation.
- 8.1 Transportation Demand Management (TDM). Promote effective TDM programs to reduce travel demand from existing and new development, shifting trips to alternative modes. Regularly update the TDM ordinance to establish effective requirements that reduce travel demand from existing and new development. Require projects to implement TDM programs, as defined in the TDM ordinance.

Policy Safety and Noise

- 4.4 Transportation safety. Minimize transportation accidents by considering pedestrian safety in all land use decisions and working closely with CHP, Caltrans, SamTrans, and other relevant agencies to identify safety problems and implement corrective measures.
-

Ravenswood/ 4 Corners Transit Oriented Development Specific Plan

Various policies in the Ravenswood Specific Plan have been adopted for the purpose of avoiding or mitigating transportation/traffic impacts resulting from planned development within the Plan Area including the following:

Policy Transportation and Traffic

- 1.2 Implement the Specific Plan’s proposed network of off-street pedestrian paths, which can help promote walking by providing more direct pedestrian connections between sites and buildings than could be offered by the street system. In addition, encourage developers to follow the Specific Plan’s guidelines regarding pedestrian connections between sidewalks and building entrances.
 - 1.4 Implement the General Plan’s proposed network of on-street bicycle lanes, off-street bicycle paths, and signed on-street bicycle routes.
 - 2.5 The City shall prepare a traffic “nexus study” that identifies necessary intersection and vehicular transportation improvements as identified in Chapter Eight of this Specific Plan under “Vehicular Improvements” section. The study will identify appropriate financing mechanisms for improvements and a fair share developer fee for future development in the Specific Plan Area.
 - 5.2 Provide on-street parking based on the Streetscape Standards contained in this Specific Plan.
-

City of East Palo Alto Municipal Code

The City of East Palo Alto Municipal Code Chapter 10.32, Transportation System Management (TSM) Plan, was adopted with the following purposes:

- To reduce peak hour traffic congestion in the city, county, and surrounding region by reducing the number of vehicular trips and vehicular miles travelled related to work travel;
- To reduce vehicular emissions, energy usage, and ambient noise levels as a result of fewer vehicle trips, fewer vehicle miles travelled, and reduced traffic congestion;

- To achieve, as an initial goal, a twenty-five (25) percent participation rate by employees who work in the County in alternatives to single-occupancy vehicle commuting during weekday peak hours. The county will periodically reevaluate this goal in conjunction with the countywide TSM program and will revise it upward when warranted by traffic conditions and demonstrated results of the TSM program.

This chapter of the Municipal Code outlines requirements for TSM programs based on the number of employees, with thresholds for employer program requirements at 25 and 100 employees (refer to Municipal Code section 10.32.040, Trip Reduction Program).

On June 1, 2021, City Council adopted a resolution to repeal the existing Chapter 10.32 of the East Palo Alto Municipal Code and enact a new Chapter 10.32 establishing a transportation demand management (TDM) ordinance. The new TDM ordinance requires non-residential development approved after January 1, 2022, to achieve a 40 percent reduction in daily vehicle trips and existing developments with 100 or more employees to submit TDM plans that demonstrate how the worksite will achieve a 40 percent reduction in average daily trips. The proposed project would be subject to the new TDM ordinance if approved after January 1, 2021.

City of East Palo Alto Bike Master Plan

The East Palo Alto Bicycle Transportation Plan, adopted in 2011, was created to reflect the goals and policies of the 1999 General Plan and Bay Access Master Plan and improve the overall community health through improved air-quality and by helping people stay physically fit. The plan embraces a reduction in greenhouse gas emissions and advocated for connectivity of schools with residential areas, shoppers with businesses, and commuters to employment centers.

4.17.1.2 Existing Roadway Network

Regional Access

Regional access to the project site is provided by US 101 and Bayfront Expressway (SR 84), as described below.

US 101 is a north-south freeway in the vicinity of the project site. US 101 extends northward through San Francisco and southward through San Jose. Within East Palo Alto, US 101 has three general-purpose travel lanes, one high-occupancy vehicle (HOV) lane, and one auxiliary lane in each direction. Access to and from the project study area is provided via full-access interchanges at Embarcadero Road and University Avenue.

Bayfront Expressway (SR 84) is a six-lane expressway that extends along the northern edge of East Palo Alto. SR 84 extends across the Dumbarton Bridge into Alameda County and westward through San Mateo County. Bayfront Expressway provides access to the project study area via University Avenue.

Local Roadway Access

Local access to the project site is provided via University Avenue, Embarcadero Road, East Bayshore Road, Willow Road, Bay Road, Clarke Avenue, Pulgas Avenue, Donohoe Street, and Demeter Street. These facilities are described below.

University Avenue (SR 109) is a north-south arterial that extends from Stanford University in Palo Alto to Bayfront Expressway just north of the City of East Palo Alto. Within East Palo Alto, University Avenue is a four-lane divided roadway with no on-street parking. South of Bay Road, University Avenue has continuous sidewalks on both sides of the street. Between Bay Road and Purdue Avenue, University Avenue has a sidewalk on only one side of the street. The posted speed limit on University Avenue is 25 mph.

Embarcadero Road is a four-lane east-west arterial street. Embarcadero Road extends from El Camino Real in the west to the Baylands Nature Reserve in the east. With the exception of the Embarcadero Road overpass at US 101, where sidewalks are present on only the north side of the street, Embarcadero Road has continuous sidewalks on both sides of the street with no on-street parking. The posted speed limit on Embarcadero Road is 25 mph.

East Bayshore Road is a two-lane north-south frontage road with two disjointed segments directly east of US 101. East Bayshore Road extend southward from Saratoga Avenue near Willow Road to Euclid Avenue, where it becomes Donohoe Street. East of University Avenue, East Bayshore Road extends southward from Donohoe Street to San Antonio Road where it becomes Bayshore Parkway in Palo Alto. East Bayshore Road has on-street parking on the east side of the street between Clarke Avenue and Pulgas Avenue. East of Donohoe Street, East Bayshore Road is 25 mph.

Willow Road (SR 114) is a four-lane north-south divided arterial that serves as a border between Menlo Park and East Palo Alto in some sections, while the majority of the roadway is within the city limits of Menlo Park. Willow Road extends from Alma Street in the south to Bayfront Expressway in the north.

Bay Road is a four-lane east-west collector street within the project vicinity beginning at East Bayshore Road continuing to Pulgas Avenue. From Pulgas Avenue, Bay Road is a two-lane road that terminates at Cooley Landing and the San Francisco Bay. Bay Road has continuous sidewalks with on-street parking on both sides of the street west of Pulgas Avenue. However, east of Pulgas Avenue, Bay Road has no sidewalks. The posted speed limit on Bay Road is 25 mph.

Clarke Avenue is a two-lane north-south local collector street within the vicinity of the site extending from East Bayshore Road in the south to Bay Road to the north, where it becomes Illinois Street. Clarke Avenue has continuous sidewalks with on-street parking on both sides of the street. The posted speed limit on Clarke Avenue is 25 mph.

Pulgas Avenue is a two-lane north-south collector street directly adjacent to the eastern boundary of the project site with on-street parking on both sides of the street. Pulgas Avenue extends from East Bayshore Road in the south to just north of Bay Road. Near the project site, a short sidewalk (about 200 feet long) is available only on the west side of Pulgas Avenue. Sidewalks are provided on both

sides of Pulgas Avenue south of Bay Road. The posted speed limit on Pulgas Avenue is 25 mph. Pulgas Avenue provides direct access to the project site via one full access gated driveway.

Donohoe Street is an east-west street that extends from East Bayshore Road in the west to Clarke Avenue in the east. Its classification varies from a local street to a major thoroughfare, while the cross section varies from a two-lane street with on-street parking to a divided six lane street. Donohoe Street has continuous sidewalks on both sides of the street east of University Avenue. Donohoe Street has a prima facia speed limit of 25 mph.

Demeter Street is a two-lane north-south local street within the vicinity of the site. Demeter Street has continuous sidewalks with on-street parking on both sides of the street. Demeter Street extends from Bay Road in the south to its terminus near Purdue Avenue. Demeter Street has a prima facia speed limit of 25 mph.

Figure 4.17-1 shows the location of the project site and study intersections.



LEGEND

- = Site Location
- X = Study Intersection

Source: Hexagon Transportation Consultants, Inc., December 6, 2019.

PROJECT SITE AND STUDY INTERSECTIONS FIGURE 4.17-1

Planned Future Improvements

The Ravenswood Specific Plan identified construction of a loop road as a planned transportation improvement. The loop road would extend northward from the current northerly terminus of Demeter Street and then turn westward to connect to University Avenue. Creating this new connection is expected to help alleviate traffic congestion on Bay Road and at the Bay Road/ University Avenue intersection by diverting some existing traffic. Because it is uncertain when the planned loop road would be constructed, unsignalized intersection LOS analyses were completed both with and without the planned loop road.

Existing Bicycle, Pedestrian, and Transit Facilities

Bicycle Facilities

Bicycle facilities in the project vicinity consist of Class I bike paths and Class II bike lanes. Class II bike lanes exist on Bay Road from Newbridge Street to Clarke Avenue, and on University Avenue starting just north of Donohoe Street and extending to the location of the future loop road. Between the future loop road and Bay Front Expressway, there is a bike lane on the west (southbound) side of University Avenue and a separate bikeway on the east side of University Avenue. Additionally, the Bay Trail, a Class I bike and pedestrian path, runs along the west boundary of the Baylands Nature Preserve area, which is about one quarter mile east of the project site. The Bay Trail connects to several local neighborhood street, including Week Street and Runnymede Street (see Figure 3). There is also a short paved mixed-use trail known as the Rail Spur that extends from Bay Road to Pulgas Avenue. These bicycle facilities are not well-connected. No bicycle lanes are provided on the other local and neighborhood street in the vicinity of the project site. However, due to low traffic volumes, many of the residential streets south of the project site are conducive to bicycle traffic. The locations of existing bicycle facilities are shown in Figure 4.17-2 below.

Pedestrian Facilities

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. In the vicinity of the project site, sidewalks are provided on both sides of Bay Road west of Pulgas Avenue. Between Pulgas Avenue and Tara Street, there are no sidewalks. A short sidewalk (approximately 400 feet long) is provided on the south side of Bay Road east of Tara Street. Sidewalks are provided on both sides of Pulgas Avenue south of Bay Road. North of Bay Road, a short sidewalk (about 200 feet long) is available only on the west side of the street.

Crosswalks are found on one or more approaches on most of the signalized study intersections. The intersection of University Avenue and Bay Road has crosswalks on all approaches.

The all-way stop controlled intersection of Clarke Avenue/Illinois Street and Bay Road has crosswalks on all four approaches. The intersection of Pulgas Avenue and Bay Road has a crosswalk on only the west approach while the intersection of Pulgas Avenue and Runnymede Street has crosswalks on all legs except the north approach. There are no crosswalks available at the following four unsignalized study intersections:



Source: Hexagon Transportation Consultants, Inc., December 6, 2019.

EXISTING BICYCLE FACILITIES FIGURE 4.17-2

- Demeter Street and Bay Road
- Pulgas Avenue and Weeks Street
- Clarke Avenue and Weeks Street
- Clarke Avenue and Runnymede Street

Transit Facilities

Existing transit services in the study area are provided by the San Mateo County Transit District (Samtrans). The bus stops closest to the project site are at the intersection of Pulgas Avenue and Bay Road and at the intersection of Pulgas Avenue and Weeks Street. Samtrans bus service and the locations of the nearest bus stops are described below. The locations of existing transit facilities are shown in Figure 4.17-3.

The **81 line** operates on Bay Road, University Avenue, and Pulgas Avenue within the study area, looping throughout East Palo Alto and providing service to Menlo-Atherton High School. The line operates twice in the morning and once in the afternoon on school days only and stops at the Pulgas Avenue and Bay Road bus stop.

The **280 line** operates on Bay Road and Pulgas Avenue within the study area, providing service between the Stanford Shopping Center and East Palo Alto. The line operates with approximately 60-minute headways during the AM and PM peak periods. The bus stop closest to the project site is at the intersection of Pulgas Avenue and Bay Road.

The **296 line** operates on Bay Road, Pulgas Avenue, and Clarke Avenue within the study area, providing service between the Redwood City Caltrain Station and East Palo Alto. The line operates with 20-minute headways during the AM and PM peak periods. The bus stop closest to the project site is at the intersection of Clarke Avenue and Bay Road.



Source: Hexagon Transportation Consultants, Inc., December 6, 2019.

4.17.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact TRN-1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. **(Less than Significant Impact)**

Pedestrian Facilities

Pedestrian facilities in the project area consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. In the vicinity of the project site, sidewalks are provided on both sides of Bay Road west of Pulgas Avenue, on the south side of Bay Road east of Tara Street, on both sides of Pulgas Avenue south of Bay Road, and on the west side of Pulgas Avenue north of Bay Road. There is no sidewalk on Pulgas Avenue approximately 200 feet north of the Bay Road/Pulgas Avenue intersection, extending north past the project site. The project would construct a new sidewalk on Pulgas Avenue adjacent to the project site which would improve pedestrian access to the site and surrounding land uses. The proposed office development and on-site wastewater treatment facility option would not conflict with a program, plan, ordinance, or policy addressing the pedestrian circulation system. **(Less than Significant Impact)**

Bicycle Facilities

Designated bicycles facilities in the immediate vicinity of the project site include bike lanes on Bay Road west of Clarke Avenue and the Bay Trail, a bike and pedestrian path that runs along the west boundary of the Baylands Nature Preserve area about one quarter mile east of the project site. There is also a short paved multi-use trail known as the Rail Spur that extends from Bay Road to Pulgas Avenue. These bicycle facilities are not well-connected. However, many of the residential streets south of the project site are conducive to bicycle travel due to their low traffic volumes and low speeds.

The East Palo Alto General Plan 2035 includes planned improvements to bicycle facilities in the project vicinity including Class II bike lanes along the entirety of Bay Road and Pulgas Avenue and Class III bike routes along Weeks Street, Cooley Avenue, East Bayshore Road, Euclid Avenue, and Runnymede Street between Cooley Avenue and Euclid Avenue. These additions to the bicycle network would improve bike access to the site. The proposed office development and on-site wastewater treatment facility option would not impede implementation of these planned improvements nor conflict with another program, plan, ordinance, or policy addressing the bicycle circulation system. **(Less than Significant Impact)**

Transit Facilities

The project area is served by two SamTrans bus routes with a total of eight buses that stop within walking distance of the project site each hour during the peak commute periods. The proposed project and on-site wastewater treatment facility option would not exceed the capacity of the existing transit facilities or conflict with a program, plan, ordinance, or policy addressing the transit circulation system. **(Less than Significant Impact)**

Impact TRN-2: The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(Less than Significant Impact)**

The City of East Palo Alto adopted a VMT policy on July 1, 2020. Under this policy, a project's VMT is compared to the threshold of 15 percent below the existing citywide average home-based work trip VMT per employee for office developments, or 18.64 miles per employee.

The baseline VMT for all office projects within East Palo Alto is assumed to be equal to the citywide average home-based trip VMT of 21.93 miles per employee regardless of the location within the City. This baseline VMT applies to all office projects with no TDM program or multi-modal improvements proposed as part of the project. The proposed project would have an employment density greater than a typical suburban office development, which may reduce VMT by making walking and bicycling more competitive alternatives to the car, increasing the rate of carpool use, and making it easier to support public transit. The project's increased employment density is estimated to reduce the project's VMT by one percent, from 21.93 to 21.72 miles per employee.

As noted in Section 3.2.7, the on-site wastewater treatment facility option would develop an approximately 2,000 to 2,500-square-foot wastewater treatment facility in the southwest corner of the project site to serve the proposed office building. Because the on-site wastewater treatment facility would be designed to serve only the proposed office building, it would not generate vehicle traffic independent of the office building and a separate VMT for the on-site wastewater treatment facility was not calculated.

Consistent with the City's current TSM ordinance, the project would be required to implement a TDM plan to reduce project VMT by at least 25 percent below a typical office development.⁸⁵ Therefore, compliance with the City's TSM ordinance would ensure the project would achieve a VMT reduction greater than 15 percent below the City's average home-based trip VMT. Therefore,

⁸⁵ As noted in Section 4.17.1, Environmental Setting, above, if approved after January 1, 2022, the project would be required to implement a TDM plan to achieve a 40 percent reduction in daily vehicle trips.

project VMT would not exceed the City's VMT threshold of 15 percent below the citywide average and impacts would be less than significant. **(Less than Significant Impact)**

Impact TRN-3: The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(Less than Significant Impact)**

Site Access

Vehicular access to the project site would be provided via two full-access driveways on Pulgas Avenue, at the northern and southern edges of the project site. The project driveway would meet the City's minimum 24-foot width for two-way driveways and would not result in a hazardous design feature.

Driveway Operations

Based on the project trip generation and trip assignment, it is estimated that the project driveways would serve 146 inbound and 161 outbound trips during the a.m. peak hour. During the p.m. peak hour, project driveways are estimated to serve 13 inbound and 72 outbound vehicle trips. Based on the existing traffic volumes on Pulgas Avenue and traffic expected to be generated by the proposed office building, the project driveways would operate acceptably.

Sight Distance

According to the Caltrans Highway Design Manual, the minimum stopping distance is the distance required by the user, traveling at a given speed, to bring the vehicle to a stop. Based on the speed limit on Pulgas Avenue (25 miles per hour), the Caltrans stopping distance is 200 feet. The project would construct two driveways 270 feet apart. There are no roadway curves, but on-street parking is permitted on Pulgas Avenue. The site plan shows a bulb-out to be constructed north of the southern site driveway that would prohibit on-street parking for a distance of 100 feet. The proposed design would provide ample sight distance to the north. On-street parking to the south of the project site would interfere with sight distance looking south.

As a condition of approval, street parking would be restricted (e.g., curb would be painted red) for a distance of 45 feet south of the project southern driveway. With implementation of this condition of approval, the proposed project and on-site wastewater treatment facility option would not result in a hazardous design feature. **(Less than Significant Impact)**

Impact TRN-4: The project would not result in inadequate emergency access. **(Less than Significant Impact)**

The project would construct an approximately 110,000-square-foot office building, surface parking lot and associated landscaping and potentially construct an on-site wastewater treatment facility on a site currently developed with industrial buildings. The project and on-site wastewater treatment facility option would not include development of structures within the public rights-of-way. As discussed under Impact TRA-3 above. Further, the project and on-site wastewater treatment facility

option would be reviewed for consistency with applicable CBC and Fire Code requirements for access and safety. As such, the proposed project and on-site wastewater treatment facility option would have a less than significant emergency access impact. **(Less than Significant Impact)**

4.17.3 Non-CEQA Effects

As noted above, with the passage of SB 743 amending CEQA’s evaluation of transportation impacts and the effective date of the Guidelines implementing SB 743, a project’s effects on LOS shall no longer be considered an impact on the environment. The following discussion is included because the City of East Palo Alto has policies that address LOS as a planning or growth management matter, outside the CEQA process. In the event a deficient LOS condition is identified, the City has discretion whether to require a project to address the deficiency by implementing roadway or other transportation improvements to restore or improve the LOS, and the relevant question under CEQA is whether those improvements would result in adverse physical changes to the environment, and not whether LOS has degraded below the condition considered acceptable.

Methodology

Consistent with City requirements, an LTA was completed for the project. The Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition (2017) was utilized to calculate the vehicle trips generated by the proposed project.

Trip Generation

Trip generation and intersection level of service analysis for the proposed project was completed in accordance with the City of East Palo Alto and the City of Menlo Park intersection analysis methodology and standards. Additionally, consistent with the City of East Palo Alto TDM policy, a 25 percent reduction in peak-hour trips was assumed for the proposed project (refer to Appendix G for additional details). As shown in Table 4.17-1, after applying the ITE trip rates, and appropriate trip reductions, it is estimated that the project would generate a net increase of 996 new daily vehicle trips, with 161 trips (146 inbound and 15 outbound) occurring during the a.m. peak hour and 72 trips (13 inbound and 59 outbound) occurring during the p.m. peak hour.

Table 4.17-1: Project Trip Generation Estimates								
Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Proposed Land Uses								
General Office ¹	110,000 sf ²	536	55	9	64	10	53	63
JobTrain ²	198 students	898	174	33	207	32	88	120
<i>25% TDM Trip Reduction</i>		- 134	-14	-2	-16	-3	-13	-16
<i>6% Additional TDM Trip Reduction for JobTrain</i>		-54	-7	-2	-9	-1	-2	-3
Existing Use								

<i>Industrial/Workshop building</i> ³	4,500 sf	-250	-7	-14	-21	-15	-14	-29
Project Trips After Reductions		996	146	15	161	13	59	72
Notes: ¹ Source: ITE Trip Generation Manual, 10th Edition 2017, average trip generation rates for Land Use Code 710 “General Office Building” ² Trip generation rates for the relocated JobTrain facility are based on driveway counts taken on 08/13/2019 at the existing JobTrain location. ³ Existing a.m. and p.m., peak hour trips for the existing uses are based on 08/01/2019 driveway counts. Existing daily trips were estimated.								

Intersection Operations Analysis

Traffic conditions at 25 intersections in the project area were evaluated using LOS and compared to the City of East Palo Alto and the City of Menlo Park LOS standards. LOS is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. As shown in Table 4.20-2 below, 10 of the 25 study intersections currently operate with LOS deficiencies.

Table 4.17-2: Existing and Existing Plus Project Intersection Levels of Service

Number	Intersection	LOS Standard	Peak Hour	Existing Conditions		Existing Plus Project				Existing Plus Project (With Improvements)	
				Average Delay	LOS	Average Delay	LOS	Increase in Critical Delay	Increase in Critical V/C	Average Delay	LOS
1	University Avenue and Bayfront Expressway (Menlo Park)*	D	AM	>80*	F	>80*	F	0.2	N/A		
			PM	263.0	F	265.1	F	2.1	N/A		
2	University Avenue and Loop Road (future signal)	D	AM	N/A	N/A	N/A	N/A	N/A	N/A	5.0	A
			PM	N/A	N/A	N/A	N/A	N/A	N/A	6.8	A
3	University Avenue and Purdue Avenue ⁵	D	AM	18.9	C	19.0	C	N/A	N/A	17.6	C
			PM	47.5	E	48.1	E	N/A	N/A	42.2	E
4	University Avenue and Bay Road	D	AM	41.7	D	43.9	D	7.9	N/A	42.8	D
			PM	48.4	D	48.8	D	0.7	N/A	46.8	D
5	Euclid Avenue and Donohoe Street/East Bayshore Road	D	AM	52.3	F	114.6	F	N/A	N/A	--	--
			PM	32.6	D	32.6	D	N/A	N/A	--	--
6	US 101 NB Off-Ramp/ University Plaza Ph II driveway and Donohoe Street	D	AM	64.7	F	69.7	F	N/A	N/A	--	--
			PM	10.2	D	9.7	B	N/A	N/A	--	--
7	Demeter Street and Bay Road	D	AM	10.4	C	10.4	C	N/A	N/A	--	--
			PM	13.0	C	13.4	C	N/A	N/A	--	--
8	Pulgas Avenue and Bay Road	D	AM	13.8	B	26.6	D	N/A	N/A	11.5	B
			PM	32.4	D	56.0	F	N/A	N/A	18.5	C

9	Pulgas Avenue and Weeks Street	D	AM PM	12.5 13.7	B B	12.9 13.8	B B	N/A N/A	N/A N/A	-- --	-- --
10	Pulgas Avenue and Runnymede Street	D	AM PM	15.0 15.0	C C	16.1 16.6	C C	1.0 0.2	0.051 0.004	-- --	-- --
11	Pulgas Avenue and O'Connor Street	D	AM PM	13.6 15.7	B C	13.9 15.9	B C	0.2 0.2	0.006 0.003	-- --	-- --
12	Pulgas Avenue and East Bayshore Road	D	AM PM	19.9 23.9	B C	20.1 24.5	C C	0.0 0.7	-0.001 0.006	-- --	-- --
13	Embarcadero Road and East Bayshore Road (City of Palo Alto)	D	AM PM	33.8 81.2	C F	33.6 81.5	-0.3 0.6	0.000	-- --	-- --	-- --
14	University Avenue and Donohoe Street	D	AM PM	107.9 74.9	F E	116.0 82.2	F F	N/A N/A	N/A N/A	9.1 47.7	F D
15	University Avenue and US 101 SB Ramps	D	AM PM	99.2 87.4	F F	105.7 100.4	F F	N/A N/A	N/A N/A	48.7 40.1	D D
16	University Avenue and Woodland Avenue ²	S	AM PM	66.1 248.0	E F	66.0 280.6	E F	N/A N/A	N/A N/A	42.5 84.9	D F
17	University Circle and Woodland Avenue ²	D	AM PM	18.7 126.8	B F	18.2 163.8	B F	N/A N/A	N/A N/A	13.5 18.2	B B

18	US 101 NB Off-Ramp/University Plaza Phase II driveway and Donohoe Street ²	D	AM	49.3	D	70.3	E	N/A	N/A	12.5	B
			PM	142.6	F	165.0	F	N/A	N/A	38.8	D
19	Cooley Avenue and Donohoe Street ²	D	AM	31.8	C	48.8	D	N/A	N/A	16.8	B
			PM	36.6	D	34.2	C	N/A	N/A	21.7	C
20	East Bayshore Road and Donohoe Street ²	D	AM	32.9	C	69.1	E	N/A	N/A	10.5	B
			PM	38.2	D	27.8	C	N/A	N/A	12.9	B
21	Clarke Avenue and Bay Road	D	AM	16.0	C	2.1	0.033	-0.4	-0.061	--	--
			PM	19.9	C	1.1	0.010	-1.2	-0.013	--	--
22	Clarke Avenue and Weeks Street	D	AM	14.7	B	N/A	N/A	--	--	--	--
			PM	16.0	C	N/A	N/A	--	--	--	--
23	Clarke Avenue and Runnymede Street	D	AM	16.1	C	16.2	C	0.1	0.003	--	--
			PM	13.3	B	13.3	B	0.0	0.001	--	--
24	Clarke Avenue and East Bayshore Road	D	AM	13.9	B	13.9	B	0.0	0.000	--	--
			PM	10.7	B	10.7	B	0.0	0.000	--	--

Notes:

*indicates LOS based on “unserved demand.” At this location, upstream & downstream congestion results in delay not captured by the VISTRO analysis.

For Intersection 1, the increase in delay column shows the increase of average delay at the intersection.

Bold text indicates intersections operates at unacceptable level of service.

Bold and highlighted text indicates adverse operations effect caused by the project. OVFL indicates that the results are out of software calculation limits.

-- Indicates that the intersection level of service and delay with the loop road is the same as without the loop road

1 For one-way and two-way stop-controlled intersections, the average delay and LOS is reported for the worst approach. Changes in critical delay and v/c cannot be calculated (N/A)

2 Intersections were analyzed using Synchro/Sim Traffic software due to close proximity of these intersections. Changes in critical delay and v/c cannot be calculated (N/A).

3 Delay shown is the average delay for the westbound left-turning vehicles, which have to find gaps in the eastbound traffic flow.

4 Average delay and LOS under mitigated existing plus project and mitigated cumulative plus project with loop road and other improvements reflects signalization.

LOS = Level of Service, V/C = volume-to-capacity ratio, AM = morning peak hour (between 7:00 and 9:00 AM), PM = evening peak hour (between 4:00 and 6:00 PM).

As shown in Table 4.17-2 above, the project would have an adverse effect on the following intersections during one or both peak hours under existing plus project conditions both with and without the planned loop road:

- Euclid Avenue and Donohoe Street/East Bayshore Road – a.m. peak hour
- US 101 Northbound on-ramp/Donohoe Street – a.m. peak hour
- Pulgas Avenue and Bay Road – p.m. peak hour
- University Avenue and Donohoe Street – a.m. and p.m. peak hours
- University Avenue and US 101 SB Ramps – a.m. and p.m. peak hours
- University Avenue and Woodland Avenue – p.m. peak hours
- University Circle and Woodland Avenue- p.m. peak hours
- US 101 Northbound Off-Ramp/University Plaza Phase I driveway and Donohoe Street – a.m. and p.m. peak hour
- East Bayshore Road and Donohoe Street – a.m. peak hour

As noted above, the project would be required to develop a comprehensive TDM program consistent with the City’s current TSM ordinance to reduce vehicle trips at least 25 percent. However, the following additional improvements would be required to further reduce the project’s adverse effects on study intersections.

Enhanced TDM Measures

Enhanced TDM measures that would reduce project trip generation by greater than 25 percent could reduce delays and improve intersection operations somewhat. However, the project would still have a significant adverse effect on study intersections even with a 50 percent reduction in trips due to TDM measures. Therefore, it is concluded that TDM measures alone would not be sufficient to reduce the project’s adverse effects.

Euclid and Donohoe Street

Construction of the planned loop road is not expected to affect the traffic volumes or delay at this intersection. A new traffic signal shall be installed at this intersection and coordinated with other closely spaced traffic signals along Donohoe Street. Along with a new traffic signal, appropriate pedestrian and bicycle accommodations should be provided. This includes pedestrian countdown timers, Americans with Disabilities Act (ADA) compliant curbs, and bicycle detection loops. Furthermore, the westbound approach shall be restriped to add an exclusive right-turn lane.

With implementation of these improvements, the Euclid/Donohoe intersection is expected to operate at an acceptable LOS D or better during both the a.m. and p.m. peak hours.

US 101 Northbound On-Ramp and Donohoe Street

Construction of the planned loop road is not expected to affect the traffic volumes or delay at this intersection. A new traffic signal shall be installed at this intersection and coordinated with other

closely spaced traffic signals along Donohoe Street. Along with a new traffic signal, appropriate pedestrian and bicycle accommodations should be provided. This includes ADA compliant curbs, and bicycle detection loops. In order to align with the proposed driveway for the University Plaza Phase II site on the north side of Donohoe Street, the US 101 ramp shall be shifted approximately 30 feet to the east. In addition, the westbound approach on Donohoe Street shall be restriped to accommodate a short exclusive left-turn pocket, a shared left/through lane, and a shared through-right lane. These improvements would require widening of the US 101 northbound on ramp to accommodate two lanes that taper down to a single lane before this ramp connects with the loop on ramp from northbound University Avenue.

With the recommended improvements, the intersection is expected to operate at an acceptable LOS C during both the a.m. and p.m. peak hours.

Pulgas Avenue and Bay Road

Construction of the planned loop road is not expected to affect the traffic volumes or delay at this intersection. Due to the relatively low traffic volumes on the uncontrolled approaches on Bay Road compared to the traffic volume on the stop-controlled northbound Pulgas Avenue approach, the installation of a new traffic signal is not recommended at this time. While a new traffic signal would be needed ultimately under cumulative conditions to support planned development farther east (e.g., in the Waterfront Office land use district), installation of all-way stop control is recommended to mitigate the significant project impact under near-term conditions. With all-way stop control, the intersection would operate at an acceptable LOS C during the p.m. peak hour under existing plus project conditions both without and with the loop road.

University Avenue and Donohoe Street

Construction of the planned loop road is not expected to affect the traffic volumes or delay at this intersection. The westbound approach on Donohoe Street shall be widened to accommodate dual left-turn lanes, one exclusive through lane, one shared through/right lane, and one exclusive right-turn lane to allow for simultaneous left-turn movement on Donohoe Street. These improvements would require right-of-way acquisition along the southside of Donohoe Street between University Avenue and the US 101 northbound off ramp.

With the recommended improvement would improve the intersection operations to LOS D during the p.m. peak hour. During the a.m. peak hour, the intersection is expected to operate at LOS F, however, the average delay would be less than under existing conditions. Thus, the improvements would satisfactorily mitigate the project impacts.

University Avenue and US 101 Southbound Ramps

Construction of the planned loop road is not expected to affect the traffic volumes or delay at this intersection. The recommended Donohoe Street improvements at Euclid Avenue, at the US 101 northbound on ramp, at University Avenue, at the US 101 northbound off ramp and at Cooley Avenue would improve traffic flow on University Avenue and eliminate the queue spillback that extends from Donohoe Street past the US 101 southbound ramps. The Donohoe Street improvements would reduce the delay and cause the University/US 101 southbound ramps

intersection to operate at LOS D during the a.m. and p.m. peak hours. No additional improvements are required to mitigate the significant project impact at this intersection.

University Avenue and Woodland Avenue

Construction of the planned loop road is not expected to affect the traffic volumes or delay at this intersection. The recommended Donohoe Street improvements at Euclid Avenue, at the US 101 northbound on ramp, at University Avenue, at the US 101 northbound off ramp and at Cooley Avenue would improve traffic flow on University Avenue and eliminate the queue spillback that extends from Donohoe Street past Woodland Avenue. While the University/Woodland intersection is expected to continue to operate at LOS D during the PM peak hour, the Donohoe Street improvements would reduce the average delay at the University/Woodland intersection below that under existing conditions without the project. No additional improvements are required to mitigate the significant project impact at this intersection.

University Circle and Woodland Avenue

Construction of the planned loop road is not expected to affect the traffic volumes or delay at this intersection. The recommended Donohoe Street improvements at Euclid Avenue, at the US 101 northbound on ramp, at University Avenue, at the US 101 northbound off ramp and at Cooley Avenue would improve traffic flow on University Avenue, and as a result reduce the queues on Woodland Avenue. The mitigation measure would improve the intersection operations to LOS B during the p.m. peak hour. No additional improvements are required to mitigate the significant project impact at this intersection.

US 101 Northbound Off-Ramp/ University Plaza Phase I driveway and Donohoe Street

Construction of the planned loop is not expected to affect the traffic volumes or delay at this intersection. The westbound approach on Donohoe Street at this US 101 northbound off ramp shall be widened to accommodate four through lanes to improve the vehicular throughput at this intersection. This improvement would require median modifications and narrowing the eastbound Donohoe Street approach to Cooley Avenue to include two through lane and a full length left-turn lane. In addition, the traffic signals shall be coordinated with adjacent traffic signals on Donohoe Street. With the proposed improvements, the intersection of US 101 northbound off ramp and Donohoe Street is expected to operate at an acceptable level (LOS D or better) during the a.m. and p.m. peak hours.

East Bayshore Road and Donohoe Street

Construction of the planned loop is not expected to affect the traffic volumes or delay at this intersection. The recommended Donohoe Street improvements at Euclid Avenue, at the US 101 northbound on ramp, at University Avenue, at the US 101 northbound off ramp, and at Cooley Avenue would improve traffic flow on Donohoe Street and cause the East Bayshore/ Donohoe intersection to operate at LOS B during the a.m. peak hour under existing plus project conditions. No additional improvements are required to mitigate the significant project impact at this intersection.

Parking

Vehicle Parking

For office developments, Municipal Code Section 18.30.050 requires one parking space per 300 square feet. Based on these off-street parking requirements, the project would be required to include 324 parking spaces. The proposed project includes a total of 357 parking spaces, which would meet the City's standard parking requirement.⁸⁶

Bicycle Parking

According to the City's Bicycle Parking Standards (Municipal Code Section 18.30.120), the project is required to provide a total of 19 bicycle parking spaces. Of the 19 required bicycle parking spaces, 14 are required to be long-term parking spaces (bike lockers) and five are required to be short term parking spaces (bike racks). The site plans show that the project would provide a total of 38 bicycle parking spaces, including 20 long-term spaces and 18 short-term bicycle parking spaces. Thus, the proposed bicycle parking would meet the City's bicycle parking standards.

⁸⁶ If the on-site wastewater treatment facility option is implemented, approximately 339 parking spaces would be provided, which would meet the City's parking requirement.

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill (AB) 52, effective July of 2015, established a new category of resources for consideration by public agencies when approving discretionary projects under CEQA, called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. 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.

Under AB 52, a TCR is defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
 - Included or determined to be eligible for inclusion in the California Register of Historic Resources⁸⁷
 - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1 (k)
- A resource determined by the lead agency to be a TCR.

4.18.1.2 *Existing Conditions*

There are no known tribal cultural resources on-site. A records search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed for the site and the results were negative.⁸⁸ The City contacted the Amah Mutsun Tribal Band of Mission San Juan Bautista, Costanoan Rumsen Carmel Tribe, Indian Canyon Mutsun Band of Costanoan, Muwekma Ohlone Indian Tribe of the FS Bay Area, the Ohlone Indian Tribe, Rumsen Am:a Tur:ataj Ohlone, Tamien Nation (i.e., the California Native American tribes traditionally affiliated with the project area). The tribes were contacted via email on July 9, 2021 and invited to initiate formal consultation with the City of East Palo Alto under AB 52, pursuant to applicable Public Resources and Government Codes. On August 7, 2021 and July 21, 2021, the City received requests Kanyon Konsulting (on behalf of the Indian Canyon Band of Costanoan Ohlone People) and Tamien Nation, respectively for formal consultation with under AB 52. The City met with a representatives of Tamien Nation on September 20, 2021 and Kanoyon Konsulting on September 30, 2021. During the meetings, the tribal representatives requested that mitigation measure MM CUL-2.1 be modified to include a requirement for tribal cultural resource sensitivity training, a Native American monitor to be present during removal of the existing building foundations as well as during all ground disturbing construction

⁸⁷ See Public Resources Code section 5024.1. The State Historical Resources Commission oversees the administration of the CRHS and is a nine-member state review board that is appointed by the Governor, with responsibilities for the identification, registration, and preservation of California's cultural heritage. The CRHR "shall include historical resources determined by the commission, according to adopted procedures, to be significant and to meet the criteria in subdivision (c) (Public Resources Code, Section 5024.1 (a) (b)).

⁸⁸ Katy Sanchez, NAHC. Personal Communication. September 13, 2021.

activities, Native American involvement in the assessment of any cultural resource finds, Native American involvement in the formulation of a Treatment Plan, incorporation of native plant species into the landscaping design, should one be necessary, and installation of interpretive signs acknowledging the tribes culturally affiliated with the site. The tribal representative did not indicate that any known TCRs are present on the site.

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project 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:				
1) 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) 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 the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact TCR-1: The project would not cause a substantial adverse change in the significance of a tribal cultural resource 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). **(Less than Significant Impact)**

As noted in Section 4.18.1.2, the Tamien Nation has requested to be informed of proposed projects in East Palo Alto under AB 52. In addition, after receiving notice of the proposed project, the Indian Canyon Band of Costanoan Ohlone People and Tamien Nation requested formal consultation on the project. The City met with a representative of the tribes on September 30, 2021 and September 20, 2021, respectively. During the meetings, the tribal representatives requested that mitigation measure MM CUL-2.1 be modified to include a requirement for tribal cultural resources sensitivity training, a Native American monitor to be present during removal of the existing building foundations and construction activities disturbing native soils on the site, Native American involvement in the assessment of any cultural resource finds, Native American involvement in the formulation of a Treatment Plan, should one be necessary, incorporation of native plants in the landscaping plan, and installation of interpretive signs acknowledging the tribes culturally affiliated with the site. The tribal representatives did not indicate that any known TCRs are present on the site or in the project area.

As noted in Section 4.6 Cultural Resources, the project site is not 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). Additionally, because the record search of the NAHC Sacred Lands File did not identify the presence of TCRs on the site or surrounding area, and because no tribes have provided information indicating that TCRs are present on the site, the project would not cause a substantial adverse change in the significance of a tribal cultural resource 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). **(Less than Significant Impact)**

Impact TCR-2: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is 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. **(Less than Significant Impact)**

As discussed under Impact TCR-1, no tribal cultural resources were identified during the Native American consultation process. If cultural resources are encountered during construction, mitigation measures MM CUL 1.1 and MM CUL 2.1 would be implemented to reduce cultural resource impacts to a less than significant level. For these reasons, the project would not result in a substantial adverse change to a tribal cultural resource. **(Less than Significant Impact)**

4.19 UTILITIES AND SERVICE SYSTEMS

The following discussion is based, in part, on a Water Supply Assessment prepared by Integrated Resource Management in May 2021. This report is attached as Appendix H to this Initial Study.

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and adopt a Water Shortage Contingency Plan to outline the water supplier's response and plan for changes or shortages in water supplies. The City of East Palo Alto adopted its most recent UWMP in June 2021.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

Local

Vista 2035 East Palo Alto General Plan

Various policies in the City’s General Plan have been adopted for the purpose of avoiding or mitigating utilities and service systems impacts resulting from planned development within the City including the following:

Policy	Economic Development
3.2	Concurrency. Require that infrastructure be in place or planned and funded prior to approval of new development projects that require such infrastructure, including water availability.
Policy	Infrastructure, Services, and Facilities
1.3	Stormwater infrastructure for new development. Require development projects to pay for their share of new stormwater infrastructure or improvement necessitated by that development.
2.2	Water supply infrastructure. Improve infrastructure to ensure the provision of a clean, reliable citywide water supply sufficient to serve existing and planned development.
2.4	Water supply planning and demand offset regulations for new or intensified development. Consider and adopt a water offset ordinance or other policy to reduce the water demand and to ensure adequate water supply exists to meet the needs of new projects or intensified development. Allow the City the right to require a Water Supply Assessment of any development project. The policy will consider the type and size of projects that might be exempt, the water offset ratio, the method for analyzing the projected water demand and methods for offsetting demand, the types of demand reduction/ mitigation implementation options (e.g., onsite or offsite design or building modification), including an in-lieu fee, that will be required, a method for estimating the savings from onsite or offsite efficiency measures, and the appropriate regulatory instruments to enforce, implement, and monitor the offset policy.
2.6	Water infrastructure for new development. Require development projects to pay for their share of new water infrastructure or improvements necessitated by that development, including but not limited to water supply, storage, and conservation, and recycled water.
2.7	Municipal water conservation and efficiency. Seek to reduce municipal water use through the following strategies: <ul style="list-style-type: none">• Implement aggressive indoor and outdoor water efficiency measures in all new city developments, substantial rehabs, and remodels.• Prioritize water efficiency upgrades to existing buildings, such as water efficient fixtures.• Reduce potable water used for parks, by planting drought-tolerant species and implementing other water saving practices.
2.8	Citywide water conservation and efficiency. Encourage and promote community water conservation and efficiency efforts, including indoor and outdoor efforts that exceed CALGreen requirements.
4.2	Waste reduction. Seek to reduce East Palo Alto’s rate of waste disposal per capita, and to increase the diversion rate of recycling and green waste.

- 4.4 Construction waste. Encourage all construction projects to divert 80% of their construction waste away from landfills, exceeding CALGreen requirements.
-

Ravenswood/ 4 Corners Transit Oriented Development Specific Plan

Various policies in the Ravenswood Specific Plan have been adopted for the purpose of avoiding or mitigating utilities impacts resulting from planned development within the Plan Area including the following:

Policy	Utilities and Public Services
1.1	In coordination with the East Palo Alto Sanitary District (EPASD) and West Bay Sanitary District (WBSD), ensure that development of each parcel includes an adequate sanitary and storm sewer infrastructure to prevent discharge of untreated water to surface waters.
1.2	Work with EPASD to ensure that additional wastewater treatment capacity is available as development occurs under the Specific Plan.
1.3	Work with WBSD to ensure that peak wet weather flows of wastewater do not increase above the present 14.4 million gallons per day (MGD) maximum, despite any increase in development. Encourage WBSD to conduct increased inspection and maintenance of the sanitary sewer system and repair any points of entry for rainwater. In addition, ensure that new development conforms to C-3 storm water requirements.
2.1	Prior to developing an increased municipal water supply, conduct a project-level environmental analysis of the environmental effects of obtaining the increased supply. For any proposed new groundwater well, or increase in pumping from existing wells, ensure that the analysis considers, at a minimum, a) land subsidence and exacerbation of existing flood risks; b) salt-water infiltration of the aquifer; c) entrainment of contamination; d) cumulative effects from drawdown of the aquifer; e) impacts from construction of a new treatment facility, including storage reservoirs; and f) installation of additional piping. For any proposed recycled water usage, ensure that the analysis contains, at a minimum, verification that the water quality is adequate and that there would be no adverse health effects from its use.
2.2	Before individual development projects are approved in the Plan Area, require the developer to demonstrate verifiable, enforceable proof that either they have secured new water supplies to serve the new development or that the proposed development will create no net increase in total water demand in East Palo Alto. Ensure that environmental review is carried out for augmentations to the supply from additional groundwater pumping in the Specific Plan area and within a quarter mile radius.
3.4	Ensure that the engineering systems identified in the 2008 Draft Engineering Plan (DEPLAN) are built, and that each project contributes its proportionate share to play for the infrastructure and community benefits.
3.7	In order to streamline new development (or expansion of existing development) consistent with the Specific Plan, the City shall work collaboratively with landowners and developers to address infrastructure issues. Projects and their required infrastructure may be allowed to be phased, pursuant to each project providing adequate infrastructure consistent with DEPLAN and/or paying appropriate impact fees. Credits shall be provided for new infrastructure that is built to the standards of the DEPLAN. The phasing of any infrastructure and credits provided for infrastructure built shall be consistent with the adopted nexus study and DEPLAN and approved by the City Engineer.

City of East Palo Alto Urban Water Management Plan

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and a Water Supply Contingency Plan for changes and shortages in water supplies. The City of East Palo Alto adopted its most recent UWMP in June 2021.

The East Palo Alto UWMP was developed based on the growth projections and land use changes included in the Vista 2035 General Plan and based on the Water Supply Assessment prepared in support of the General Plan. The UWMP concluded that the City would have adequate supplies during normal years through 2045. However, under both single- and multiple-dry years beginning in 2025, the City would experience water supply shortages. Additionally, from 2023 through 2025, if the Bay-Delta Plan Amendment is implemented, under single- and multiple dry-years, water supplies from SFPUC are expected to be reduced further contributing to additional water supply shortages.⁸⁹ To address these potential water shortages, the UWMP identifies water conservation measures such as restricting the time and duration of potable water use for irrigation, requiring hotels and motels to limit laundry service to at the end of a guests stay or at the guest's request, requiring restaurants to only serve water when requested by customers, as well as limiting the number and times of day when agricultural and commercial nursery operations are allowed to use potable water. Implementation of water conservation measures identified in the UWMP and Water Supply Contingency Plan would ensure adequate water supplies would be available during single- and multiple-dry years.

4.19.1.2 Existing Utilities

Water Service and Supply

The municipal water supply to the project area is provided by the Veola, under contract with the City of East Palo Alto. The source of the water supply comes from the SFPUC Hetch Hetchy water supply and distribution system. The Hetch Hetchy Aqueduct carries water from Yosemite National Park to San Francisco and other cities on the peninsula, including East Palo Alto. Recently, the City acquired permanent water transfers from adjacent municipalities served by the SFPUC Hetch Hetchy water supply. The City acquired 1,000,000 gpd from the City of Mountain View in July 2017 and 500,000 gallons from the City of Palo Alto in May 2018.

There is currently no storage within the City of East Palo Alto's managed water system. The City is reliant upon the SFPUC supply system for the necessary storage equalization, fire flows, and emergency use. As mentioned above, the City is in the process of updating the UWMP. Based on the information contained in the updated UWMP, the water supply from the SFPUC would be capable of

⁸⁹ The Bay-Delta Plan Amendment requires the release of waters in SFPUC supplies to three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta, reducing the amount of water available to serve SFPUC customers during single and multiple-dry years. Source: City of East Palo Alto. *Final Urban Water Management Plan*. June 2021.

meeting water demand in the City through the year 2045, with the demand within the City's service area expected to exceed projected supplies in single- and multiple-dry years beginning in 2025. The UWMP update projects shortfalls during single- and multiple-dry years.

The City of East Palo Alto owns and operates one groundwater well located at the intersection of Gloria Way and Bay Road. Use of the well for potable purposes ceased shortly after construction in 1981, due to customer complaints related to elevated concentrations of manganese. The groundwater well is currently used for nonportable purposes (e.g., street cleaning and construction).

The City is in the process of expanding groundwater production to meet and supplement future water demands. The City plans to develop its local groundwater supplies by constructing a new water supply well and treatment system (the Pad D Well).

The project site is served by an eight-inch water line in Pulgas Avenue. Water demand from existing uses on the project site are estimated to be approximately 316 gpd.⁹⁰

Wastewater Services

Wastewater services are provided to the City of East Palo Alto by the East Palo Alto Sanitary District (EPASD) and the West Bay Sanitary District. Wastewater services are provided to the project site by the EPASD.⁹¹ EPASD infrastructure includes approximately 30 miles of sewer pipelines and 560 manholes. According to the Specific Plan EIR, the average dry weather flow for the EPASD is 1.8 million gallons per day (mgd) and average wet weather flow for the EPASD is five (5) mgd. Wastewater from the EPASD is treated at the Palo Alto Regional Water Quality Control Plant (PARWQCP).

The City of Palo Alto owns, maintains, and upgrades the PARWQCP, based on the RWQCB permit, and the contributing jurisdictions purchase capacity rights. Discharge from the PARWQCP is required to meet stringent standards to protect the health of the San Francisco Bay, where the water is discharged. The PARWQCP operates under the conditions of a RWQCB discharge permit that regulates discharge limits. The PARWQCP has a dry weather capacity of 39 mgd and a wet weather capacity of 80 mgd.⁹² Of this total, the EPASD is allocated a total treatment capacity of 3.06 mgd for dry weather flow. Average dry weather flows into the plant are currently 29.3 mgd and average wet weather flows typically do not exceed 63 mgd.⁹³

The project site is currently served by a six-inch sanitary sewer line in Pulgas Avenue.

⁹⁰ BKF. *2535 Pulgas Avenue – Domestic Water Demand Memorandum*. October 19, 2020.

⁹¹ City of East Palo Alto. *Water, Garbage, & Sewer Services*. Accessed January 27, 2020. <http://www.ci.east-palo-alto.ca.us/index.aspx?NID=512>

⁹² City of Palo Alto. *City Council Staff Report (ID#9485): Design Services for RWQCB Secondary Treatment Process Upgrades*. October 1, 2018. Accessed January 27, 2020. <https://www.cityofpaloalto.org/civicax/filebank/documents/66788>

⁹³ City of Palo Alto, Environmental Services Division, Regional Water Quality Control Plant. *Palo Alto Annual Report 2018*. January 30, 2019. <https://www.cityofpaloalto.org/files/assets/public/public-works/water-quality-control-plant/palo-alto-rwqcp-annual-report-2018.pdf?t=53468.01>

Storm Drainage

The City of East Palo Alto’s storm drainage system is composed of networks of pipes, channels, storage ponds, and pump stations which outlet to San Francisquito Creek and the San Francisco Bay.⁹⁴ Stormwater in the City drains into two major drainage systems: the Runnymede Storm Drain System and the O’Connor Storm Drain System. Due to their proximity to the San Francisco Bay, portions of the drainage systems are influenced by tide. Many of the streets do not have storm drains, and those that do are unable to handle stormwater during peak events, resulting in flooding during 10- and 20-year storm events.

The project site is served by an existing 18-inch storm drain line in Pulgas Avenue. As discussed in Section 4.13, Hydrology and Water Quality, the entire project site is covered by impervious surfaces (i.e., paved storage areas and/or structures).

Solid Waste

East Palo Alto is a member of the South Bay Waste Management Authority (SBWMA), a joint powers authority whose other members include Atherton, Belmont, Burlingame, Foster City, Hillsborough, Menlo Park, Redwood City, San Carlos, San Mateo, the West Bay Sanitary District, and San Mateo County.⁹⁵ The Shoreway Environmental Center (SEC) serves as a regional solid waste and recycling facility for the receipt, handling, and transfer of solid waste and recyclables collected from the SBWMA service area.

The vast majority of solid waste generated in East Palo Alto (as well as other SBWMA member communities) is transported to the Ox Mountain Landfill near Half Moon Bay. The remaining permitted capacity of the landfill is 22,030,078 cubic yards (as of December 31, 2015).⁹⁶ Based upon current waste disposal rates, the estimated closure date for the landfill is 2034.

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

⁹⁴ City of East Palo Alto. *Vista 2035 East Palo Alto General Plan*. October 2016.

⁹⁵ Ibid.

⁹⁶ CalRecycle. SWIS Facility Detail: Corinda Los Trancos Landfill (Ox Mtn) (41-AA-0002). Accessed January 27, 2020. <https://www2.calrecycle.ca.gov/SWFacilities/Directory/41-AA-0002/Detail>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) Be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact UTL-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **(Less than Significant Impact)**

Water Supply Infrastructure

The proposed project would connect to the eight-inch water main in Pulgas Avenue. According to a Water Supply Assessment prepared for the proposed project, the project would result in a net increase of 6,619 gpd in water demand on site compared to existing conditions.

Connections and any off-site improvements to water supply lines needed would be constructed on-site or within existing street right-of-way, per City standards for construction and sizing. Work would be completed by the project applicant or as a fair share contribution. Coordination would be required with existing infrastructure projects, such as the Bay Road Phase III project and improvements identified in the Ravenswood Specific Plan, such as new 12-inch water pipes in Bay Road. For these reasons, the City's Water supply infrastructure would have capacity for the proposed project. The project would not result in the relocation or construction of new or expanded water facilities that would cause significant environmental effects. **(Less than Significant Impact)**

Sanitary Sewer Infrastructure

Proposed Project

As discussed in Section 3.2.7, Sanitary Sewer, the proposed project would connect to the existing six-inch sewer main in Pulgas Avenue. According to the District, a total of 4,188 feet (0.79-mile) of sanitary sewer mains downstream of the project site require replacement in order to serve the increased sewer demand generated by the proposed project. The sanitary sewer mains to be replaced are all located within the existing right-of-way. The downstream improvements and connection to the EPASD system would be covered under a separate environmental review completed by EPASD. Because the required improvements would not exceed one mile in length and would be located within existing public right-of-way, they are statutorily exempt from CEQA per Section 15284 of the CEQA Guidelines. For these reasons, expansion of the sanitary sewer mains required to serve the project would not cause significant environmental effects and impacts would be less than significant. **(Less than Significant Impact)**

On-Site Wastewater Treatment Facility Option

If connection to the East Palo Alto Sanitary Sewer District system is not feasible, the project would construct an on-site sanitary sewer treatment facility to serve the proposed office building. The environmental effects associated with construction and operation of the on-site wastewater treatment facility option are discussed throughout this Initial Study. As discussed in Sections 4.1 through 4.21 of this Initial Study, implementation of the on-site wastewater treatment facility option would not cause significant environmental effects. **(Less than Significant Impact)**

Storm Drainage Infrastructure

The entire project site is covered by impervious surfaces (i.e., paved storage areas and/or structures). Runoff from the project site currently enters the storm drainage system untreated and unimpeded. As discussed in Section 4.14 Hydrology and Water Quality, compared to existing conditions, the proposed project and on-site wastewater treatment facility option reduced impervious surface and associated stormwater runoff. In addition, consistent with the requirements of the San Francisco Bay MRP, provision C.3, the project would include installation of filtration areas, bioretention basins, and flow-through planters, removing pollutants and decreasing the rate and volume of stormwater runoff entering the City storm drain system. For these reasons, the proposed project and on-site wastewater treatment facility option would not require or result in the relocation or construction of new or expanded storm drainage infrastructure. **(Less than Significant Impact)**

Electric Power, Natural Gas, and Telecommunications Facilities

Existing natural gas, electricity, and telecommunications utilities currently serve the project site. No improvements or relocation are proposed for these utilities and, therefore, the project and on-site wastewater treatment facility option would not result in a significant environmental effect from the construction or relocation of natural gas, electricity, or telecommunication utilities. **(Less than Significant Impact)**

Impact UTL-2: The project would have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. **(Less than Significant Impact with Mitigation Incorporated)**

Water Demand and Supply

Ravenswood Specific Plan Policy UTIL-2.2 requires individual development projects in the Specific Plan area to demonstrate verifiable, enforceable proof that either they have secured new water supplies to serve the new development or that the proposed development will create no net increase in total water demand in East Palo Alto. To determine whether adequate water supplies are available to serve the proposed project, a Water Supply Assessment (WSA) was prepared for the project by Integrated Resource Management in May 2021 (Appendix H). The WSA considered existing demand plus the approved and pending projects in East Palo Alto water system service area.

The estimated water demand for the proposed project is 6,935 gpd, or 6.76-acre feet per year.⁹⁷ The estimated water demand from the existing on-site industrial uses is 316 gpd, or 0.35-acre feet per year. Thus, the project would result in a net increase of 6,619 gpd or 6.41-acre feet per year in water demand compared to existing conditions. Table 4.19-1 shows the estimated water supply and demand for the City of East Palo Alto through the year 2045.

Table 4.19-1: Estimated Water Supply and Demand (acre feet per year)					
	2025	2030	2035	2040	2045
<i>Normal Year</i>					
Supply	3,927	3,927	3,927	3,927	3,927
Demand	2,124	2,213	2,391	2,845	3,308
Surplus/(Deficit)	1,803	1,714	1,536	1,082	619
<i>Single Dry Year</i>					
Supply	1,394	1,449	1,538	1,817	1,817
Demand	2,124	2,213	2,391	2,845	3,308
Surplus/(Deficit)	(730)	(764)	(853)	(1,028)	(1,491)
<i>Multiple Dry Years</i>					
Year 1					
Supply	1,394	1,449	1,538	1,817	1,817
Demand	2,124	2,213	2,391	2,845	3,308
Surplus/(Deficit)	(730)	(764)	(853)	(1,028)	(1,491)
Year 2, 3, 4, & 5					
Supply	1,203	1,246	1,326	1,572	1,817

Demand	2,124	2,213	2,391	2,845	3,308
Surplus/(Deficit)	(920)	(966)	(1,065)	(1,273)	(1,491)
Source: Integrated Resource Management. <i>Water Supply Assessment City of East Palo Alto, 2535 Pulgas Avenue.</i> May 2021.					

As shown in Table 4.19-1, the City has sufficient water supplies to meet additional demand generated by the proposed project during normal years through 2045. **(Less than Significant Impact)**

Impact UTL-2: The City does not have sufficient water supplies available to serve the project and reasonably foreseeable future development during single-dry and multiple-dry years in 2025 and beyond. **(Significant Impact)**

Mitigation Measure: The following mitigation measures shall be implemented by the proposed project to ensure adequate water supplies are available to serve the project and on-site wastewater treatment facility option and reduce impacts to a less than significant level.

MM UTL-2.1: To address the discrepancy between the proposed project’s 6,619 gpd water demand and the available water supply, the City shall secure the additional water supplies needed for the proposed project. To do so, the City shall implement one or more of the following programs to supply a minimum of 6,619 gpd:

- **Groundwater Opportunities.** The City is addressing the supply shortfall by developing new groundwater well and treatment facility at Pad D. This project is expected to produce 29,460 gpd. Implementation of this measure alone would provide sufficient water supplies to serve the proposed project and on-site wastewater treatment facility option.
- **Transfer and Exchange Opportunities.** The City’s agreement with SFPUC allows for the transfer or exchange of unused portions of water allocations among contracting agencies within the SFPUC system. Additionally, the agreement allows for purchase and transfer of water from outside the SFPUC service area through third party transmission systems. The City of East Palo Alto is seeking other opportunities for water supply transfers. However, no specific agreements are currently being negotiated by the City.
- **Recycled Water Opportunities.** The RWQCP currently produces an average of 600,000 gpd of recycled water. It is estimated that the City of East Palo Alto could use 401,734 gpd of recycled water for non-potable uses. There is currently no conveyance system to transport recycled water throughout the City of East Palo Alto service area. However, a four-inch recycled water pipeline was constructed as part of the San Francisquito Creek Bridge Replacement Project which would allow for future conveyance of recycled water from the RWQCP to the City of East Palo Alto. Extending the recycled water system into the City of East Palo Alto is considered a low cost and reasonable investment for the City. When this project is complete, a portion of the City’s existing potable water demand (such as landscape irrigation) could be served the new recycled water supply. The excess potable water supply made available with this

program would be sufficient to meet the needs of the proposed project and on-site wastewater treatment facility option.

- **Emergency Ordinance.** The East Palo Alto City Council adopted an emergency ordinance temporarily prohibiting new or expanded water service connections within the City’s water service area during drought conditions. If implemented during drought times, the ordinance provides staff time to study the current water shortage issue, develop new water supply and water demand offset policies for the City Council to consider for adoption. The ordinance does not apply to projects that have been approved by City Council and for which the City has executed an agreement for reimbursement of water supply development costs with the project applicant(s).

With implementation of these programs, total projected water supplies available during normal, single-dry, and multiple-dry years through 2045 would meet the projected water demand associated with the proposed project, in addition to the City’s existing and planned developments.

Mitigation Measure UTL-2.1 would require the City to implement programs to offset potable supply with recycled water, thereby making potable water supplies available for the demands of the proposed project. The City would be required to demonstrate that sufficient water supplies have been secured prior to issuance of occupancy permits for the project. With implementation of this mitigation measure, impacts related to water supply sufficiency would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

On-site Wastewater Treatment Facility Option

As noted described in Section 3.2.7 Sanitary Sewer, if connection to the existing EPASD system is infeasible, the project is considering development of an on-site wastewater treatment facility to serve the proposed office building. The on-site wastewater treatment facility would be designed to treat wastewater generated by the proposed office building and produce recycled water that would be pumped back to the office building for non-potable uses within the building and for landscape irrigation. As discussed under Impact UTL-3 below, the project would generate 5,404 gpd of wastewater. Assuming 20 percent of wastewater is lost through the treatment process, approximately 4,800 gpd of recycled water could be used for non-potable uses within the office building and for landscape irrigation. The total non-potable water demand for the proposed project is estimated to be 4,946 gpd (including 4,016 gpd for the office building and 930 gpd for the landscaping). Thus, if the on-site wastewater treatment facility option is selected, the project’s water demand would be reduced to 1,819 gpd, a net increase of 1,503 gpd over existing conditions on-site. As shown in Table 4.19-1, the City’s existing water supplies are sufficient to meet additional demand generated by the on-site wastewater treatment facility option during normal years through 2045. There would not be sufficient supplies, however, to meet the additional demand generated by the project in single-dry and multiple-dry years in 2025 and beyond. Therefore, impacts would be significant. With implementation of MM UTL-2.1, impacts related to water supply sufficiency would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

Impact UTL-3: The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments. **(Less than Significant Impact)**

Palo Alto Regional Water Quality Control Plant

According to the Specific Plan EIR, the PARWQCP is in good condition and is considered to have sufficient capacity to serve the community for 30 years without the need for expansion.

As discussed in Section 3.22.1.2, Existing Conditions, the PARWQCP has a dry weather capacity of 39 mgd and a wet weather capacity of 80 mgd.⁹⁸ The average dry weather flow for the EPASD is 1.8 mgd, which is below the district’s allotted dry weather flow treatment capacity of 3.06 mgd. Based on a sanitary sewer demand memo prepared by BKF for the proposed project in November 2020, the proposed project would result in an average dry weather flow of 0.01 mgd (10,248 gpd) and an average peak wet weather flow of 0.03 mgd (30,743 gpd), which is within the available capacity of the PWRWQCP and would not result in the need for increased wastewater treatment capacity.⁹⁹ **(Less than Significant Impact)**

Impact UTL-4: The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

The proposed project would demolish all existing structures and improvements on the project site and construct a new 110,000-square-foot office building, surface parking lot, associated site improvements and landscaping on-site and potentially construct an on-site wastewater treatment facility. Employees and visitors would generate solid waste and recyclables during operation of the proposed project and on-site wastewater treatment facility.

The Ox Mountain Landfill has an agreement with San Mateo County to provide disposal capacity for development within East Palo Alto. The Ox Mountain Landfill has sufficient capacity to accommodate waste materials from East Palo Alto through the year 2034 and increased recycling throughout the City would extend the useful life of the landfill. New landfill facilities would not be needed to serve the proposed project and on-site wastewater treatment facility option.

Waste would be generated during construction of the proposed project and on-site wastewater treatment facility option. In accordance with General Plan policy ISF-4.4 Construction Waste, 80 percent of construction waste away from landfills, which would meet CALGreen construction waste diversion requirements. The project and on-site wastewater treatment facility option are consistent with AB 939, AB 341, and SB 1383 statewide goal to reduce the statewide disposal of organic waste by 75 percent by 2025. For these reasons, the project and on-site wastewater treatment facility option

⁹⁸ City of Palo Alto. *City Council Staff Report (ID#9485): Design Services for RWQCB Secondary Treatment Process Upgrades*. October 1, 2018. Accessed January 27, 2020. <https://www.cityofpaloalto.org/civicax/filebank/documents/66788>

⁹⁹ BKF Engineers Surveyors, Planners. *2535 Pulgas Avenue Sewer Demand Memorandum*. November 4, 2020.

would not generate solid waste in excess of state standards that would impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

Impact UTL-5: The project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. **(Less than Significant Impact)**

As discussed in the response to Impact UTIL-4, the proposed project and on-site wastewater treatment facility option would comply with state and local regulations related to solid waste reduction. The proposed project and on-site wastewater treatment facility option would not negatively impact the provision of solid waste services and would comply with AB 341 which requires all businesses in California that generate four or more cubic yards of garbage per week (approximately 6,740 pounds per week) to recycle. Future occupants of the site would be required to recycle waste consistent with federal, state, and local requirements. Thus, the project and on-site wastewater treatment facility option would comply with federal, state, and local solid waste statutes and regulations. **(Less than Significant)**

4.20

MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact MFS-1: The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. **(Less than Significant Impact with Mitigation Incorporated)**

The project would not result in significant impacts to aesthetics, agricultural resources, greenhouse gas emissions, hydrology and water quality, land use, mineral resources, population and housing, public services, recreation, transportation/traffic, and wildfire. With implementation of mitigation measures included in the proposed project and described in the air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, and utilities and service systems sections of this Initial Study, the proposed project would not result in significant adverse environmental impacts. **(Less than Significant with Mitigation Incorporated)**

Impact MFS-2: The project does not have impacts that are individually limited, but cumulatively considerable. **(Less than Significant Impact with Mitigation Incorporated)**

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects “that are individually limited, but cumulatively considerable.” As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means “that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

The project would not impact agricultural, forestry, mineral resources, or wildfires. Therefore, the project would not contribute to cumulative impacts to these resources.

The project is consistent with the growth assumptions in the Ravenswood Specific Plan, which was determined to not result in cumulative population and housing, public services, or recreation impacts, therefore, the project would not result in cumulative population and housing, public services, or recreation impacts. The project’s geology and soils, hazardous materials, and hydrology and water quality impacts are specific to the project site and would not contribute to cumulative impacts. The project site is not located within a scenic view corridor and, therefore, would not contribute to a significant aesthetic impact. The project would require energy, emit criteria air pollutants and GHG emissions, and contribute to the overall regional and global emissions of such pollutants. By its very nature, air pollution, energy, and GHG emissions are largely cumulative impacts. The project-level thresholds identified in Sections 4.3, 4.7, and 4.9 are the basis for determining whether a project’s individual impact is cumulatively considerable. For this reason, the project would have a less than significant cumulative impact on air quality, energy, and greenhouse gas emissions.

The proposed project could result in biological, cultural, and tribal cultural resources impacts during construction. The proposed project is consistent with the growth assumptions and includes measures to avoid and mitigate construction-related impacts to biological and cultural resources impacts in conformance with the Ravenswood Specific Plan, which was determined to not result in cumulative biological and cultural resources impacts; therefore, the project would not result in cumulative biological and cultural resources impacts.

Potential cumulative effects in the areas of construction air quality, construction noise, and water supply are discussed below.

Cumulative Construction Air Quality Impacts

Five pending development projects were identified within 1,000 feet of the project site including: Sobrato Center for Community Services, 2020 Bay Road mixed-use project, EPA Waterfront mixed-use project, Harvest Properties mixed-use project, and Four Corners mixed-use project. Based on the timing of the development approvals for the 2020 Bay Road, EPA Waterfront, Harvest Properties, and Four Corners projects, construction of these projects is not likely to coincide with construction of the proposed project. Therefore, these projects were not included in the cumulative risk assessment

and only Sobrato Center for Community Services project was included. Cumulative community risk impacts associated with the proposed project and on-site wastewater treatment facility option are shown in Table 4.20-1 below.

Table 4.20-1: Cumulative Community Risk Impacts from Combined TAC Sources			
Source	Maximum Cancer Risk (per million)	PM_{2.5} Concentration (µg/m³)	Hazard Index
Proposed Project and On-Site Wastewater Treatment Facility Option Impacts			
Unmitigated Total/Maximum Project (years 0-30)	7.55 (infant)	0.05	<0.02
<i>BAAQMD Single-Source Threshold</i>	<i>>10.0</i>	<i>>0.3</i>	<i>>1.0</i>
Exceed threshold?	No	No	No
Cumulative Sources			
Bay Road, 22,606 ADT	5.21 (infant)	0.21	<0.01
Pulgas Avenue, 15,372 ADT	4.06 (infant)	0.18	<0.01
West Bay Sanitary District (Facility ID #21311, generators) MEI + 1,000 feet	0.02	--	--
Cal Spray Inc. (Facility ID #610, Spray booth # abrasives blasting) MEI 300 feet	--	<0.01	<0.01
Sobrato Center for Community Services Mitigated Construction Emissions – MEI 600 feet south	<10.0	<0.3	<1.0
Combined Sources (unmitigated)	26.82 (infant)	<0.75	<1.05
<i>BAAQMD Cumulative Source Threshold</i>	<i>>100</i>	<i>>0.8</i>	<i>>10.0</i>
Exceed threshold?	No	No	No
Source: Illingworth & Rodkin, Inc. <i>JobTrain Air Quality & Greenhouse Gas Assessment, East Palo Alto</i> . February 17, 2021.			

As shown in Table 4.20-1 and discussed in Section 4.4, Air Quality, the community risks associated with construction of the proposed project and on-site wastewater treatment facility option would not exceed the single-source threshold for maximum increased cancer risk, PM_{2.5} concentrations, or Hazards Index. In addition, the combined unmitigated cancer risk, PM_{2.5} concentrations, or Hazards Index values would not exceed their respective cumulative thresholds when combined with cumulative sources such as area roadways and adjacent development projects. Therefore, the proposed project and on-site wastewater treatment facility option’s contribution to existing cumulative impacts from area roadways would not be cumulatively considerable. **(Less than Significant Cumulative Impact)**

Cumulative Construction Noise Impacts

Cumulative projects in the project vicinity which may share overlapping construction schedules include the Sobrato Center for Community Services (adjacent to the project site at 2519 Pulgas Avenue), and 1804 Runnymede Street (2,500 feet to the southeast). Additionally, a project is

currently under construction at 965 Weeks Street, approximately 1,300 feet southwest of the project site. Assuming a worst-case scenario, all four projects could be constructed simultaneously for a short duration of time.

Based on the location of these cumulative projects, noise from the project at 1804 Runnymede Street would not be audible at sensitive receptors near the project site and noise from the project at 965 Weeks Street would be occasionally audible at residences along Illinois Street and the Ravenswood Family Health Center (the nearest receptors to the proposed project). However, due to the distance between these projects and the nearest receptors to the proposed project, this exposure would be minimal. Cumulative construction noise from the proposed project and the Sobrato Center for Community Services project would dominate the noise environment at the Ravenswood Family Health Center. However, with implementation of MM NOI-1.1, cumulative construction noise impacts be less than significant. The Ravenswood Family Health Center is the nearest sensitive receptor to the proposed project; therefore, cumulative construction noise impacts at the residences on Illinois Street would also be less than significant. **(Less than Significant Cumulative Impact with Mitigation Incorporated)**

Cumulative Water Supply Impacts

The geographic area for cumulative water supply impacts is the City of East Palo Alto service area. The City of East Palo Alto is responsible for supplying potable water to all residential, commercial, and industrial uses and for supplying firewater for fire protection within the service area. Cumulative development includes past, present and future development projects in the East Palo Alto service area.

Cumulative development within the City of East Palo Alto service area will contribute to an increase in water demand. As shown in Table 4.19-1, by 2045 total demand within the City is estimated to be 3,308 gpd, an increase of 1,184 gpd from 2025 demands. As discussed in Section 4.19, Utilities and Service Systems, the City does have sufficient water supplies to meet demand from projected growth and the proposed project during normal years; however, it would not have sufficient water supplies to meet demand from projected growth and the proposed project during single-dry and multiple-dry years in 2025 and beyond. This represents a significant cumulative impact. With implementation of mitigation measure MM UTL-1.1, overall potable water demand within the City, would be reduced and the cumulative impact would be less than significant. **(Less than Significant Cumulative Impact with Mitigation Incorporated)**

Impact MFS-3: The project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. **(Less than Significant Impact with Mitigation Incorporated)**

Under this standard, a change to the physical environmental that might otherwise by minor must be treated as significant if it would cause substantial adverse effects to humans, either directly or indirectly. This factor relates to adverse changes to the environment of human beings generally, and not effects on particular individuals.

The potential for the proposed project to result in changes to the environment that could directly or indirectly affect human beings is evaluated in each section of this Initial Study using the CEQA Checklist. Mitigation measures are identified to reduce all project-related impacts to a less than significant level. No other direct or indirect adverse effects of the project on human beings have been identified. **(Less than Significant Impact with Mitigation Incorporated)**

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

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SECTION 7.0 ACRONYMS AND ABBREVIATIONS

ATCM	Airborne Toxics Control Measure
ADA	Americans with Disabilities Act
ACM	Asbestos containing material
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ADT	Average Daily Traffic Volumes
BEF	Base Flood Elevation
2017 CAP	Bay Area 2017 Clean Air Plan
BAAQMD	Bay Area Air Quality Management District
BCDC	Bay Conservation and Development Commission
BMP	Best Management Practices
Btu	British thermal units
CalARP	California Accidental Release Prevention
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
Caltrans	California Department of Transportation
CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources Information System
CO ₂	Carbon dioxide
CO	Carbon monoxide
CUPA	Certified Unified Program Agency
CFCs	Chlorofluorocarbons
C/CAG	City/County Association of Governments of San Mateo County
CO _{2e}	CO ₂ equivalent
PM ₁₀	Coarse Particulate Matter
CNEL	Community Noise Equivalent Level
CLUP	Comprehensive Land Use Plan

CMP	Congestion Management Program
DNL	Day-Night Level
DEPLAN	2008 Draft Engineering Plan
DTSC	Department of Toxic Substances Control
DRC	Development Review Committee
DPM	Diesel particulate matter
EIR	Environmental Impact Report
EPAPD	East Palo Alto Police Department
EPASD	East Palo Alto Sanitary District
EOP	Emergency Operations Plan
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FTA	Federal Transit Administration
PM _{2.5}	Fine Particulate Matter
FIRMs	Flood Insurance Rate Maps
GWP	Global warming potential
GMP	Groundwater Management Plan
HI	Hazard index
HMP	Hazard Mitigation Plan
HSP	Health and Safety Plan
HOV	High-occupancy vehicle
HFCs	Hydrofluorocarbons
ITE	Institute of Transportation Engineers
kW	Kilowatt
LOS	Level of Service
LID	Low Impact Development
MEI	Maximally exposed individual
MPFPD	Menlo Park Fire Protection District
CH ₄	Methane
MTC	Metropolitan Transportation Commission
MBTA	Migratory Bird Treaty Act
Mpg	Miles per gallon
MGD	Million gallons per day

MND	Mitigated Negative Declaration
MLD	Most Likely Descendant
MRP	Municipal Regional Stormwater NPDES Permit
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act of 1966
NRHP	National Register of Historic Places
NAHC	Native American Heritage Commission
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen oxides
NOD	Notice of Determination
NOI	Notice of Intent
Cal/OSHA	California Occupational Safety and Health
OCRS	Office of Cultural Resources
OPR	Office of Planning and Research
O ₃	Ozone
PARWQCP	Palo Alto Regional Water Quality Control Plant
PM	Particulate matter
PCE	Peninsula Clean Energy
PFCs	Perfluorocarbons
PDAs	Priority Development Areas
PRC	Public Resources Code
REC	Ravenswood Employment Center
RHNA	Regional Housing Needs Allocation
RWQCB	Regional Water Quality Control Board
R&D	Research and development
ROW	Right-of-way
SHMA	Seismic Hazards Mapping Act
SEC	Shoreway Environmental Center
SMP	Site Management Plan
SBWMA	South Bay Waste Management Authority
SFHAs	Special Flood Hazard Areas
SR	State Route
SWPPP	Stormwater Pollution Prevention Plan

SF ₆	Sulfur hexafluoride
SO _x	Sulfur oxide
GHGs	Super-greenhouse gases
SCS	Sustainable Communities Strategy
TACs	Toxic Air Contaminants
TIA	Traffic impact analysis
TOD	Transportation-oriented development
TCRs	Tribal Cultural Resources
RWQCB	Regional Water Quality Control Board
USDA	U.S. Department of Agriculture
UV	Ultraviolet
USTs	Underground storage tanks
USACE	United States Army Corps of Engineers
EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UWMP	Urban water management plan
VMT	Vehicle-miles traveled
V/C	Volume-to-capacity ratio