

# **DRAFT**

## **1431 El Camino Real Initial Study and Environmental Checklist**

*Prepared for:*

**City of Burlingame**  
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Burlingame, California 94010  
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**DECEMBER 2017**



**TABLE OF CONTENTS**

<b><u>Section</u></b>	<b><u>Page No.</u></b>
<b>ACRONYMS AND ABBREVIATIONS.....</b>	<b>III</b>
<b>1 PROJECT OVERVIEW .....</b>	<b>1</b>
1.1 Project Description.....	2
1.2 References.....	4
<b>2 ENVIRONMENTAL IMPACTS.....</b>	<b>5</b>
Determination .....	6
2.1 Aesthetics .....	7
2.2 Agriculture Resources.....	8
2.3 Air Quality .....	9
2.4 Biological Resources .....	20
2.5 Cultural Resources .....	22
2.6 Geology And Soils.....	25
2.7 Greenhouse Gas Emissions.....	28
2.8 Hazards And Hazardous Materials .....	34
2.9 Hydrology And Water Quality.....	38
2.10 Land Use And Planning.....	42
2.11 Mineral Resources .....	43
2.12 Noise .....	44
2.13 Population And Housing.....	50
2.14 Public Services.....	51
2.15 Recreation .....	53
2.16 Transportation / Traffic.....	53
2.17 Utilities And Service Systems .....	59
2.18 Mandatory Findings Of Significance.....	62
<b>APPENDICES</b>	
A CalEEMod Calculations	
B Historical Resources Compliance Report	
C Project Application to the Planning Commission	
D Klaus Multiparking Noise Specifications	

**TABLE OF CONTENTS (CONTINUED)**

**Page No.**

**FIGURES**

1	Regional Map.....	65
2	Vicinity Map.....	67

**TABLES**

1	Thresholds of Significance .....	11
2	Average Daily Unmitigated Construction Emissions.....	14
3	Daily Operational Emissions .....	15
4	Estimated Annual Operational Greenhouse Gas Emissions .....	32
5	Maximum Allowable Noise Levels from Construction Equipment .....	48
6	Trip Generation Summary .....	56



# 1431 El Camino Real Initial Study and Environmental Checklist

## ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
ACM	asbestos-containing material
BAAQMD	Bay Area Air Quality Management District
BMP	best management practice
C/CAG	San Mateo City/County Association of Governments
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CBC	California Building Code
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CH <sub>4</sub>	methane
City	City of Burlingame
CMP	Congestion Management Program
CNEL	community noise equivalent level
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> E	carbon dioxide equivalent
dBA	A-weighted decibel
GHG	greenhouse gas
LBP	lead-based paint
L <sub>eq</sub>	equivalent noise level
LOS	level of service
MM	Mitigation Measure
MT	metric tons
NO <sub>x</sub>	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O <sub>3</sub>	ozone
PM <sub>10</sub>	particulate matter with an aerodynamic resistance diameter of 10 micrometers or less
PM <sub>2.5</sub>	particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less
ROG	reactive organic gas
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
µg/m <sup>3</sup>	micrograms per cubic meter
VdB	vibration decibels

# **1431 El Camino Real Initial Study and Environmental Checklist**

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# 1431 El Camino Real Initial Study and Environmental Checklist

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## 1 PROJECT OVERVIEW

1. **Project Title:** 1431 El Camino Real
2. **Lead Agency Name and Address:** City of Burlingame  
501 Primrose Road  
Burlingame, California 94010
3. **Contact Person and Phone Number:** Catherine Keylon, Senior Planner  
City of Burlingame  
650.558-7250
4. **Report Preparers:** Dudek
5. **Project Location:** 1431 El Camino Real  
Burlingame, California
6. **Assessor's Parcel Number:** 026-013-110
7. **Project Sponsor's Name and Address:** GGH Investment LLC  
110 Robler Avenue  
Hillsborough, California 94010
8. **General Plan Designation:** Medium-High Density Residential  
(R-3 Base District)
9. **Zoning:** R-3

### 10. Description of Project:

The 7,722-square-foot proposed project site is located at 1431 El Camino Real in the City of Burlingame, and consists of Assessor's Parcel Number 026-013-110. The project site is located in an R-3 zoning district and is surrounded by either R-1 or R-3 zoning districts. The proposed 1431 El Camino Real project (project) would include demolition of an existing two-story apartment building with a detached five-car garage structure at the rear, and construction of a 3,858-square-foot, three-story (35 feet tall) residential building in its place.

### 11. Surrounding Land Uses and Setting:

The project site is surrounded by a variety of residential and public service uses, including a school and library to the south, a school to the west, a Caltrain station to the east, and State Route (SR) 82 to the north.

## **1431 El Camino Real Initial Study and Environmental Checklist**

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### **12. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

The proposed project would require Planning Commission approval for condominium permit and a parking variance. A building permit would be required from the City of Burlingame Community Development Department, Building Division. Since building demolition is involved, a demolition permit would be required from the Bay Area Air Quality Management District.

### **1.1 Project Description**

The 7,722-square-foot project site is located at 1431 El Camino Real in the City of Burlingame (City) and consists of Assessor's Parcel Number 026-013-110 (Figure 1, Regional Map; Figure 2, Vicinity Map). According to the City's General Plan, the project site is zoned R-3 Medium-High Density Residential (City of Burlingame 2006–2015). The project would include demolition of an existing two-story apartment building and detached five-car garage structure at the rear. The building currently holds four residential units. The project would involve construction of a new three-story (six-unit) residential building totaling 3,858 square feet and a proposed height of 35 feet. Each unit would be two bedrooms and 2.5 bathrooms, ranging in size from 1,004 square feet to 1,195 square feet. The total proposed floor area would be 9,224 square feet. All entrances to the units would be located on the north-facing (driveway) side of the project site.

The property at 1431 El Camino Real was constructed in 1947, according to San Mateo County Assessor records (County of San Mateo 2017). Therefore, the property would require evaluation to determine if the proposed project has the potential to impact historical resources, as defined by the California Environmental Quality Act (CEQA).

The proposed project would have approximately 600 square feet of common open space in the rear yard and a minimum of 75 square feet of private open space per unit in the form of private balconies. Exterior lighting would include wall sconces at unit entries and possibly some soft lighting at front yard landscaping areas, the mail area, and the rear-yard trash enclosure.

The closest highways to the project site are U.S. Route 101 and Interstate 280. The closest schools are Our Lady of Angels School, approximately 0.3 miles from the project site; Lincoln Elementary School, approximately 0.4 miles from the project site; Roosevelt Elementary School, approximately 0.8 miles from the project site; and Mercy High School, approximately 1 mile from the project site.

# **1431 El Camino Real Initial Study and Environmental Checklist**

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## **Parking and Circulation**

An existing driveway runs along the southeastern edge of the project site and opens up into a paved vehicle parking lot. The project would shift the driveway to the northwestern edge of the site. Each unit would have two on-site parking spaces (for a total of 12 spaces) under each unit that would be provided in the form of mechanical, stacked-vehicle lifts. The vehicle lift would store one vehicle at ground level and one vehicle below ground. The project site is not located within the boundaries of the plan area for the Downtown Specific Plan (City of Burlingame 2010), where parking options, such as lifts, are allowed; a parking variance would be required for the parking lifts. There would also be two ground-level guest parking spaces located at the far end of the driveway, and a service/delivery vehicle space located in front of the rear landscaping.

## **Landscaping and Fencing**

The project would contain landscaping along the front sidewalk and in the rear yard. The front yard would consist of 782.5 square feet of open space, 522 square feet of which would be landscaping and plants. The rear yard would include approximately 600 square feet of open space, with 391 square feet of landscaping. Each unit would have a deck or balcony with approximately 75 square feet of private open space.

At least 75% of the plant material would be specified as drought tolerant. The project would include an irrigation system that would use automatic controllers, evapotranspiration or soil moisture sensor data, and a rain sensor. The project also proposes to relocate one of the young elms adjacent to the sidewalk within the California Department of Transportation (Caltrans) right-of-way. Because this tree is a contributor to the Howard-Ralston Eucalyptus Tree Rows (P-41-002191), which is listed in the National Register of Historic Places (NRHP), the elm would be replanted directly south of its current location to avoid any adverse effects to this resource.

## **Surrounding Land Uses and Setting**

- North – Multi-Family Residential/ Mills Creek and Easton Creek/SR-82
- Northwest – Village Park
- Northeast – Laguna Park
- South – Multi-Family Residential and Single-Family Residential/ Our Lady of Angels School/Burlingame Library Easton Branch
- East – Multi-Family Residential/Caltrain Station (Broadway Station)
- West – Single-Family Residential and Multi-Family Residential/Ray Park/Lincoln Elementary School

# **1431 El Camino Real Initial Study and Environmental Checklist**

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## **Background Documents and Plans**

The proposed project falls under the influence of the following City planning documents and policies:

- The City of Burlingame General Plan
- The City of Burlingame Municipal Code

## **Entitlements and Required Approvals**

- Design review and Condominium Permit for construction of a new three-story, six-unit townhouse building
- Parking variance for use of mechanical parking lifts to provide the required parking spaces
- Encroachment permit from Caltrans due to the shifting of curb cuts within a state right-of-way and added landscaping
- Bay Area Air Quality Management District demolition permit
- Storm Water Pollution Prevention Plan applied for prior to start of construction

## **1.2 References**

City of Burlingame. 2006–2015. City of Burlingame General Plan, Zoning. June 2016. Accessed August 18, 2017. <https://www.burlingame.org/modules/showdocument.aspx?documentid=13356>.

City of Burlingame. 2010. Burlingame Downtown Specific Plan. Adopted October 4, 2010, as amended through May 2, 2016. <http://www.burlingame.org/modules/showdocument.aspx?documentid=13840>.

County of San Mateo. 2017. Property Details. Search conducted by Dudek in 2017 for APN 026-013-110.

# 1431 El Camino Real Initial Study and Environmental Checklist

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## 2 ENVIRONMENTAL IMPACTS

### Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this project involving at least one impact that is a “Potentially Significant Impact,” as indicated by the checklists under each issue area, below.

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

# 1431 El Camino Real Initial Study and Environmental Checklist

## DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
\_\_\_\_\_  
Signature

WILLIAM D. MEERER  
Printed Name

12/4/2017  
\_\_\_\_\_  
Date

CITY OF BURLINGAME  
For



# 1431 El Camino Real Initial Study and Environmental Checklist

## 2.1 Aesthetics

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) 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"/>

### Discussion

- a) **Less than Significant Impact.** The project site is located along El Camino Real, also known as State Route 82, which is parallel to Highway 101. The Scenic Roads and Highways Element of the City of Burlingame General Plan notes that portions of SR-82 are designated as County Scenic Road, and some portions (directly adjacent to the project site) are designated as a Local Scenic Route (City of Burlingame 1975). The General Plan emphasizes the importance of the heritage elm and eucalyptus trees that form a tunnel of foliage and give Burlingame a distinctive image. The project proposes to relocate one of the young elms adjacent to the sidewalk within the Caltrans right-of-way. Because this tree is a contributor to the NRHP-listed Howard-Ralston Eucalyptus Tree Rows (P-41-002191), it will be replanted directly south of its current location to avoid any adverse effects to this resource. The project would be constructed on a developed site surrounded by existing buildings, and would not involve construction of any structures that would impact scenic vistas; therefore, the impact would be less than significant.
- b) **No Impact.** The proposed project is located along El Camino Real, which is not designated as a State Scenic Highway. The closest State Scenic Highway is Interstate 280 (Caltrans 2017), and the project site is not visible from this roadway. Therefore, there would be no impact to scenic resources within a Scenic Highway.
- c) **Less than Significant Impact.** The proposed project would alter the visual character of the project site but would not degrade it. The additional story would increase the height of the building to 35 feet. The extended building and added landscaping would replace the existing paved parking area, which would improve the general aesthetic. The vehicle lifts would also remove vehicles from view. The proposed project is similar in mass,

# 1431 El Camino Real Initial Study and Environmental Checklist

bulk, and character to existing adjacent buildings. Therefore, impacts to visual character would be less than significant.

- d) Less than Significant Impact.** The project site and surrounding urban environment are currently developed with existing sources of light and glare. The proposed project would include exterior lighting along portions of the building and within the parking and loading areas. The project would be required to comply with exterior lighting regulations of Burlingame Municipal Code Chapter 18.16.030, which requires that the cone of light be kept entirely on the property and requires use shielded light fixtures (City of Burlingame 2013). Therefore, the project would result in a less-than-significant impact related to light and glare.

## References

Caltrans (California Department of Transportation). 2017. "California Scenic Highway Mapping System: San Mateo County." Accessed August 17, 2017. [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/).

City of Burlingame. 1975. City of Burlingame General Plan, Scenic Roads and Highways Element. September 15, 1975.

City of Burlingame. 2013. City of Burlingame Municipal Code, Title 18 –Building Construction.

## 2.2 Agriculture Resources

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

# 1431 El Camino Real Initial Study and Environmental Checklist

## Discussion

- a) **No Impact.** The proposed project site is located within a fully developed and urban area. As shown on the California Important Farmland Map, the site does not contain any prime or unique farmland or any farmland of statewide significance (DOC 2015). There would be no impacts to farmland.
- b) **No Impact.** The proposed project site is zoned R-3, Medium-High Density Residential, in the General Plan and does not allow for agricultural uses. The project site is designated “Urban and Built-Up Land” and is not within a Williamson Act contract (DOC 2006/2007). Therefore, there would be no impacts to zoning.
- c) **No Impact.** The project site does not contain any farmland and would not result in the conversion of farmland to other uses. No impact would occur.

## References

DOC (California Department of Conservation). 2006/2007. “San Mateo County Williamson Act FY 2006/2007. [ftp://ftp.consrv.ca.gov/pub/dlrp/wa/SanMateo\\_06\\_07\\_WA.pdf](ftp://ftp.consrv.ca.gov/pub/dlrp/wa/SanMateo_06_07_WA.pdf).

DOC. 2015. “California Important Farmland: 1984–2016.” [map]. Accessed August 18, 2017. <https://maps.conservation.ca.gov/dlrp/ciftimeseries>.

## 2.3 Air Quality

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.</i>				
<i>Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## 1431 El Camino Real Initial Study and Environmental Checklist

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
e) Frequently create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Analysis

The Bay Area Air Quality Management District (BAAQMD) adopted updated CEQA Air Quality Guidelines, including new thresholds of significance in June 2010, and revised them in May 2011. The CEQA Air Quality Guidelines advise lead agencies on how to evaluate potential air quality impacts, including establishing quantitative and qualitative thresholds of significance. The BAAQMD resolutions adopting and revising the significance thresholds in 2011 were set aside by a judicial writ of mandate on March 5, 2012. In May 2012, BAAQMD updated its CEQA Air Quality Guidelines to continue to provide direction on recommended analysis methodologies, but without recommended quantitative significance thresholds (BAAQMD 2012). On August 13, 2013, the First District Court of Appeal ordered the trial court to reverse the judgment and upheld the BAAQMD's CEQA thresholds. The BAAQMD CEQA Air Quality Guidelines were recently re-released in May 2017 and include the same thresholds as in the 2010 and 2011 Guidelines for criteria air pollutants, toxic air contaminants (TACs), and greenhouse gases (GHGs) (BAAQMD 2017a). The Air Quality Guidelines also address the December 2015 Supreme Court's opinion (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369). The BAAQMD significance thresholds are summarized in Table 1.

In general, the BAAQMD significance thresholds for reactive organic gases (ROGs), oxides of nitrogen (NO<sub>x</sub>), particulate matter with an aerodynamic resistance diameter of 10 micrometers or less (PM<sub>10</sub>), particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less (PM<sub>2.5</sub>), and carbon monoxide (CO) address the first three air quality significance criteria. According to the BAAQMD, these thresholds are intended to maintain ambient air quality concentrations of these criteria air pollutants below state and federal standards and to prevent a cumulatively considerable contribution to regional nonattainment with ambient air quality standards. The TAC thresholds (cancer and noncancer risks) and local CO thresholds address the fourth significance criterion, and the BAAQMD odors threshold addresses the fifth significance criterion.

# 1431 El Camino Real Initial Study and Environmental Checklist

**Table 1  
Thresholds of Significance**

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub>	82 (exhaust)	82	15
PM <sub>2.5</sub>	54 (exhaust)	54	10
PM <sub>10</sub> /PM <sub>2.5</sub> (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average, 20.0 ppm (1-hour average)	
Risks and Hazards (Individual Project)	Compliance with Qualified Community Risk Reduction Plan or Increased cancer risk of >10.0 in a million Increased noncancer risk of >1.0 Hazard Index (Chronic or Acute) Ambient PM <sub>2.5</sub> increase >0.3 µg/m <sup>3</sup> annual average Zone of Influence: 1,000-foot radius from property line of source or receptor		
Risks and Hazards (Cumulative)	Compliance with Qualified Community Risk Reduction Plan or Cancer risk of >100 in a million (from all local sources) Noncancer risk of >10.0 Hazard Index (chronic, from all local sources) Ambient PM <sub>2.5</sub> >0.8 µg/m <sup>3</sup> annual average (from all local sources) Zone of Influence: 1,000-foot radius from property line of source or receptor		
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous material located near receptors or new receptors located near stored or used acutely hazardous materials considered significant	
Odors	None	Five confirmed complaints to BAAQMD per year averaged over 3 years	

**Source:** BAAQMD 2017 (see Footnote 9)

lbs/day = pounds per day; tons/year = tons per year; ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter; ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; PM<sub>2.5</sub> = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; CO = carbon monoxide

- a) Less than Significant Impact.** An area is designated as “in attainment” when it is in compliance with the federal and/or state standards. These standards are set by the U.S. Environmental Protection Agency and California Air Resources Board for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or public welfare, with a margin of safety. The project site is located within the San Francisco Bay Area Air Basin, which is designated as non-attainment for the federal 8-hour ozone (O<sub>3</sub>) and 24-hour PM<sub>2.5</sub> standards. The area is in attainment or unclassified for all other federal standards. The area is designated as non-attainment for state standards for 1-hour and 8-hour O<sub>3</sub>, 24-hour PM<sub>10</sub>, annual PM<sub>10</sub>, and annual PM<sub>2.5</sub> (BAAQMD 2017b).

## 1431 El Camino Real Initial Study and Environmental Checklist

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On April 19, 2017, the BAAQMD adopted the Spare the Air: Cool The Climate Final 2017 Clean Air Plan (BAAQMD 2017b). The 2017 Clean Air Plan provides a regional strategy to protect public health and the climate. The BAAQMD 2017 Guidelines identify a three-step methodology for determining a project's consistency with the current Clean Air Plan. If the responses to these three questions (see below) can be concluded in the affirmative, and those conclusions are supported by substantial evidence, then the BAAQMD considers the project to be consistent with air quality plans prepared for the Bay Area.

The first question to be assessed in this methodology is, "Does the project support the goals of the Air Quality Plan" (currently the 2017 Clean Air Plan)? The BAAQMD-recommended measure for determining project support for these goals is consistency with BAAQMD thresholds of significance. If a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation measures, the project would be consistent with the goals of the 2017 Clean Air Plan. As indicated in the following discussion with regard to air quality impact questions b) and c), the project would result in less-than-significant construction emissions and would not result in long-term adverse air quality impacts. Therefore, the project would be considered to support the primary goals of the 2017 Clean Air Plan and, therefore, consistent with the current Clean Air Plan.

The second question to be assessed in this consistency methodology is, "Does the project include applicable control measures from the Clean Air Plan?" The 2017 Clean Air Plan contains 85 control measures aimed at reducing air pollution in the Bay Area. Projects that incorporate all feasible air quality plan control measures are considered to be consistent with the Clean Air Plan. The control strategies of the 2017 Clean Air Plan include measures in the categories of stationary sources, the transportation sector, the buildings sector, the energy sector, the agriculture sector, natural and working lands, the waste sector, the water sector, and super-GHG pollutant measures. Depending on the control measure, the tools for implementation include leveraging the BAAQMD rules and permitting authority; regional coordination and funding; and working with local governments to facilitate best policies in building codes, outreach and education, and advocacy strategies. Since the proposed project is required to comply with all applicable BAAQMD rules and would incorporate energy-efficiency and green building measures in compliance with state standards and/or local building codes, the project would include applicable control measures from the 2017 Clean Air Plan.

The third question to be assessed in this consistency methodology is, "Does the project disrupt or hinder implementation of any control measures from the Clean Air Plan?" Examples of how a project may cause the disruption or delay of control measures include

## 1431 El Camino Real Initial Study and Environmental Checklist

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a project that precludes an extension of a transit line or bike path, or proposes excessive parking beyond parking requirements. Since development of the townhomes for the project would not include physical changes that could create any barriers or impediments to planned or future improvements to transit or bicycle facilities in the area, the proposed project would not hinder implementation of Clean Air Plan control measures.

In summary, the responses to all three of the questions with regard to Clean Air Plan show that the proposed project would not conflict with or obstruct implementation of the current Clean Air Plan. The impact would be less than significant.

- b) **Less than Significant Impact.** The California Emissions Estimator Model (CalEEMod) Version 2016.3.1 was used to estimate emissions from construction and operation of the proposed project. CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant and GHG emissions associated with the construction and operational activities from a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters, including the proposed project land use type and size and construction schedule, were based on information provided by the project applicant or model defaults when project-specific information was not available.

**Construction.** The project would include demolition of a 4,102-square-foot two-story apartment building and detached five-car garage structure at the rear and the construction of a new 3,858-square-foot three-story residential building on the 7,722-square-foot lot. Construction is anticipated to begin in April 2018 and end in July 2019. Standard construction methods would be employed for building construction. Sources of emissions would include off-road construction equipment exhaust, on-road vehicle exhaust (i.e., material delivery trucks, demolition haul trucks, and worker vehicles), entrained road dust, fugitive dust associated with site preparation and grading activities, and paving and architectural coating. Detailed assumptions associated with project construction are included in Appendix A.

Average daily emissions were computed by dividing the total construction emissions by the number of active construction days, which were then compared to the BAAQMD construction thresholds of significance. Table 2 shows average daily construction emissions of O<sub>3</sub> precursors (ROG and NO<sub>x</sub>), PM<sub>10</sub> exhaust, and PM<sub>2.5</sub> exhaust during project construction.<sup>1</sup>

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<sup>1</sup> Fuel combustion during construction and operations would also result in the generation of sulfur dioxide (SO<sub>2</sub>) and CO. These values are included in Appendix A. However, since the San Francisco Bay Area Air Basin is in attainment of these pollutants and the BAAQMD has not established a quantitative mass-significance threshold

## 1431 El Camino Real Initial Study and Environmental Checklist

**Table 2**  
**Average Daily Unmitigated Construction Emissions**

Year	ROG	NO <sub>x</sub>	PM <sub>10</sub> Exhaust	PM <sub>2.5</sub> Exhaust
	<i>Pounds per Day</i>			
2018–2019 Construction	1.5	11.8	0.7	0.7
<i>BAAQMD Construction Thresholds</i>	<i>54</i>	<i>54</i>	<i>82</i>	<i>54</i>
<b>Exceed Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

**Notes:** The values shown are average daily emissions based on total overall construction emissions in tons, converted to pounds, and divided by 326 active work days. This calculation is included in Appendix A.

ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter; BAAQMD = Bay Area Air Quality Management District

As shown in Table 2, construction of the proposed project would not exceed BAAQMD significance thresholds. Criteria air pollutant emissions during construction would be less than significant. Although the BAAQMD does not have a quantitative significance threshold for fugitive dust, the BAAQMD’s CEQA Guidelines recommend that projects determine the significance for fugitive dust through application of best management practices (BMPs). The project contractor would be required as conditions of approval to implement the following BMPs from BAAQMD:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
5. All 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.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

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for comparison, these are not included in the project-generated emissions tables in this document. The BAAQMD does have screening criteria for operational localized CO, which are discussed in more detail below.



## 1431 El Camino Real Initial Study and Environmental Checklist

7. All 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.
8. A publicly visible sign shall be posted with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Implementation of the required BMPs would ensure air quality and fugitive-dust-related impacts associated with construction would remain less than significant.

**Operations.** The project would involve demolition of four existing apartments and construction of six new townhomes. Operation of the project would generate criteria pollutant (including ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>) emissions from mobile sources (vehicular traffic), area sources (consumer products, architectural coatings, landscaping equipment), and energy sources (natural gas appliances, space and water heating). CalEEMod was used to estimate daily emissions from the operational sources for the existing uses to be demolished and for the project uses to be developed. Table 3 summarizes the daily mobile, energy, and area emissions of criteria pollutants that would be generated by project development, as well as emissions of existing land uses to be demolished, and compares the net increase in emissions to BAAQMD operational thresholds.

**Table 3**  
**Daily Operational Emissions**

Source	ROG	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
	Pounds per Day			
<i>Project Emissions</i>				
Area	0.2	0.1	0.0	0.0
Energy	0.0	0.0	0.0	0.0
Mobile	0.1	0.2	0.2	0.1
<i>Total Project Emissions</i>	<i>0.3</i>	<i>0.4</i>	<i>0.2</i>	<i>0.1</i>
<i>Existing Use Emissions</i>				
Area	0.1	0.0	0.0	0.0
Energy	0.0	0.0	0.0	0.0
Mobile	0.1	0.2	0.1	0.0
<i>Total Existing Use Emissions</i>	<i>0.2</i>	<i>0.2</i>	<i>0.1</i>	<i>0.0</i>
<b>Net Increase (Project Minus Existing)</b>	<b>0.1</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>
<i>BAAQMD Operational Thresholds</i>	<i>54</i>	<i>54</i>	<i>82</i>	<i>54</i>
<b>Exceed Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

**Notes:** The values shown are the maximum summer or winter daily emissions results from CalEEMod, included in Appendix A. Total emissions may not sum exactly due to rounding. Project emissions are based on the "Mitigated" CalEEMod outputs in order to incorporate indoor/outdoor

## 1431 El Camino Real Initial Study and Environmental Checklist

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water use reduction per CALGreen and exceeding 2013 Title 24 by 28% for residences to approximate 2016 Title 24 compliance, even though compliance with standards would not be considered actual mitigation. No fireplaces or woodstoves were assumed for existing uses, and only gas fireplaces were assumed for the project.

ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter; BAAQMD = Bay Area Air Quality Management District

As indicated in Table 3, project-related operational emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> would not exceed BAAQMD significance thresholds during operations, and, thus, the proposed project would have a less-than-significant impact in relation to regional operational emissions.

For localized CO concentrations, according to the BAAQMD thresholds (BAAQMD 2017a), a project would result in a less-than-significant impact if the following screening criteria are met:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The change in project uses would generate minimal new traffic trips and would comply with the BAAQMD screening criteria. Accordingly, project-related traffic would not exceed CO standards and, therefore, no further analysis was conducted for CO impacts. This CO emissions impact would be less than significant on a project level and cumulative basis.

- c) **Less than Significant Impact.** Past, present, and future development projects may contribute to the region's adverse air quality impacts on a cumulative basis. Per BAAQMD's CEQA Guidelines (BAAQMD 2017a), by its nature, air pollution is largely a cumulative impact; no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. In developing thresholds of significance for air pollutants, BAAQMD considered the emissions levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be considered cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, if the proposed project's emissions are below the

## 1431 El Camino Real Initial Study and Environmental Checklist

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BAAQMD thresholds or screening criteria, then the proposed project's cumulative impact would be less than significant.

As described in criterion b), above, criteria pollutant emissions generated by short-term construction and long-term operations of the project would not exceed the BAAQMD's significance thresholds. Thus, the project would have a less-than-significant cumulative impact in relation to regional emissions. In addition, project-related traffic would not exceed the BAAQMD CO screening criteria and would result in a less-than-significant cumulative impact for localized CO.

- d) **Less than Significant Impact.** The BAAQMD has adopted project and cumulative thresholds for three risk-related air quality indicators for sensitive receptors: cancer risks, noncancer health effects, and increases in ambient air concentrations of PM<sub>2.5</sub>. These impacts are addressed on a localized rather than regional basis, and are specific to the sensitive receptors identified for the project. Sensitive receptors are groups of individuals, including children, the elderly, the acutely ill, and the chronically ill, who may be more susceptible to health risks due to chemical exposure. Sensitive-receptor population groups are likely to be located at hospitals, medical clinics, schools, playgrounds, childcare centers, residences, and retirement homes (BAAQMD 2017a). The proposed project site is adjacent to El Camino Real and proximate to existing residential development in each direction.

“Incremental cancer risk” is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the standard Office of Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. A TAC that would potentially be emitted during construction activities would be diesel particulate matter, emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to California Air Resources Board air toxic control measures to reduce diesel particulate matter emissions. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with the project) (OEHHA 2015). Thus, the duration of proposed construction activities (approximately 14 months) would only constitute a small percentage of the total 30-year exposure period. Regarding long-term operations, the proposed project would not result in non-permitted stationary sources that would emit air pollutants or TACs.

## 1431 El Camino Real Initial Study and Environmental Checklist

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For demolition activities, structures to be demolished sometimes contain asbestos-containing materials (ACMs). Demolition of existing buildings and structures would be subject to BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing). BAAQMD Regulation 11, Rule 2 is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of ACM generated or handled during these activities (BAAQMD 1998). All ACMs found on site must be removed prior to demolition or renovation activity in accordance with BAAQMD Regulation 11, Rule 2, including specific requirements for surveying, notification, removal, and disposal of ACMs. The project is required to comply with BAAQMD Regulation 11, Rule 2, ensuring that ACMs, if present, would be removed and disposed of appropriately and safely. Complying with BAAQMD Regulation 11, Rule 2 would minimize the release of airborne asbestos emissions; therefore, demolition activity would result in a less-than-significant impact to nearby sensitive receptors.

Notably, in the *California Building Industry Association v. Bay Area Air Quality Management District* case, decided in 2015, the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing environmental conditions might impact a project's occupants, except where the project would significantly exacerbate an existing environmental condition. Since the project would not introduce TAC sources that would exacerbate existing environmental conditions, it is not required to assess the impact of the environment on the residents at the proposed townhomes. However, for disclosure purposes, El Camino Real is not considered a high-volume roadway for an urban setting (i.e., less than 100,000 annual average daily trips). Based on the BAAQMD Highway Screening Analysis Tool (BAAQMD 2011), the maximum cancer risk, chronic hazard index, acute hazard index, and PM<sub>2.5</sub> concentrations at 10 feet from El Camino Real would be 10.5 in 1 million for maximum cancer risk, 0.0 for chronic hazard index, 0.0 for acute hazard index, and 0.2 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) for PM<sub>2.5</sub> concentrations. These values would be less than the BAAQMD threshold of 100 in 1 million for cumulative cancer risk, the non-cancer hazard indices of 10, and a PM<sub>2.5</sub> concentration threshold of 0.8  $\mu\text{g}/\text{m}^3$ .

In summary, the project would not expose sensitive receptors to substantial pollutant concentrations or health risk during construction or operations, and this impact would be less than significant on a project level and cumulative basis.

- e) **No Impact.** BAAQMD has identified typical sources of odor in its CEQA Air Quality Guidelines (BAAQMD 2017a), a few examples of which include manufacturing plants, rendering plants, coffee roasters, wastewater treatment plants, sanitary landfills, and solid waste transfer stations. Sources that generate objectionable odors must comply with air

## 1431 El Camino Real Initial Study and Environmental Checklist

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quality regulations, but the public's sensitivity to locally produced odors often exceeds regulatory thresholds. The proposed project would not include uses that have been identified by BAAQMD as potential sources of objectionable odors. There would be no impact related to potential odors.

### References

- BAAQMD (Bay Area Air Quality Management District (BAAQMD)). 1998. Regulation 11, Hazardous Pollutants, Rule 2, Asbestos Demolition, Renovation and Manufacturing. Site aAccessed August 15, 2017. <http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/reg-11/rg1102.pdf>. BAAQMD. 2011. Highway Screening Analysis Tool. Available at: <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools>.
- BAAQMD. 2012. California Environmental Quality Act Air Quality Guidelines. Updated May 2012. [http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines\\_Final\\_May%202012.ashx?la=en](http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines_Final_May%202012.ashx?la=en).
- BAAQMD. 2017a. California Environmental Quality Act Air Quality Guidelines. Updated May 2017. [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en).
- BAAQMD. 2017b. Spare the Air: Cool the Climate - Final 2017 Clean Air Plan. April 19, 2017. [http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a\\_-proposed-final-cap-vol-1-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en).
- OEHHA (Office of Environmental Health Hazard Assessment). 2015. Air Toxics Hot Spot Program – Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments. February 2015. <http://oehha.ca.gov/media/downloads/crn/2015guidancemanual.pdf>.

# 1431 El Camino Real Initial Study and Environmental Checklist

## 2.4 Biological Resources

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or state-protected wetlands, through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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 type="checkbox"/>	<input checked="" type="checkbox"/>
f) Fundamentally 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"/>

### Discussion

- a) **No Impact.** The project site is fully developed as an existing four-unit (two-story) apartment building and detached five-car garage structure in an urban area. The site is not expected to support any candidate or special-status species, or species identified for protection in local, regional, or national wildlife plans or policies or associated habitat for such species; thus, there would be no impacts to these species.

## 1431 El Camino Real Initial Study and Environmental Checklist

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- b) **No Impact.** The project site does not support any riparian habitat or any sensitive communities identified in local regional, state, or national plans or policies; thus, there would be no impacts to these resources.
- c) **No Impact.** The proposed project site is fully developed and does not support any wetlands eligible for state or federal protection; thus, there would be no impacts to these resources.
- d) **No Impact.** The proposed project site is located in a fully urbanized area and is surrounded by fully developed properties with commercial and industrial uses. The project site and vicinity are not expected to support wildlife migratory corridors or nursery sites. Construction and operation of the proposed project is not expected to inhibit movement of any native wildlife species; thus, there would be no impacts to these species.
- e) **No Impact.** As described in response a), above, the project would not involve any impacts to biological resources due to the developed nature of the site and surrounding areas. The proposed project would include on-site landscaping; low-water-use plants would be installed for at least 75% of the plant area, and plants would be grouped by hydrozones. The proposed project would include “soft” landscaping for common open space. The project also proposes to relocate one of the young elms adjacent to the sidewalk within the Caltrans right-of-way. Because this tree is a contributor to the NRHP-listed Howard-Ralston Eucalyptus Tree Rows (P-41-002191), however, it would be replanted directly south of its current location to avoid any adverse effects to this resource. No impacts due to conflicts with local policies for protection of biological resources would occur.
- f) **No Impact.** The project site is not located in any area subject to a local, regional, or state Habitat Conservation Plan or Natural Community Conservation Plan area. The nearest habitat conservation plan area to the project site is the San Bruno Mountain Habitat Conservation Plan, approximately 11 miles away (CDFW 2017). Therefore, the proposed project would not conflict with the conservation goals and objectives of any such plans.

### Reference

CDFW (California Department of Fish and Wildlife). 2017. California Regional Conservation Plans, June 2017. Accessed August 25, 2017. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>.

# 1431 El Camino Real Initial Study and Environmental Checklist

## 2.5 Cultural Resources

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

a) **No Impact.** The proposed project site is occupied by a four-unit residential building with a detached five-car garage structure at the rear. These two structures would be demolished and replaced with a six-unit, three-story residential building. The property was constructed in 1947. As described in the Historical Resources Compliance Report (see Appendix B), the property was evaluated for historical significance in consideration of the NRHP, California Register of Historical Resources, and City designation criteria and integrity requirements. No important historical associations were identified for the project site, and it does not appear to be significant for its architecture due to a lack of requisite integrity.

However, one NRHP-listed resource is located within the project site: two young elm trees that contribute to the Howard-Ralston Eucalyptus Tree Rows, a 1.76-mile-long landscaping effort dating from 1873 to 1876 that consists of a row of trees lining each side of the historic El Camino Real in Burlingame. The project proposes to relocate one tree from this historic tree row so it is not adversely affected during widening of the driveway. The project has an action plan to ensure that relocation of the tree does not impact this resource. Therefore, the project would not cause any substantial change to a historic resource, and no impact would occur.

b, c, d) **Less than Significant Impact with Mitigation Incorporated.** The project would involve demolition of existing buildings and construction of a new building within a fully developed and previously disturbed site. No archaeological resources were identified



## 1431 El Camino Real Initial Study and Environmental Checklist

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within the project site or immediate vicinity as a result of the California Historical Resources Information System records search and Native American correspondence. However, it is always possible that intact archaeological deposits are present at subsurface levels. Based on geomorphological evidence and known buried cultural deposits in the Bay Area, the project site would be treated as potentially sensitive for archaeological resources. The project site is situated within Quaternary Alluvial deposits (generally less than 11,000 years old), which are generally considered to have formed too recently to support the presence of paleontological deposits. Therefore, the area is considered to be of low sensitivity for encountering significant paleontological deposits (Appendix B). However, Mitigation Measure (MM) CU-1, MM-CU-2, and MM-CU-3 would ensure potential impacts to unanticipated archaeological and paleontological resources and human remains would be less than significant.

**MM-CU-1 Unanticipated Discovery of Archaeological Resources.** All construction crew members shall be alerted to the potential to encounter sensitive archaeological material. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether additional study is warranted. Prehistoric archaeological deposits may be indicated by the presence of discolored or dark soil, fire-affected material, concentrations of fragmented or whole marine shell, burned or complete bone, non-local lithic materials, or a characteristic observed to be atypical of the surrounding area. Common prehistoric artifacts may include modified or battered lithic materials; lithic or bone tools that appeared to have been used for chopping, drilling, or grinding; projectile points; fired clay ceramics or non-functional items; and other items. Historic-age deposits are often indicated by the presence of glass bottles and shards, ceramic material, building or domestic refuse, ferrous metal, or old features such as concrete foundations or privies. Depending on the significance of the find under CEQA (14 CCR 15064.5[f]; Public Resources Code Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted.

## 1431 El Camino Real Initial Study and Environmental Checklist

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**MM-CU-2 Unanticipated Discovery of Human Remains.** In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the county coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the county coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the county coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete his/her inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

**MM-CU-3 Unanticipated Discovery of Paleontological Resources.** Paleontological resources are limited, nonrenewable resources of scientific, cultural, or educational value and are afforded protection under state laws and regulations (CEQA). Paleontological resources are explicitly afforded protection by CEQA, specifically in Section V(c) of CEQA Guidelines Appendix G, the Environmental Checklist Form, which addresses the potential for adverse impacts to “unique paleontological resource[s] or site[s] or ... unique geological feature[s]” (14 CCR 15000 et seq.). Further, CEQA provides that, generally, a resource shall be considered “historically significant” if it has yielded or may be likely to yield information important in prehistory (14 CCR 15064.5[a][3][D]). In the event that paleontological resources (silicified shell, bone, or other features) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified paleontologist can evaluate the significance of the find. This analysis shall comply with guidelines and significance criteria specified by the Society of Vertebrate Paleontology. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted.

# 1431 El Camino Real Initial Study and Environmental Checklist

## 2.6 Geology And Soils

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) 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"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as it may be revised), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

**a) i) No Impact.** No active or potentially active faults have been identified on or near the project site. In addition, the project site is not located within an Alquist–Priolo Earthquake Fault Zone. The nearest active earthquake fault zone (i.e., evidence of displacement within the past 11,000 years) is the San Andreas Fault, located approximately 2 miles southwest of the site. In addition, the active Hayward Fault is located approximately 15 miles to the east of Burlingame, at the base of the East Bay Hills. The closest potentially active fault (i.e., evidence of displacement within the past 1.6 million years) is the Serra Fault, which is associated with the San Andreas Fault and located approximately 0.8 miles southwest of the project site (CDMG 1982; CGS 2010;

## 1431 El Camino Real Initial Study and Environmental Checklist

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City of Burlingame 1975). Therefore, no impacts related to fault rupture would occur in association with construction of the project.

- a) ii) iii) c) Less than Significant Impact.** Based on the proximity of the San Andreas and Hayward Faults, moderate to strong seismically induced ground shaking may occur at the project site. To address these seismic concerns, a geotechnical/soils report would be completed prior to final project design, in accordance with Burlingame Municipal Code, Title 18 – Building Construction, Chapters 18.08 – Building Code, and 18.20 – Grading, Excavation, Fills. Chapter 18.08 pertains to adoption of the 2016 California Building Code (CBC), Part 2, Volume 1 as the City Building Code. The geotechnical/soils report would develop seismic design parameters for the project site using the online U.S. Geological Survey Seismic Design Calculator, which is based on 2016 CBC Seismic Parameters. The structural design of the proposed structure would be based on these seismic design parameters, such that direct seismically induced ground shaking impacts would be less than significant.

Potential secondary seismic hazards that could affect the project include liquefaction, lateral spreading, seismically induced settlement, and differential compaction. Based on the City General Plan, Seismic Safety Element, the industrial area and waterfront commercial district of Burlingame, which is located on fill and Bay Mud within the historic marshland area, is especially prone to differential settlement, liquefaction, lateral spreading, and increased seismically induced ground accelerations. The project site is not located within this area of fill. However, the project site is located on alluvium, consisting primarily of gravel, sand, and clay. Localized lenses of water-bearing sands and gravels within the alluvium could potentially result in liquefaction at the site (City of Burlingame 1975). Similar to direct seismically induced ground shaking, the City-mandated geotechnical/soils report would address these potential secondary seismic hazards. Final design of the project would comply with the 2016 CBC, which includes specific provisions for structural seismic safety. Therefore, compliance with CBC regulations and recommendations by the project-specific geotechnical report would result in less-than-significant secondary seismic impacts associated with construction of the project.

- a) iv) No Impact.** The topography of the project site slopes gently to the northeast. Based on site observations completed for the project, the ground surface elevation varies from 15 feet along the street, to 19 feet at the rear of the property. Similarly, the surrounding area is gently sloping. Based on the City General Plan, Seismic Safety Element, the site is not located in a landslide risk area (City of Burlingame 1975). Therefore, no landslides are anticipated in the vicinity of the site.

## 1431 El Camino Real Initial Study and Environmental Checklist

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As discussed for a) ii) iii) c), above, a geotechnical/soils report would be completed prior to final project design. Depending on the results of the soils report, excavation of incompetent soils may be required in the area of the proposed structural footprint. Project excavations would likely be limited to shallow (i.e., generally 2 to 4 feet or less) soil excavation. In the event that such excavation is necessary, this area would be backfilled with compacted soil prior to excavations for structural footings. Based on the Project Application to the Planning Commission, dated September 30, 2016, grading would involve less than 500 cubic yards of material, indicating that substantial excavation of soils is not anticipated (see Appendix C). As a result, potential slope instability associated with on-site excavations would not occur. The project would not expose people or structures to potential substantial adverse effects related to landslides and no impacts would occur.

- b) Less than Significant Impact.** The project would include demolition of an existing apartment building and construction of six new townhomes (as one building). Removal of existing paved areas and project grading/excavations would potentially result in short-term erosion-induced siltation in off-site drainages and waterways. However, a Storm Water Pollution Prevention Plan (SWPPP) would be implemented during construction. BMPs included in the San Mateo Countywide Water Pollution Prevention Program (City/County Association of Governments of San Mateo County 2015) and Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (San Francisco Bay Region RWQCB 2015) would be implemented during construction. These BMPs would include temporary erosion controls to stabilize all denuded areas until permanent erosion controls are established. Construction-related BMPs would include use of sediment traps such as silt fences, check dams, and earthen dikes or berms; diversion of runoff around exposed areas; protection of adjacent properties using sediment barriers or filters; and stabilization of the designated access point.

The SWPPP would include appropriate erosion-control and water-quality-control measures during site demolition, grading, and construction. Implementation of the SWPPP for the project would minimize short-term erosion impacts. Long-term impacts of the project would not result in erosion, since the soils would be covered by the proposed building, pavement, vegetation, and landscaping. Therefore, construction impacts related to erosion would be less than significant.

- d) Less than Significant Impact.** Expansive soils are those that possess “shrink/swell” characteristics, and are usually fine-grained clay sediments that expand and contract due to moisture and desiccation. In the absence of proper structural engineering, expansive soils can crack and damage structural foundations. As discussed for a) ii) iii) c), above, a geotechnical/soils report would be completed prior to final project design. Consistent with

## **1431 El Camino Real Initial Study and Environmental Checklist**

the Burlingame Municipal Code and the 2016 CBC, in the event that soil testing indicates that expansive soils are present, the upper few feet of expansive soil would be excavated and replaced with non-expansive soils. Alternatively, the building foundation could be engineered to accommodate expansive soils without resulting in distress to the foundation. Therefore, less-than-significant impacts related to expansive soils would result from construction of the project.

- e) **No Impact.** The project would not include installation of septic tanks, since proposed project facilities would connect to City sewer services. Therefore, the capability of the soils to support the operation of such tanks was not evaluated. No impact would occur in association with construction of the project.

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### **2.7 Greenhouse Gas Emissions**

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a) Generate greenhouse gas 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"/>

## 1431 El Camino Real Initial Study and Environmental Checklist

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Analysis

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer). Gases that trap heat in the atmosphere are often called greenhouse gases (GHGs). The greenhouse effect traps heat in the troposphere through a threefold process: (1) short-wave radiation emitted by the Sun is absorbed by the Earth, (2) the Earth emits a portion of this energy in the form of long-wave radiation, and (3) GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and back toward the Earth. This trapping of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

Principal GHGs are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide, O<sub>3</sub>, and water vapor. Some GHGs, such as CO<sub>2</sub>, CH<sub>4</sub>, and nitrous oxide, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO<sub>2</sub> and CH<sub>4</sub> are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely byproducts of fossil-fuel combustion, whereas CH<sub>4</sub> results mostly from off-gassing associated with agricultural practices and landfills. Manufactured GHGs, which have a much greater heat-absorption potential than CO<sub>2</sub>, include fluorinated gases, such as hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride, which are associated with certain industrial products and processes (CAT 2006).

The Intergovernmental Panel on Climate Change developed the global warming potential concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The global warming potential of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO<sub>2</sub>; therefore, emissions weighted for global warming potential are measured in metric tons (MT) of CO<sub>2</sub> equivalent (CO<sub>2</sub>E).

Regarding impacts from GHGs, both BAAQMD and the California Air Pollution Control Officers Association consider GHG impacts to be exclusively cumulative impacts (BAAQMD 2017; CAPCOA 2008); therefore, assessment of significance is based on a determination of whether the GHG emissions from a project represent a cumulatively considerable contribution to

## 1431 El Camino Real Initial Study and Environmental Checklist

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the global atmosphere. This analysis uses both a quantitative and a qualitative approach. The quantitative approach is used to address the first significance criterion: “Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?” This analysis considers that, because the quantifiable thresholds developed by BAAQMD were formulated based on Assembly Bill 32 and California Climate Change Scoping Plan reduction targets for which a set of strategies were developed to reduce GHG emissions statewide, a project cannot exceed a numeric BAAQMD threshold without also conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (CARB 2017). Therefore, if a project exceeds a numeric threshold and results in a significant cumulative impact, it would also result in a significant cumulative impact with respect to plan, policy, or regulation consistency, even though the project may incorporate measures and have features that would reduce its contribution to cumulative GHG emissions.

Separate thresholds of significance are established for operational emissions from stationary sources (such as generators, furnaces, and boilers) and nonstationary sources (such as on-road vehicles). The threshold for stationary sources is 10,000 MT CO<sub>2</sub>E per year (i.e., emissions above this level may be considered significant). For nonstationary sources, the following three separate thresholds have been established (BAAQMD 2017):

- Compliance with a Qualified Greenhouse Gas Reduction Strategy (i.e., if a project is found to be out of compliance with a Qualified Greenhouse Gas Reduction Strategy, its GHG emissions may be considered significant).
- 1,100 MT CO<sub>2</sub>E per year (i.e., emissions above this level may be considered significant).
- 4.6 MT CO<sub>2</sub>E per service population per year (i.e., emissions above this level may be considered significant). (Service population is the sum of residents plus employees expected for a development project.)

The quantitative threshold of 1,100 MT CO<sub>2</sub>E per year adopted by the BAAQMD was applied to this analysis. If the project operational GHG emissions would exceed this threshold, then, consistent with BAAQMD Air Quality Guidelines, it would be considered to have a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact on climate change.

**a, b) Less than Significant Impact.** Construction. Construction of the proposed project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. Since the BAAQMD has not established construction-phase GHG thresholds, construction GHG emissions were amortized assuming a 30-year development life after completion of construction and added to operational emissions to compare to the



## **1431 El Camino Real Initial Study and Environmental Checklist**

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BAAQMD operational GHG threshold. CalEEMod was used to estimate GHG emissions associated with project construction. Amortized GHG emissions associated with project construction would result in annualized generation of 7 MT CO<sub>2</sub>E (Appendix A).

Operations. Long-term operational emissions would occur over the life of the project. CalEEMod was used to estimate GHG emissions from motor vehicle trips, grid electricity usage, solid waste, and other sources (including area sources, natural gas combustion, and water/wastewater conveyance) for the existing uses to be demolished and for the proposed project.

CalEEMod default mobile source data, including temperature, trip characteristics, variable start information, emission factors, and trip distances, were conservatively used for the model inputs. Project-related traffic was assumed to be composed of a mixture of vehicles in accordance with the model defaults for the specified land uses. It is assumed that the first full year of operations would be in 2020.

The estimation of operational energy emissions was based on CalEEMod land use defaults and total area (i.e., square footage) of the existing use to be demolished and for the proposed project. For the existing use, no fireplaces or woodstoves were assumed, and natural gas and electricity emissions were estimated in CalEEMod using the emissions factors for Pacific Gas & Electric and adjusted to account for 25% Renewable Portfolio Standard by 2016. Historical (pre-2005 buildings) energy use standards were incorporated for the existing apartments to be demolished.

For the proposed townhomes, only gas fireplaces were assumed, and annual natural gas (non-hearth) and electricity emissions were estimated in CalEEMod using the emissions factors for Pacific Gas & Electric and adjusted to account for the 33% Renewable Portfolio Standard by 2020. The most recent amendments to Title 24, Part 6, the California Energy Code, became effective on January 1, 2017. Residential buildings constructed in accordance with the updated Title 24 standards are anticipated to use 28% less energy for lighting, heating, cooling, ventilation, and water heating than the 2013 standards. Although these standards would be required for the project, they were accounted for in the “Mitigation” options of CalEEMod, and are, thus, part of the mitigated scenario.

Supply, conveyance, treatment, and distribution of water for the project would require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the proposed project would require the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for indoor and outdoor water use and associated

## 1431 El Camino Real Initial Study and Environmental Checklist

electricity consumption from water use and wastewater generation were estimated using CalEEMod default values.

The proposed project would generate solid waste and would, therefore, result in CO<sub>2</sub>E emissions associated with landfill off-gassing. CalEEMod default solid waste generation values for the specified land uses were used.

The estimated operational GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, water supply, and wastewater treatment for the existing uses to be demolished and the proposed project are shown in Table 4 (see also Appendix A).

**Table 4**  
**Estimated Annual Operational Greenhouse Gas Emissions**

Emissions Source	CO <sub>2</sub> E (Metric Tons per Year)
<i>Project Emissions</i>	
Area	0.8
Energy	14.6
Mobile	31.4
Solid Waste	1.4
Water Supply and Wastewater	1.0
Total Project Emissions	49.2
<i>Existing Use Emissions</i>	
Area	0.0
Energy	9.0
Mobile	25.0
Solid Waste	0.9
Water Supply and Wastewater	0.9
Total Existing Use Emissions	35.8
<b>Operational Emission Net Increase (Project Minus Existing)</b>	<b>13.4</b>
Amortized Construction Emissions	7.1
<b>Operational Emission Net Increase + Amortized Construction Total</b>	<b>20.5</b>
<i>BAAQMD Greenhouse Gas Threshold</i>	<i>1,100</i>
<i>Significant (Yes or No)?</i>	<i>No</i>

**Source:** Appendix A

**Notes:** CO<sub>2</sub>E = carbon dioxide-equivalent; BAAQMD = Bay Area Air Quality Management District

Project GHG emissions are based on the annual CalEEMod outputs, included in Appendix A. Total emissions may not sum exactly due to rounding. Project emissions are based on the "Mitigated" CalEEMod outputs in order to incorporate indoor/outdoor water use reduction per CALGreen and exceeding 2013 Title 24 by 28% for residences to approximate 2016 Title 24 compliance, even though compliance with standards would not be considered actual mitigation. No fireplaces or woodstoves were assumed for existing uses, and only gas fireplaces were assumed for the project.

Table 4 (see also Appendix A) indicates that the net increase in GHG emissions associated with the project would be less than BAAQMD's GHG threshold of 1,100 MT CO<sub>2</sub>E per year. Therefore, the project would not generate GHG emissions, either directly

## 1431 El Camino Real Initial Study and Environmental Checklist

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or indirectly, that may have a significant impact on the environment, and this would represent a less-than-significant cumulative GHG impact.

The City of Burlingame's Climate Action Plan is designed to focus on near- and medium-term solutions to reduce the City's GHG emissions. The five major focus areas are energy efficiency/green building, transportation/land use, waste reduction/recycling, education/outreach, and municipal operations. Energy efficiency and green building programs provide the fastest and most economical means to reduce emissions (City of Burlingame 2009). The proposed project is required to comply with the City of Burlingame's Green Building Ordinance, which implements the CALGreen Building Standards. Since the project would comply with applicable statewide and local requirements, the project would not conflict with the Climate Action Plan.

Regarding consistency with Senate Bill 32 (goal of reducing GHG emissions to 40% below 1990 levels by 2030) and Executive Order S-3-05 (goal of reducing GHG emissions to 80% below 1990 levels by 2050), there are no established protocols or thresholds of significance for that future-year analysis. However, the California Air Resources Board forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014). As discussed previously, the project would result in minimal GHG emissions, and would not conflict with the state's trajectory toward future GHG reductions. With respect to future GHG targets under Senate Bill 32 and Executive Order S-3-05, the California Air Resources Board has also made clear its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the Assembly Bill 32 horizon year of 2020, to meet the reduction targets for 2030 and 2050; this legal interpretation provides evidence that future regulations will be adopted to continue the state on its trajectory toward meeting future GHG targets.

Based on the preceding considerations, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. This impact would be less than significant.

### References

BAAQMD (Bay Area Air Quality Management District). 2017. California Environmental Quality Act Air Quality Guidelines. Updated May 2017. [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en).

## **1431 El Camino Real Initial Study and Environmental Checklist**

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### **2.8 Hazards And Hazardous Materials**

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a) 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"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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 type="checkbox"/>	<input checked="" type="checkbox"/>

## 1431 El Camino Real Initial Study and Environmental Checklist

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) 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"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

- a) **Less than Significant Impact.** The project would result in a slight increase in the routine use of hazardous materials. The project would include use of heavy equipment for demolition, grading, excavations, and construction. Fueling and maintenance of such equipment could result in incidental spills of petroleum products and hazardous materials to soils exposed after demolition. However, such incidental spills would likely be minor and would be minimized through implementation of standard BMPs included in a SWPPP during construction. The BMPs would be consistent with the San Mateo Countywide Water Pollution Prevention Program and Municipal Regional Stormwater NPDES Permit (City/County Association of Governments of San Mateo County 2015; RWQCB 2015). Relevant BMPs would typically include creation of a designated fueling and maintenance area equipped with temporary spill containment booms, absorbent pads, and petroleum waste disposal containers. Therefore, impacts associated with routine transport, use, and disposal of hazardous materials would be less than significant as a result of project construction.
- b) **Less than Significant Impact.** The closest gas transmission pipeline is located approximately 2,200 feet northeast of the project site, along Rollins Road (PHMSA 2017). This pipeline would have no impact on the project.

## 1431 El Camino Real Initial Study and Environmental Checklist

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The project would include demolition of the existing structure, which was constructed in 1947, according to San Mateo County Assessor records (County of San Mateo 2017). Based on the age of the structure, lead-based paint (LBP) and ACM may be present in the building. The federal government banned consumer use of LBP in 1978, and ACMs were banned in construction products in 1989. Layers of LBP may be present beneath layers of non-LBP. ACMs may be present in floor and ceiling tiles, exterior wall and roofing shingles, pipe insulation, plaster, and stucco finishes. As a result, LBP and ACMs may be encountered during demolition activities, which could result in adverse health and safety impacts to demolition personnel.

In California, the Residential Lead-Based Paint Hazard Reduction Act of 1992 states that individuals must permanently remove LBP hazards in accordance with federal standards. Only certified lead testers may be used for this process. Under CCR Section 1532.1, workers must assess the level of lead exposure on any given job site, and regularly gauge lead levels as the project progresses.

Similarly, the removal of potential ACMs would be subject to asbestos regulations administered by the BAAQMD, which protects the public from uncontrolled emissions of asbestos through enforcement of the Federal Asbestos Standard (BAAQMD 1998). The ACM regulations include survey and notification requirements prior to beginning a project, as well as work practice standards and disposal requirements, in accordance with BAAQMD Regulation 11, Hazardous Pollutants, Rule 2, Asbestos Demolition, Renovation and Manufacturing.

With implementation of these regulations, 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. Impacts related to the removal of potential LBP and ACMs during project demolition would be less than significant.

- c) **No Impact.** The closest school is Our Lady of Angels School, located approximately 700 feet southeast of the project site. In addition, Lincoln Elementary School is located approximately 1,200 feet west of the site. However, as discussed in a) and b), above, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste that could potentially impact these schools. Therefore, no impacts would occur.
- d) **Less than Significant Impact.** The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code 65962.5 (Cortese List), which requires the California Environmental Protection Agency to develop, at least annually, an

## 1431 El Camino Real Initial Study and Environmental Checklist

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updated list (DTSC 2017). However, it is possible that the project site or adjacent properties may be listed on other environmental databases pertaining to prior releases of petroleum products and/or hazardous substances. With the exception of the Cortese List, an environmental database search was not completed for the project. However, it is unlikely that soil contamination is present beneath the site, since the project site is located in a residential neighborhood that extends back to at least the 1940s, where releases of petroleum waste or hazardous waste into the subsurface is unlikely. As a result, less-than-significant impacts would occur with respect to potential prior releases of hazardous materials at the site.

- e, f, g) No Impact.** The project is located approximately 1.5 miles south of San Francisco International Airport, within an airport influence area. However, the project site is not located within a designated airport safety zone (City/County Association of Governments of San Mateo County 2012). Therefore, no aircraft-related safety impacts would occur in association with construction of the project. The City of Burlingame does not currently have a comprehensive emergency response plan. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, no impacts would occur.
- h) No Impact.** The proposed project is located within a fully urbanized area that is not adjacent to wildlands. Vegetation on site is limited to landscaping that is irrigated and maintained by the property owner. Based on review of the California Department of Forestry and Fire Protection Fire Hazards Severity Zones Map for San Mateo County, the nearest area of moderate wildland fire risk is approximately 1.5 miles away (CalFIRE 2007). No impact would occur related to exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires.

### References

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# 1431 El Camino Real Initial Study and Environmental Checklist

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DTSC (Department of Toxics Substances Control). 2017. Hazardous Waste and Substances Site List. Accessed August 15, 2017.

PHMSA (U.S. Department of Transportation, Pipeline, and Hazardous Materials Safety Administration). 2017. National Pipeline Mapping System. Accessed August 14, 2017. <https://www.npms.phmsa.dot.gov/>.

RWQCB (San Francisco Bay Region, California Regional Water Quality Control Board). 2015. Municipal Regional Stormwater NPDES Permit. Order No. R2-2015-0049, NPDES Permit No. CAS612008, November 19, 2015. Accessed August 14, 2017. [http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/stormwater/Municipal/R2-2015-0049.pdf](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/R2-2015-0049.pdf).

## 2.9 Hydrology And Water Quality

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## 1431 El Camino Real Initial Study and Environmental Checklist

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation of seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

**a, f) Less than Significant Impact.** Completion of the proposed project would not substantially alter the amount or type of pollutants in stormwater runoff. Land use would not change, since the existing four-unit residential development would be replaced with a six-unit residential development. Similar to existing conditions, stormwater runoff would occur as sheetflow, which would be transmitted into two 6-inch-diameter subdrains that would drain into an upgraded curb and gutter.

The project would include 572 square feet of landscaping in the front setback and 391 square feet of landscaping in the rear common open space area. Such landscaping would result in an increase in permeable surfaces capable of capturing and infiltrating surface runoff such that potentially polluted runoff would be less compared to existing conditions. This increase in permeable surfaces would result in beneficial long-term water-quality impacts.

The closest creek is Mills Creek, located approximately 1,000 feet northwest of the project site. Mills Creek is not listed in the 2012 California 303(d) List of Water Quality Limited Segments, or Impaired Water Bodies (CalEPA SWRCB 2017). Therefore, runoff

## 1431 El Camino Real Initial Study and Environmental Checklist

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from the project site would not contribute to a water body that contains pollutants at levels that currently exceed protective water quality criteria and standards.

Demolition and construction of the project would result in short-term soil-disturbing activities that could lead to increased erosion and sedimentation of nearby drainages and Mills Creek. However, a Construction SWPPP would be implemented during demolition and construction. BMPs included in the San Mateo Countywide Water Pollution Prevention Program and Municipal Regional Stormwater NPDES Permit would be implemented (City/County Association of Governments of San Mateo County 2015; RWQCB 2015). These BMPs would include temporary erosion controls to stabilize all denuded areas until permanent erosion controls are established.

Demolition and construction-related BMPs would include use of sediment traps such as silt fences, check dams, and earthen dikes or berms; diversion of runoff around exposed areas; protection of adjacent properties using sediment barriers or filters; stabilization of the designated access point; and proper storage, handling, and disposal of construction wastes to prevent contact with stormwater. Implementation of the SWPPP for the project would minimize erosion and related impacts on water quality, such that short-term demolition- and construction-related impacts would be less than significant.

- b) **No Impact.** The proposed project would not adversely affect groundwater. Water demand is anticipated to be approximately 792 gallons per day, which would be an increase over existing conditions due to the additional two residential units. The City of Burlingame Water Division would supply water to the project, and the source of water within the City water system is metered connections off the San Francisco Water Department's Crystal Springs and Sunset Aqueducts (City of Burlingame 2015). On-site groundwater would not be used; therefore, no impacts would occur with respect to groundwater withdrawals. In addition, the project would result in an increase in permeable surfaces, which would result in an increase in groundwater recharge. This increase would result in beneficial groundwater impacts.

See section Utilities and Service Systems, below, for additional information related to water service for the project.

- c, d, e) **Less than Significant Impact.** Runoff at the site would be similar to existing conditions. The drainage pattern would not be substantially altered. The project would include approximately 6,568 square feet of impervious area, including the building roof, driveway, pathways, and trash enclosure. Similar to existing conditions, paved area stormwater runoff would occur as sheetflow. Proposed runoff would be diverted to two 6-

## 1431 El Camino Real Initial Study and Environmental Checklist

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inch-diameter subdrains that would discharge surface flows to the street curb and gutter. New curb and gutter would be constructed as part of the project.

As previously discussed for a) f), above, the project would include 572 square feet of landscaping in the front setback and 391 square feet of landscaping in the rear common open space. Such landscaping would result in an increase in permeable surfaces capable of capturing and infiltrating surface runoff, such that runoff volumes would be less in comparison to existing conditions. This increase in permeable surfaces would result in beneficial drainage impacts.

As previously discussed, construction of the project would result in short-term soil-disturbing activities that could lead to increased erosion and sedimentation of nearby drainages and Mills Creek. However, the project would comply with the SWPPP requirements for construction site stormwater discharges, including appropriate erosion-control and water-quality-control measures during demolition and construction activities. Implementation of the SWPPP for the project would minimize erosion and related impacts on water quality such that construction-related impacts would be less than significant.

**g, h, i, j) No Impact.** The City of Burlingame Seismic Safety Element indicates that the project site is located within a 100-year flood zone (City of Burlingame 1975). However, updated flood maps completed by the Federal Emergency Management Agency indicate that the site is not located within a 100-year flood zone (FEMA 2012). The project site is not located in an area that would be inundated in the event of a dam failure, since no reservoirs are located upslope of the site. The project site is located at an elevation of 15 to 19 feet above sea level and is not located within a designated tsunami inundation area (California Emergency Management Agency et al. 2009; City of Burlingame 1975). In addition, the project would not be subject to inundation as a result of seiche or mudflow. Therefore, no flood-related impacts would occur in association with construction of the project.

### References

CalEPA SWRCB (California Environmental Protection Agency, State Water Resources Control Board). 2017. Impaired Water Bodies. Accessed August 14, 2017. [http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/integrated2012.shtml](http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml).

California Emergency Management Agency, California Geological Survey, and University of Southern California. 2009. Tsunami Inundation Map for Emergency Planning, State of California – County of San Mateo, San Mateo Quadrangle, Scale 1:24,000. June 15, 2009. Accessed August 14, 2017. [http://www.conservation.ca.gov/cgs/geologic\\_hazards/Tsunami/Inundation\\_Maps/SanMateo/Documents/Tsunami\\_Inundation\\_SanMateo\\_Quad\\_SanMateo.pdf](http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SanMateo/Documents/Tsunami_Inundation_SanMateo_Quad_SanMateo.pdf).

## **1431 El Camino Real Initial Study and Environmental Checklist**

City/County Association of Governments of San Mateo County. 2015. San Mateo Countywide Water Pollution Prevention Program. Accessed August 14, 2017.  
<http://www.flowstobay.org/brochures>.

City of Burlingame. 1975. Burlingame General Plan, Seismic Safety Element, adopted July 21, 1975. Accessed August 11, 2017. <http://www.burlingame.org/Modules/ShowDocument.aspx?documentid=173>.

City of Burlingame. 2015. City Water System. Accessed August 15, 2017.  
<https://www.burlingame.org/index.aspx?page=668>.

FEMA (Federal Emergency Management Agency). 2012. FEMA Flood Map Service Center: Search By Address, effective October 16, 2012. Accessed August 14, 2017.  
<https://msc.fema.gov/portal/search#searchresultsanchor>.

RWQCB (San Francisco Bay Region, California Regional Water Quality Control Board). 2015. Municipal Regional Stormwater NPDES Permit. Order No. R2-2015-0049, NPDES Permit No. CAS612008, November 19, 2015. Accessed August 14, 2017.  
[http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/stormwater/Municipal/R2-2015-0049.pdf](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/R2-2015-0049.pdf).

### **2.10 Land Use And Planning**

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### **Discussion**

- a) **No Impact.** The proposed project would not include construction of a physical barrier that would physically divide the existing area surrounding the proposed project site. No

## **1431 El Camino Real Initial Study and Environmental Checklist**

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freeways, railroad tracks, or any kind of physical obstruction is included as part of the proposed project. Construction associated with the project would not result in major changes to any public roadways. The proposed use as a residential development would be compatible with the existing residential uses in the project vicinity. Therefore, the project would not physically divide an established community and would have no impacts related to this topic.

- b) **No Impact.** The project would be located on El Camino Real and is designated as medium-high density residential (R-3) land use in the City of Burlingame’s General Plan. The general plan land use designation is for uses with 21 to 50 dwelling units per acre. The project complies with the dwelling unit density allowed per the General Plan Land Use Map (City of Burlingame 2016). This Zoning District designates land uses as predominately multi-family residential, including some lower-intensity residential uses such as single-family homes, duplexes, apartment homes, multi-family homes, and accessory buildings. The proposed project is in compliance with Burlingame’s General Plan and would not conflict with any applicable land use plans, policies, or regulations; there would be no impact.
- c) **No Impact.** The nearest habitat conservation plan to the project site is the San Bruno Mountain Habitat Conservation Plan, approximately 11 miles from the site (CDFW 2017). The project site is not located within the jurisdiction of any habitat conservation plan or natural community conservation plan, and would not conflict with any applicable plans or policies; therefore, there would be no impact.

### **References**

CDFW (California Department of Fish and Wildlife). 2017. California Regional Conservation Plans. June 2017. Accessed August 17, 2017. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>.

City of Burlingame. 2016. City of Burlingame General Plan, Zoning. June 2016. Accessed August 18, 2017. [https://www.burlingame.org/modules/show\\_document.aspx?documentid=13356](https://www.burlingame.org/modules/show_document.aspx?documentid=13356).

### **2.11 Mineral Resources**

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				

## 1431 El Camino Real Initial Study and Environmental Checklist

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

**a, b) No Impact.** The City of Burlingame General Plan does not identify any areas of significant mineral value on the project site or in the project vicinity (City of Burlingame 2010). The State of California Department of Mines and Geology, Mineral Land Classification Map designates the project site as a Mineral Resource Zone MRZ-1. The MRZ-1 designation refers to an area “where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence” (California Department of Conservation 1982). Implementation of the project would, therefore, not impact mineral resources.

### References

California Department of Conservation. 1982. “California Department of Mines and Geology, Mineral Land Classification Map 146, Plate 2.43.” [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR\\_146-2/SR-146\\_Plate\\_2.43.pdf](ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_146-2/SR-146_Plate_2.43.pdf).

City of Burlingame. 2010. The City of Burlingame General Plan, as amended.

### 2.12 Noise

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project result in:				
a) Expose persons to or generate noise levels 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"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne vibration levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## 1431 El Camino Real Initial Study and Environmental Checklist

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

- a) **Less than Significant Impact with Mitigation Incorporated.** The City’s General Plan Noise Element includes noise and land use compatibility recommendations for evaluating the compatibility of new uses with the on-site noise environment. The Noise Element establishes a 60 A-weighted decibel (dBA) community noise equivalent level (CNEL) criterion as the maximum suggested outdoor noise level for land uses that include “public, quasi-public, and residential” (CNEL is a 24-hour average noise level, with “penalties” added to noise during the night and evening hours (7 p.m.–7 a.m.) (City of Burlingame 1975). The interior noise level standard is 45 dBA CNEL in any habitable room, with windows closed.

The primary source of noise in the area is roadway noise along El Camino Real. Exterior private open spaces that are provided for the proposed future residences would face the neighboring lots and be shielded from traffic noise produced by El Camino Real. No planned open spaces face El Camino Real. The building setback would be approximately 20 feet from the road. Based on the referenced measurement of traffic noise along El Camino Real (1509 El Camino Real Mitigated Negative Declaration) it is expected that traffic noise levels at the building façade would be approximately 63 dBA equivalent noise level ( $L_{eq}$ ) (City of Burlingame 2012). Conservatively assuming that shielding from building components would provide 5 dBA of noise reduction, the approximate  $L_{eq}$  for the balconies of the project building closest to the El Camino Real frontage would be 58 dBA. This expected level meets the 60 dBA CNEL requirement for exterior living spaces

## 1431 El Camino Real Initial Study and Environmental Checklist

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(City of Burlingame 1975). To ensure interior noise levels meet the 45 dBA CNEL requirement (City of Burlingame 1975), MM-NOI-1 is required for the building façade facing El Camino Real.

**MM-NOI-1** The project sponsor shall retain a qualified acoustical engineer to prepare an acoustical study in accordance with State Title 24 requirements. The acoustical study shall identify methods of design and construction to comply with the applicable portions of the California Building Code Title 24 to achieve an indoor noise level of 45 A-weighted decibel community noise equivalent level or less from traffic noise sources.

- b) **Less than Significant Impact.** The proposed project is not expected to generate excessive groundborne vibration or noise during operation. The North Burlingame/Rollins Road Specific Plan lists roadway bus and truck traffic, railway operations, and construction activities as the common sources of groundborne vibration in the area (City of Burlingame 2004). In residential areas, ambient vibration levels are usually approximately 50 vibration decibels (VdB). Instantaneous vibration levels may reach 63 VdB when buses or trucks pass within 50 feet of a receptor, and 72 VdB when these vehicles hit a bump in the road (City of Burlingame 2004).

Project construction would generate short-term groundborne vibration within the project site and the surrounding areas. Construction equipment, such as dozers and trucks, can be sources of excessive groundborne vibration. The nearest sensitive receptors to the proposed project would be the residences located adjacent to the project site. The nearest residence is approximately 15 feet from the proposed building outline and approximately 30 feet from the center of the project site.

Neither the City of Burlingame's General Plan nor the City's Municipal Code contain provisions specifically regarding groundborne vibration or groundborne noise levels. The following analysis is based on the guidance from the Federal Transit Administration's Transit Noise and Vibration Impact Assessment manual. Vibration levels in the 70 to 75 VdB range are often noticeable but generally deemed acceptable, and levels in excess of 80 VdB are often considered unacceptable. The threshold for human perception is approximately 65 VdB (FTA 2006).

The primary source of vibration during project construction and/or demolition would likely be from a small bulldozer or tractor. Expected vibration levels from such equipment would be approximately 58 VdB at 25 feet. A bulldozer would temporarily operate at the property line, approximately 15 feet from an existing residential building. On average during construction, the bulldozer would typically be approximately 30 feet



## 1431 El Camino Real Initial Study and Environmental Checklist

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from the residential receptors. Thus, average vibration levels are expected to be less than 58 VdB and below the perceptible range for humans (FTA 2006).

Demolition of the existing on-site building would not require the use of blasting, a wrecking ball, or other groundborne-vibration-generating equipment. Therefore, impacts associated with the vibration from construction equipment would be less than significant.

- c) **Less than Significant Impact.** Residential developments do not typically result in significant levels of ambient noise. The existing building on the project site is a residential building. The proposed building would not add a substantial amount of residences compared to the existing use.

For traffic noise, a doubling of traffic volume is generally required to produce a perceptible increase in ambient sound levels. The current average daily traffic along El Camino Real is approximately 30,000 (City of Burlingame 2012); thus, another 30,000 average daily trips would need to be added for a perceptible change in traffic noise to occur. The project is not expected to substantially increase the average daily traffic, and, therefore, would not noticeably change the ambient sound levels associated with traffic noise from El Camino Real.

Dudek reviewed sound level data for the vehicle lift to be used in the garages. Documented levels during operation are approximately 59 dBA during vehicle raising. Levels are lower during the lowering of vehicles and when the door is opening (see Appendix D). Sound levels due to lift operations are not expected to be excessive at neighboring residential properties. The anticipated intermittent use of the proposed car lift equipment further reduces the likelihood of noise impacts from car lifts. Therefore, impacts would be less than significant.

- d) **Less than Significant Impact with Mitigation Incorporated.** The project site is surrounded by residential uses. Construction of the proposed project would expose these sensitive receptors to increased ambient exterior noise levels. During project construction, heavy equipment would be used for demolition, site preparation, grading, building construction, architectural coating, and paving, which would increase ambient noise levels. Noise levels would vary depending on the type of equipment used, how it is operated, and how well it is maintained. Standard construction equipment, such as graders, backhoes, loaders, backhoes, and saws, would be used for this work.

Regarding construction activity, the City of Burlingame General Plan Noise Element provides Table 5, Maximum Allowable Noise Levels from Construction Equipment (page N-33 of the General Plan Noise Element, City of Burlingame 1975).

## 1431 El Camino Real Initial Study and Environmental Checklist

**Table 5**  
**Maximum Allowable Noise Levels from Construction Equipment**

Equipment	Peak Noise Level in dBA at 50 Feet
<i>Earthmoving</i>	
Front Loader	75
Backhoes	75
Dozers	75
Tractors	75
Scrapers	80
Graders	75
Truck	75
Paver	80
<i>Materials Handling</i>	
Concrete mixer	75
Concrete pump	75
Crane	75
Derrick	75
<i>Stationary</i>	
Pumps	75
Generators	75
Compressors	75
<i>Impact</i>	
Pile Drivers	95
Jackhammers	75
Rock Drills	80
Pneumatic tools	80
<i>Other</i>	
Saws	75
Vibrator	75

**Source:** City of Burlingame 1975

Implementation of the proposed project would result in intermittent short-term noise impacts resulting from construction-related activities. There would be a relatively high single-event noise exposure potential resulting in potential short-term intermittent annoyances. However, the effect on long-term ambient noise levels would be small when averaged over longer time periods, such as 24 hours for CNEL. Section 18.07.110 of the City's Municipal Code limits the hours of construction to between 8 a.m. and 7 p.m. on weekdays, 9 a.m. to 6 p.m. on Saturdays.

With compliance with the City of Burlingame General Plan Noise Element and incorporation of MM-NOI-2 through MM-NOI-4 below, impacts from construction noise would be less than significant.

## 1431 El Camino Real Initial Study and Environmental Checklist

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- MM-NOI-2** All construction equipment shall use available noise-suppression devices and properly maintained mufflers. All internal combustion engines used on the project site shall be equipped with the type of muffler recommended by the vehicle manufacturer. In addition, all equipment shall be maintained in a good mechanical condition to minimize noise created by a faulty or poorly maintained engine, drive train, or other component.
- MM-NOI-3** During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receptors and as far as possible from the boundary of sensitive receptors.
- MM-NOI-4** Pursuant to the City of Burlingame Municipal Code, the applicant shall limit construction activities to between 8 a.m. and 7 p.m. Mondays through Fridays, and Saturdays between 9 a.m. and 6 p.m.
- e) **Less than Significant Impact.** The site is included on maps addressing San Francisco International Airport noise contours in the Noise Exposure Map Report (SFO 2015a). The 2019 noise contour maps show that the project site location is outside of the 65 dBA CNEL noise contour for San Francisco International Airport (SFO 2015b). According to the 14 Code of Federal Regulations Part 150 Land Use Compatibility Guidelines, in Aircraft Noise Exposure Areas, this aircraft noise exposure level is acceptable for all land uses, including residential (SFO 2015b). The project site is in an area that is exposed to noise levels less than 65 dBA from San Francisco International Airport. Therefore, impacts would be less than significant.
- f) **No Impact.** The project site is not located within the vicinity of a private airstrip. Therefore, no impacts related to a private airstrip would occur as a result of the proposed project.

### References

- City of Burlingame. 1975. Burlingame General Plan Noise Element. Adopted September 15, 1975. <https://www.burlingame.org/Modules/ShowDocument.aspx?documentid=170>.
- City of Burlingame. 2004. North Burlingame/Rollins Road Specific Plan, Chapter 7, Development Framework. <http://www.burlingame.org/Modules/ShowDocument.aspx?documentid=103>.

## 1431 El Camino Real Initial Study and Environmental Checklist

City of Burlingame. 2012. Initial Study and Mitigated Negative Declaration, Residential Condominiums at 1509 El Camino Real. January 23, 2012.  
<https://www.burlingame.org/modules/showdocument.aspx?documentid=12742>.

FTA (U.S. Department of Transportation, Federal Transit Administration). 2006. Transit Noise and Vibration Impact Assessment. May 2006. [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA\\_Noise\\_and\\_Vibration\\_Manual.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf).

SFO (San Francisco International Airport). 2015a. Noise Exposure Map Report. August 2015.  
<http://www.flysfo.com/community/noise-abatement/sfo-part-150-study/noise-exposure-map-report>.

SFO. 2015b. Noise Exposure Map Report. Chapter 5, Noise Exposure Maps and Effects on Land Use. August 2015. [http://media.flysfo.com/media/sfo/noise-abatement/sfo\\_p150\\_nem\\_ch5\\_nems\\_ada.pdf](http://media.flysfo.com/media/sfo/noise-abatement/sfo_p150_nem_ch5_nems_ada.pdf).

### 2.13 Population And Housing

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

### Discussion

- a) **Less than Significant Impact.** The proposed project would involve demolition of the current four-unit building and construction of a six-unit building within a residential district. According to the 2010 Census for the City of Burlingame, the average household size was 2.29 people (American Community Survey 2006–2010). Therefore, this two-unit increase would represent an increase of approximately five people. This does not represent a substantial growth in population, and is well within the expected population increase noted in the City’s General Plan (City of Burlingame 2015). Therefore, the

## 1431 El Camino Real Initial Study and Environmental Checklist

proposed project would not cause a substantial growth in population either directly or indirectly, and impacts would be less than significant.

- b, c) Less than Significant Impact.** The project would add two residential units and would not necessitate the need for construction of replacement housing elsewhere. The project would temporarily displace the tenants of four residential units, but would not necessitate the construction of replacement housing. Therefore, the project would have a less-than-significant impact on the displacement of housing and people.

### Reference

American Community Survey. 2006–2010. Bay Area Census. City of Burlingame, San Mateo County. Accessed August 28, 2017. <http://www.bayareacensus.ca.gov/cities/Burlingame.htm>.

City of Burlingame. 2015. City of Burlingame General Plan 2015–2023 Housing Element. Adopted January 5, 2015. <https://www.burlingame.org/modules/showdocument.aspx?documentid=11658>.

### 2.14 Public Services

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

The proposed project would involve incidental or no impacts on government services, and would not involve substantial population growth; any such growth would occur within the framework

## 1431 El Camino Real Initial Study and Environmental Checklist

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of the adopted Burlingame General Plan. The project would be located in a residential area where there are established public facilities. Therefore, as discussed below, the project would not involve new or increased impacts to public services, and would not require mitigation measures to avoid significant environmental effects.

- a) i) **Less than Significant Impact.** The Central County Fire Department provides fire protection services to the City of Burlingame. There are three fire stations located within the City: Station 34 at 799 California Drive, Station 35 at 2832 Hillside Drive, and Station 36 at 1399 Rollins Road (Central County Fire Department 2017). The proposed project would include demolition of an existing two-story apartment building and a detached five-car garage, and construction of a three-story building with a proposed height of 35 feet. Operation of the proposed project is not anticipated to result in increased demand for fire or emergency services, or a need for modified facilities due to the minimal increase of two residential units. The Central County Fire Department would review project plans prior to issuance of building permits to ensure compliance with all applicable fire and building safety codes. Therefore, impacts to fire protection services would be less than significant.
- a) ii) **Less than Significant Impact.** The Burlingame Police Department, located at 1111 Trousdale Drive, provides police services to the City. Operation of the proposed project is not anticipated to result in increased demand for police services or a need for modified facilities due to the minimal increase of two residential units. Therefore, impacts to police protection services would be less than significant.
- a) iii) **Less than Significant Impact.** Our Lady of Angels School is the closest school to the project site at 0.3 miles away. Operation of the proposed project is not anticipated to result in increased demand for school services or result in the requirement of alterations to any school facilities due to the minimal population increase. Therefore, impacts to school services would be less than significant.
- a)iv)v) **No Impact.** The proposed project would involve demolition an existing two-story apartment building and construction of townhouse units. The site is surrounded by residential uses. The proposed project would not impact any existing parks or other public facilities and would not increase demand for parks or other public facilities due to the minimal increase of two residential units. Therefore, there would be no impacts to parks or other public facilities.

# 1431 El Camino Real Initial Study and Environmental Checklist

## Reference

Central County Fire Department. 2017. "Fire Stations." Accessed August 21, 2017 .  
<http://www.ccfdonline.org/about-ccfd/fire-stations/>.

## 2.15 Recreation

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
a) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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 type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion

**a, b) No Impact.** The proposed project would demolish a two-story residential building and construct a new three-story residential building. The proposed project is not anticipated to increase demand for existing recreational facilities due to the minimal increase in population from the addition of two units. The project would not require construction or expansion of recreational facilities. Therefore, implementation of the project would result in no impact to existing recreational facilities.

## 2.16 Transportation / Traffic

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 1431 El Camino Real Initial Study and Environmental Checklist

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

This analysis is based on Dudek’s assessment of the existing vicinity roadway network capacity and current traffic conditions, and the project’s net new trip generation to determine the proposed project’s impact on vicinity transportation systems.

The proposed project site is located at 1431 El Camino Real in the City of Burlingame. The proposed project would include demolition of an existing four-unit (two-story) apartment complex and construction of new six-unit (three-story) residential townhouse development. The proposed project would have six townhouse units that would be two bedrooms each, built side-by-side with a ground-level parking garage that would accommodate two parking spaces provided in the form of mechanical auto lifts (parking lifts). The entrance to each of the six townhouse units would be on the north-facing (driveway) side of the project site.

Access to the project site (a driveway to be located along the north-facing side of the building) would be via El Camino Real (SR-82). The project site is located just southwest of the one-way-stop-controlled intersection of El Camino Real/ Mills Avenue.

El Camino Real (SR-82) is a north/south arterial roadway in the City and a part of the California State Highway System. El Camino Real, south of Ray Drive near the project site, is a four-lane undivided roadway with a speed limit of 35 miles per hour. On-street parking is not permitted along El Camino Real. There is a raised sidewalk along the roadway, and there is no bike route or lane along the roadway.



## **1431 El Camino Real Initial Study and Environmental Checklist**

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The City of Burlingame does not have an adopted level of service (LOS) standard; however, a standard of LOS D or better typically has been applied in traffic studies performed within the City.

As the Congestion Management Agency for San Mateo County, the San Mateo City/County Association of Governments (C/CAG) is responsible for establishing applicable operational standards and for maintaining performance of the Congestion Management Program (CMP) roadway network. The LOS standards established for San Mateo County vary by roadway segment, as C/CAG intends to use the CMP process to prevent future congestion levels from getting worse than currently anticipated. El Camino Real is an arterial roadway in the City and is included in the San Mateo C/CAG CMP network. On El Camino Real (SR-82), the LOS standard is LOS E. For intersections along El Camino Real, the standard is LOS E, consistent with the roadway segment standards (C/CAG 2015).

Based on the City of Burlingame Draft General Plan Outline, Existing Conditions Report, the average daily traffic volumes along the roadway segment of El Camino Real between Millbrae Avenue and Broadway is approximately 20,900 (City of Burlingame 2016). This roadway segment of El Camino Real carries a relatively low volume of daily traffic in the City when compared to other segments in San Mateo County. Per the San Mateo County Final Congestion Management Program, the roadway segment of El Camino Real in the vicinity of the project site (from Trousdale Drive to 3rd Avenue) operates at LOS A during both AM and PM peak hours (C/CAG 2015).

### **Discussion**

- a) **No Impact.** As shown in Table 6, the proposed project would generate a very low volume of net new daily and peak-hour trips. Therefore, a level of service analysis of roadway segments and intersections is not warranted. Based on expected trip generation rates for the project, there would be no impact associated with an increase in traffic in relation to the existing traffic load and capacity of the street system.

### **Project Trip Generation**

Table 6 provides a summary of trip generation for the project based on the Institute of Transportation Engineers' Trip Generation Manual, 9th Edition (ITE 2012). The trip generation for the project was estimated by calculating the difference in trips generated by the existing four apartment units and the proposed six townhouse units. Based on the Institute of Transportation Engineers' trip generation rates, the proposed project is estimated to generate approximately eight net new daily trips, with one new trip in the AM peak hour and one new trip in the PM peak hour.

# 1431 El Camino Real Initial Study and Environmental Checklist

**Table 6  
Trip Generation Summary**

Trip Generation Rates									
Land Use	Daily Trip Rate	Unit	AM Peak Hour			PM Peak Hour			
			Total	Percent In	Percent Out	Total	Percent In	Percent Out	
Residential Condominium/Townhouse	5.81	DU	8%	17%	83%	9.0%	67%	33%	
Apartment	6.65	DU	8%	20%	80%	9.0%	65%	35%	
Trip Generation									
Land Use	Total No. of Units	Unit	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Residential Condominium/Townhouse (Proposed)	6	DU	35	3	1	2	3	2	1
Apartment (Existing)	4	DU	27	2	0	2	2	1	1
<b>Net Increase = (Proposed – Existing)</b>			<b>8</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>

Source: ITE 2012  
DU = dwelling unit

**b) No Impact.** The passage of Proposition 111 in June 1990 established a process for each metropolitan county in California that has an urbanized area with a population of more than 50,000 to prepare a CMP. As the Congestion Management Agency for San Mateo County, C/CAG is responsible for maintaining the performance and standards of the CMP roadway network. The CMP legislation stipulates that the CMP’s LOS standards can be set at any level of service: A through F. However, only roadway segments or intersections currently operating at LOS F may have an LOS F standard set for them. On El Camino Real (SR-82) in the project area, the standard for roadway segments and intersections is LOS E.

For large development projects, local jurisdictions would need to notify C/CAG at the beginning of the CEQA process of all development applications or land use policy changes that are expected to generate a net (i.e., project trip generation after subtracting existing on-site uses that are currently active) 100 or more peak-period trips on the CMP network within 10 days of completion of the initial study prepared under CEQA.

Since the proposed project would generate only one trip during the AM peak hour and one trip during the PM peak hour, it is not subject to a CMP analysis, per criteria established by C/CAG (C/CAG 2015).

For smaller or cumulative projects, local jurisdictions need to inform C/CAG of all development proposals or land use changes that would replace or add to current or projected

## 1431 El Camino Real Initial Study and Environmental Checklist

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levels of development. This process updates the land use database used by the Travel Forecasting Model every 2 years, and its results are reported to C/CAG and local jurisdictions in San Mateo County. This cumulative analysis may be used to determine existing LOS on the CMP network or to project future LOS. The results of the analysis alert local jurisdictions about where the amount of congestion is approaching the LOS standard.

Since the proposed project would not generate a significant number of peak-hour trips, it would not exceed, either individually or cumulatively, an LOS standard established by the county congestion management agency for designated roads or highways. No impact would occur.

- c) **No Impact.** The San Francisco International Airport is located just outside the City limits within unincorporated San Mateo County. The project site is located in the influence area of the San Francisco International Airport (San Mateo County 2015). The maximum height proposed by the project is 35 feet, and it would not emit light, glare, or smoke that would disrupt aviation. Further, the project is not anticipated to result in any change in, or impact to, air traffic patterns. No impact would occur.
- d) **No Impact.** Access to the proposed project would be via El Camino Real (SR-82). The project's existing driveway would be removed from the south-facing side of the site and would be constructed along the north-facing side of the project site to provide access to all the units. This would involve curb cuts and require an encroachment permit from Caltrans, since the project would be accessed via a state highway facility. Appropriate traffic control and pedestrian safety requirements would be included as standard conditions in the Caltrans encroachment permit to ensure that safe and adequate pedestrian and vehicular movement along El Camino Real is maintained during construction.

The project would not increase hazards due to design features such as sharp curves or dangerous intersections or incompatible uses. No impact would occur.

- e) **No Impact.** Per standard City practice, the Central County Fire Department would review the project plans prior to the issuance of permits to ensure compliance with the applicable fire and building code regulations regarding emergency access. This would ensure that adequate fire and life safety measures are incorporated into the project. No impact would occur.
- f) **No Impact.** The City's Municipal Code, Zoning (Section 25.70.032), requires two off-street parking spaces for each dwelling unit containing two bedrooms or two potential bedrooms (City of Burlingame 2015). Eighty percent of the total required parking spaces need to be covered or within a garage or carport. The project proposes to build six two-

## 1431 El Camino Real Initial Study and Environmental Checklist

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bedroom townhouse units, and, therefore, would be required to provide 12 on-site parking spaces. The proposed project would provide 12 on-site parking spaces in the form of mechanical, stacked auto lifts (parking lifts). Each unit would be provided with one stacker with a two-car capacity. A parking variance would be required for the use of mechanical parking lifts to provide the required parking spaces.

Buildings that contain five to 15 units require two on-site guest parking spaces. These guest parking spots would be located in the right rear corner of the property. Additionally, one space for delivery vehicles/on-site service vehicles would be provided for the proposed project site in the rear yard, adjacent to the two guest parking spots.

The quantity of proposed on-site parking supply would comply with zoning ordinance requirements; therefore, the project would not result in inadequate parking capacity. No impact would occur.

- g) No Impact.** The project access would be via El Camino Real (SR-82), which is a four-lane undivided arterial roadway in the City of Burlingame and part of the California State Highway System. The City of Burlingame Draft General Plan Outline states the Mobility Study-Area-Specific Policy for El Camino Real (SR-82): to coordinate with Caltrans and the Grand Boulevard Initiative partners to achieve multi-modal safety and mobility improvements (City of Burlingame 2016).

**Transit.** Bus service by SamTrans (part of the San Mateo County Transit District) is available near the project site and provides service throughout San Mateo County. A northbound bus stop is located on the east side El Camino Real, approximately 350 feet south of the project site. A southbound bus stop is located on the west side of El Camino Real, approximately 530 feet south of the project site. Currently, Bus Route 397 and Bus Route ECR provide service along El Camino Real. The Millbrae Bay Area Rapid Transit (BART)/Caltrain station and Broadway station are located on California Drive and provide rail transit access near the project site.

**Bicycle.** El Camino Real, near the project site, does not have bicycle lanes. Per the City of Burlingame Bicycle Transportation Plan, El Camino Real is not designated as a bicycle route. The nearest bicycle lane to the project site is along California Drive, approximately 1,000 feet from the project site (City of Burlingame 2004).

**Pedestrian.** A sidewalk is provided along the east of the project frontage along El Camino Real (SR-82). An encroachment permit from Caltrans would be required for work in the state highway right-of-way that would include the proposed relocation of a driveway, resulting in curb cut and sidewalk improvements. The Caltrans encroachment permit would include standard conditions requiring appropriate traffic control and

## 1431 El Camino Real Initial Study and Environmental Checklist

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pedestrian safety measures during project construction to maintain safe and adequate pedestrian movement along El Camino Real.

The proposed project would not conflict with policies, plans, or programs supporting alternative transportation such as public transit, bicycle, or pedestrian facilities. No impact would occur.

### References

- C/CAG (San Mateo City/County Association of Governments). 2015. Final San Mateo County Congestion Management Program 2015. November 2015. [http://ccag.ca.gov/wp-content/uploads/2016/02/2015-CMP\\_Final\\_rev.pdf](http://ccag.ca.gov/wp-content/uploads/2016/02/2015-CMP_Final_rev.pdf).
- City of Burlingame. 2004. City of Burlingame Bicycle Transportation Plan. As approved by Burlingame City Council Resolution No. 91-2004. October 18, 2004. <https://www.burlingame.org/Modules/ShowDocument.aspx?documentid=156>.
- City of Burlingame. 2015. Municipal Code, Title 25 Zoning, Chapter 25.70, Off-Street Parking. Accessed August 2017. <http://qcode.us/codes/burlingame/>.
- City of Burlingame. 2016. Chapter 4, Mobility, in Draft General Plan Outline City of Burlingame Existing Conditions Report 2015. October 2016. Accessed August, 2017. [http://www.envisionburlingame.org/files/managed/Document/242/Draft\\_GP\\_OUTLINE%20CAC%20Review%20Draft%20%2810-14-16%29.pdf](http://www.envisionburlingame.org/files/managed/Document/242/Draft_GP_OUTLINE%20CAC%20Review%20Draft%20%2810-14-16%29.pdf).
- ITE (Institute of Transportation Engineers). 2012. Trip Generation Manual, 9th Edition. November 16, 2012.
- San Mateo County. 2015. City/County Association of Governments of San Mateo County, Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport, Final, November 2012. Accessed August, 2017. [http://ccag.ca.gov/wp-content/uploads/2014/10/Consolidated\\_CCAG\\_ALUCP\\_November-20121.pdf](http://ccag.ca.gov/wp-content/uploads/2014/10/Consolidated_CCAG_ALUCP_November-20121.pdf).

### 2.17 Utilities And Service Systems

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## 1431 El Camino Real Initial Study and Environmental Checklist

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

**a, b, e) Less than Significant Impact.** The project site is located in an urban area and is served by existing utility systems. Water and sanitary sewer would be controlled by the City. The proposed use would not result in a significant increase in demand for water or wastewater services above what is currently being used. Therefore, impacts would be less than significant.

**c) Less than Significant Impact.** The existing condition of the site is predominantly impervious surfaces. The reconstruction/replacement of impervious surfaces in the area would not result in a significant increase of stormwater runoff. The proposed project would not significantly increase the amount of impervious paved area on the site. Therefore, the proposed project would not significantly increase demand for stormwater drainage facilities, and impacts would be less than significant.

**d) Less than Significant Impact.** The proposed project is not anticipated to result in a significant increase on water demand over previous uses at the site. Water is provided to the site by the City water system, administered by the City of Burlingame Public Works

## 1431 El Camino Real Initial Study and Environmental Checklist

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Department. The City of Burlingame has water supplied by the San Francisco Regional Water System, which is owned and operated by the San Francisco Public Utilities Commission. The San Francisco Public Utilities Commission supplied an average of 205 million gallons per day of water to serve 2.6 million people in the Bay Area in 2016 (City of Burlingame 2016). The proposed project's water increase would be the addition of two townhouse units (from four to six units). This would not result in a significant increase in water usage for the proposed project site. Therefore, the proposed project is not expected to have significant impacts on water supplies based on existing resources and entitlements. The impact would be less than significant.

- f, g) Less than Significant Impact.** Solid waste service is provided to the project site by Recology of San Mateo County (Recology 2017). Waste generated at the site would be transported by Recology to the Ox Mountain Landfill for disposal (Republic Services 2017). Demolition and construction waste would include typical materials such as plaster, drywall sheeting, scrap wood and metal, and concrete. Operational waste would be moderate in volume and consist of the typical waste associated with a six-unit residential building. Ox Mountain Landfill, the landfill used for final disposal of the material generated by the City of Burlingame, has several years of capacity left at current disposal rates, plus it is possible for the landfill to be expanded into adjacent areas to allow for further capacity (Recology 2017). Therefore, impacts on the City's solid waste capacity due to implementation of the proposed project would be less than significant.

### References

- City of Burlingame. 2016. Burlingame 2016 Water Quality Report. Accessed August 21, 2017. <https://www.burlingame.org/modules/showdocument.aspx?documentid=14292>.
- Recology. 2017. San Mateo County. Accessed August 21, 2017. <https://www.recology.com/recology-san-mateo-county/>.
- Republic Services. 2017. Accessed August 21, 2017. <https://www.republicservices.com/>.

## 1431 El Camino Real Initial Study and Environmental Checklist

### 2.18 Mandatory Findings Of Significance

Issues (and Supporting Information Sources):	Significant or Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulative considerable? ("Cumulative 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"/>
c) 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"/>

#### Discussion

- a) **No Impact.** The project site is fully developed as an existing four-unit (two-story) apartment building and detached five-car garage structure in an urban area. The site is not expected to support any candidate or special-status species or species identified for protection in local, regional, or national wildlife plans or policies or associated habitat for such species; thus, the project does not have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Therefore, no impact would occur.
- b) **Less than Significant Impact with Mitigation Incorporated.** In accordance with CEQA Guidelines Section 15183, the environmental analysis in this Initial Study was conducted to determine if any project-specific effects would occur as a result of the proposed project. No project-specific significant effects specific to the project or its



## **1431 El Camino Real Initial Study and Environmental Checklist**

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site were identified that could not be mitigated to a less-than-significant level. Mitigation measures proposed in this document would mitigate any potential contribution to cumulative impacts. All other impacts would be less than significant. Therefore, the proposed project does not have impacts that are individually limited, but cumulatively considerable.

- c) **Less than Significant Impact with Mitigation Incorporated.** There is nothing in the nature of the proposed development and property improvements that would have a substantial adverse effect on human beings, or other life or environmental impacts once mitigation is implemented to reduce potential impacts from noise. Therefore, impacts would be less than significant.

## **1431 El Camino Real Initial Study and Environmental Checklist**

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**DUDEK**

SOURCE: Esri Basemaps

1431 El Camino Real Project

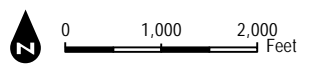
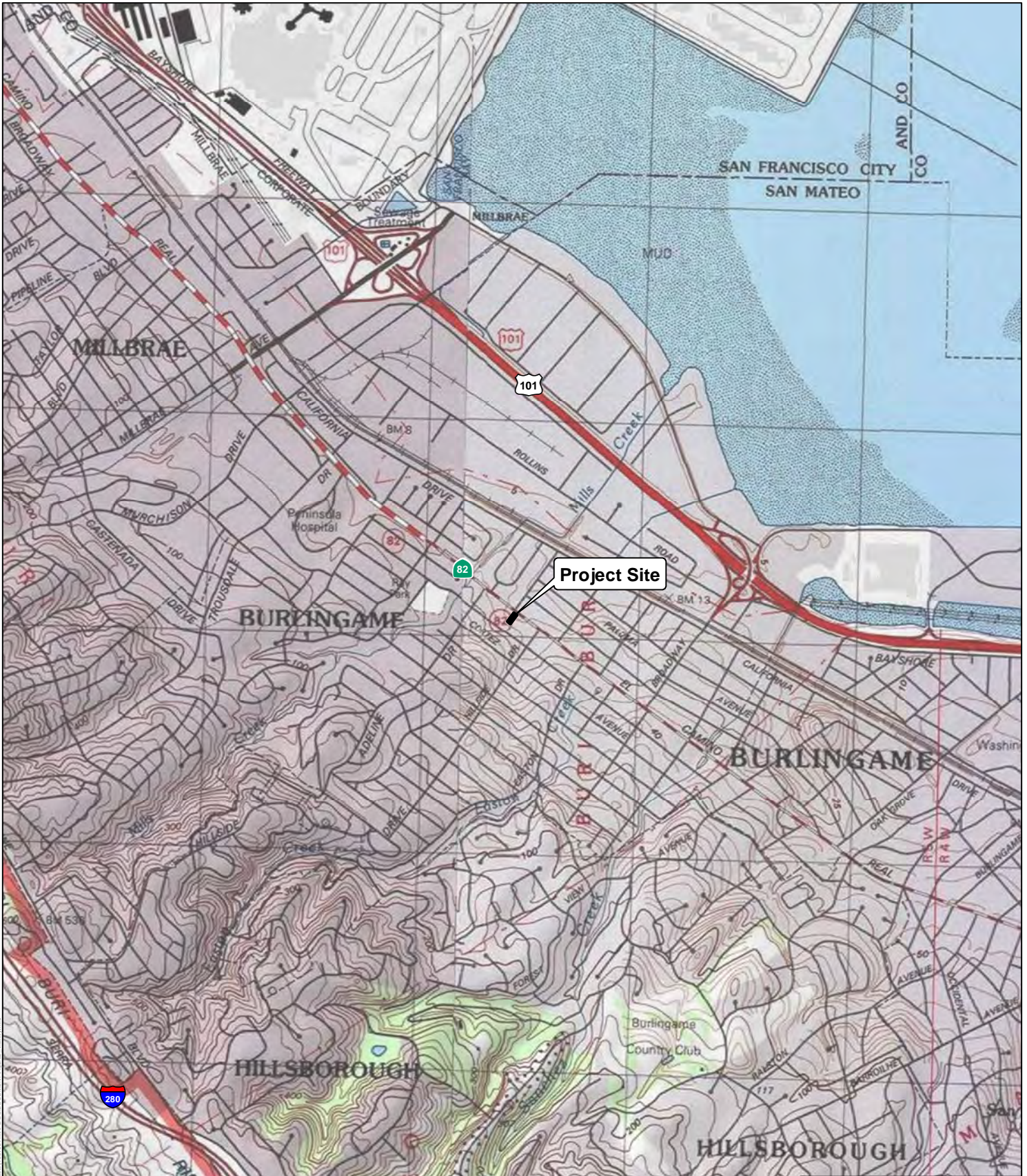
**FIGURE 1**  
Regional Map


## **1431 El Camino Real Initial Study and Environmental Checklist**

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 Project Boundary

SOURCE: USGS 7.5-Minute Series San Mateo Quadrangle  
Township 4S; Range 5W; Section 14

**DUDEK**

1431 El Camino Real Project

**FIGURE 2**  
Vicinity Map

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**APPENDIX A**  
*CalEEMod Calculations*





1431 El Camino Real - Proposed Project - San Mateo County, Annual

**1431 El Camino Real - Proposed Project  
San Mateo County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	6.00	Dwelling Unit	0.11	6,584.00	17
Parking Lot	3.02	1000sqft	0.07	3,023.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	70
<b>Climate Zone</b>	5			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	499.66	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - PG&E CO2 Intensity Adjusted based on 33% RPS by 2020

Land Use - Proposed: 6 condo/townhomes and ~3 ksf of paved driveway/parking

Construction Phase - Estimated construction durations provided by architect

Off-road Equipment - Default

Trips and VMT - Default

Architectural Coating - Default

Vehicle Trips - Default

Woodstoves - Assumed all condo/townhomes would have a gas fireplace

Area Coating - Default

Energy Use - Default energy use

Demolition - Debris tonnage based on CalEEMod factor of 0.046 tons/sf for buildings and CalRecycle factor of 2,400 lbs asphalt debris/yd3

Construction Off-road Equipment Mitigation - Mitigation: compliance with BAAQMD basic dust controls

Energy Mitigation - Exceed 2013 Title 24 by 28% for residences to approximate 2016 Title 24 compliance

Water Mitigation - 20% indoor/outdoor reduction in water assumed for CALGreen compliance

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	1.00	23.00
tblConstructionPhase	NumDays	2.00	21.00
tblConstructionPhase	NumDays	100.00	261.00
tblConstructionPhase	NumDays	5.00	44.00
tblConstructionPhase	NumDays	5.00	66.00
tblFireplaces	NumberGas	0.90	6.00
tblFireplaces	NumberNoFireplace	0.24	0.00
tblFireplaces	NumberWood	1.02	0.00
tblLandUse	BuildingSpaceSquareFeet	6,000.00	6,584.00
tblLandUse	LandUseSquareFeet	6,000.00	6,584.00
tblLandUse	LotAcreage	0.38	0.11
tblProjectCharacteristics	CO2IntensityFactor	641.35	499.66
tblProjectCharacteristics	OperationalYear	2018	2020
tblWoodstoves	NumberCatalytic	0.12	0.00
tblWoodstoves	NumberNoncatalytic	0.12	0.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1051	1.0475	0.7407	1.1900e-003	0.0223	0.0644	0.0867	6.9400e-003	0.0597	0.0667	0.0000	108.0315	108.0315	0.0291	0.0000	108.7585
2019	0.1391	0.8815	0.7291	1.1600e-003	6.8700e-003	0.0534	0.0603	1.8400e-003	0.0496	0.0514	0.0000	103.2641	103.2641	0.0280	0.0000	103.9652
<b>Maximum</b>	<b>0.1391</b>	<b>1.0475</b>	<b>0.7407</b>	<b>1.1900e-003</b>	<b>0.0223</b>	<b>0.0644</b>	<b>0.0867</b>	<b>6.9400e-003</b>	<b>0.0597</b>	<b>0.0667</b>	<b>0.0000</b>	<b>108.0315</b>	<b>108.0315</b>	<b>0.0291</b>	<b>0.0000</b>	<b>108.7585</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1051	1.0475	0.7407	1.1900e-003	0.0132	0.0644	0.0777	3.9800e-003	0.0597	0.0637	0.0000	108.0314	108.0314	0.0291	0.0000	108.7584
2019	0.1391	0.8815	0.7291	1.1600e-003	6.8700e-003	0.0534	0.0603	1.8400e-003	0.0496	0.0514	0.0000	103.2640	103.2640	0.0280	0.0000	103.9651
<b>Maximum</b>	<b>0.1391</b>	<b>1.0475</b>	<b>0.7407</b>	<b>1.1900e-003</b>	<b>0.0132</b>	<b>0.0644</b>	<b>0.0777</b>	<b>3.9800e-003</b>	<b>0.0597</b>	<b>0.0637</b>	<b>0.0000</b>	<b>108.0314</b>	<b>108.0314</b>	<b>0.0291</b>	<b>0.0000</b>	<b>108.7584</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>31.08</b>	<b>0.00</b>	<b>6.18</b>	<b>33.71</b>	<b>0.00</b>	<b>2.51</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2018	6-30-2018	0.3474	0.3474
2	7-1-2018	9-30-2018	0.4037	0.4037
3	10-1-2018	12-31-2018	0.4040	0.4040
4	1-1-2019	3-31-2019	0.3518	0.3518
5	4-1-2019	6-30-2019	0.6612	0.6612
6	7-1-2019	9-30-2019	0.0083	0.0083
		Highest	0.6612	0.6612

**2.2 Overall Operational**  
**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0321	1.1600e-003	0.0450	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	0.8219	0.8219	9.0000e-005	1.0000e-005	0.8281
Energy	9.1000e-004	7.7600e-003	3.3000e-003	5.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	16.8531	16.8531	6.3000e-004	2.6000e-004	16.9460
Mobile	0.0106	0.0344	0.1187	3.4000e-004	0.0290	4.6000e-004	0.0295	7.8000e-003	4.3000e-004	8.2400e-003	0.0000	31.4012	31.4012	1.2600e-003	0.0000	31.4328
Waste						0.0000	0.0000		0.0000	0.0000	0.5603	0.0000	0.5603	0.0331	0.0000	1.3880
Water						0.0000	0.0000		0.0000	0.0000	0.1240	0.6749	0.7989	0.0128	3.1000e-004	1.2104
<b>Total</b>	<b>0.0435</b>	<b>0.0434</b>	<b>0.1670</b>	<b>4.0000e-004</b>	<b>0.0290</b>	<b>1.3900e-003</b>	<b>0.0304</b>	<b>7.8000e-003</b>	<b>1.3600e-003</b>	<b>9.1700e-003</b>	<b>0.6843</b>	<b>49.7511</b>	<b>50.4354</b>	<b>0.0479</b>	<b>5.8000e-004</b>	<b>51.8054</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0321	1.1600e-003	0.0450	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	0.8219	0.8219	9.0000e-005	1.0000e-005	0.8281
Energy	6.8000e-004	5.7900e-003	2.4600e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	14.4834	14.4834	5.8000e-004	2.2000e-004	14.5624
Mobile	0.0106	0.0344	0.1187	3.4000e-004	0.0290	4.6000e-004	0.0295	7.8000e-003	4.3000e-004	8.2400e-003	0.0000	31.4012	31.4012	1.2600e-003	0.0000	31.4328
Waste						0.0000	0.0000		0.0000	0.0000	0.5603	0.0000	0.5603	0.0331	0.0000	1.3880
Water						0.0000	0.0000		0.0000	0.0000	0.0992	0.5399	0.6392	0.0102	2.5000e-004	0.9683
<b>Total</b>	<b>0.0433</b>	<b>0.0414</b>	<b>0.1662</b>	<b>3.9000e-004</b>	<b>0.0290</b>	<b>1.2300e-003</b>	<b>0.0303</b>	<b>7.8000e-003</b>	<b>1.2000e-003</b>	<b>9.0100e-003</b>	<b>0.6595</b>	<b>47.2464</b>	<b>47.9059</b>	<b>0.0453</b>	<b>4.8000e-004</b>	<b>49.1796</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.53</b>	<b>4.54</b>	<b>0.50</b>	<b>2.50</b>	<b>0.00</b>	<b>11.51</b>	<b>0.53</b>	<b>0.00</b>	<b>11.76</b>	<b>1.74</b>	<b>3.62</b>	<b>5.03</b>	<b>5.02</b>	<b>5.45</b>	<b>17.24</b>	<b>5.07</b>

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2018	4/30/2018	5	21	
2	Site Preparation	Site Preparation	5/1/2018	5/31/2018	5	23	
3	Grading	Grading	6/1/2018	6/30/2018	5	21	
4	Building Construction	Building Construction	7/1/2018	7/1/2019	5	261	
5	Architectural Coating	Architectural Coating	4/1/2019	7/1/2019	5	66	
6	Paving	Paving	5/1/2019	7/1/2019	5	44	

Acres of Grading (Site Preparation Phase): 11.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.07

Residential Indoor: 13,333; Residential Outdoor: 4,444; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	6.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	23.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Demolition - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.4900e-003	0.0000	2.4900e-003	3.8000e-004	0.0000	3.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0990	0.0817	1.3000e-004	6.5400e-003	6.5400e-003	6.2400e-003	6.2400e-003	6.2400e-003	6.2400e-003	0.0000	11.1386	11.1386	2.1500e-003	0.0000	11.1923
<b>Total</b>	<b>0.0112</b>	<b>0.0990</b>	<b>0.0817</b>	<b>1.3000e-004</b>	<b>2.4900e-003</b>	<b>6.5400e-003</b>	<b>9.0300e-003</b>	<b>3.8000e-004</b>	<b>6.2400e-003</b>	<b>6.6200e-003</b>	<b>0.0000</b>	<b>11.1386</b>	<b>11.1386</b>	<b>2.1500e-003</b>	<b>0.0000</b>	<b>11.1923</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2000e-004	4.2400e-003	1.5400e-003	1.0000e-005	1.9000e-004	2.0000e-005	2.1000e-004	5.0000e-005	2.0000e-005	7.0000e-005	0.0000	0.9885	0.9885	1.2000e-004	0.0000	0.9914
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.5000e-004	2.5200e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.7337	0.7337	2.0000e-005	0.0000	0.7342
<b>Total</b>	<b>4.6000e-004</b>	<b>4.4900e-003</b>	<b>4.0600e-003</b>	<b>2.0000e-005</b>	<b>1.0200e-003</b>	<b>3.0000e-005</b>	<b>1.0400e-003</b>	<b>2.7000e-004</b>	<b>2.0000e-005</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.7222</b>	<b>1.7222</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.7256</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1200e-003	0.0000	1.1200e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0990	0.0817	1.3000e-004		6.5400e-003	6.5400e-003		6.2400e-003	6.2400e-003	0.0000	11.1386	11.1386	2.1500e-003	0.0000	11.1922
<b>Total</b>	<b>0.0112</b>	<b>0.0990</b>	<b>0.0817</b>	<b>1.3000e-004</b>	<b>1.1200e-003</b>	<b>6.5400e-003</b>	<b>7.6600e-003</b>	<b>1.7000e-004</b>	<b>6.2400e-003</b>	<b>6.4100e-003</b>	<b>0.0000</b>	<b>11.1386</b>	<b>11.1386</b>	<b>2.1500e-003</b>	<b>0.0000</b>	<b>11.1922</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Hauling	1.2000e-004	4.2400e-003	1.5400e-003	1.0000e-005	1.9000e-004	2.0000e-005	2.1000e-004	5.0000e-005	2.0000e-005	7.0000e-005	0.0000	0.9885	0.9885	1.2000e-004	0.0000	0.9914
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.5000e-004	2.5200e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.7337	0.7337	2.0000e-005	0.0000	0.7342
<b>Total</b>	<b>4.6000e-004</b>	<b>4.4900e-003</b>	<b>4.0600e-003</b>	<b>2.0000e-005</b>	<b>1.0200e-003</b>	<b>3.0000e-005</b>	<b>1.0400e-003</b>	<b>2.7000e-004</b>	<b>2.0000e-005</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.7222</b>	<b>1.7222</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.7256</b>

### 3.3 Site Preparation - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.1000e-003	0.0000	6.1000e-003	6.6000e-004	0.0000	6.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0400e-003	0.1122	0.0489	1.1000e-004		4.8100e-003	4.8100e-003		4.4200e-003	4.4200e-003	0.0000	10.2523	10.2523	3.1900e-003	0.0000	10.3321
<b>Total</b>	<b>9.0400e-003</b>	<b>0.1122</b>	<b>0.0489</b>	<b>1.1000e-004</b>	<b>6.1000e-003</b>	<b>4.8100e-003</b>	<b>0.0109</b>	<b>6.6000e-004</b>	<b>4.4200e-003</b>	<b>5.0800e-003</b>	<b>0.0000</b>	<b>10.2523</b>	<b>10.2523</b>	<b>3.1900e-003</b>	<b>0.0000</b>	<b>10.3321</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.4000e-004	1.3800e-003	0.0000	4.5000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4018	0.4018	1.0000e-005	0.0000	0.4020



Total	1.9000e-004	1.4000e-004	1.3800e-003	0.0000	4.5000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4018	0.4018	1.0000e-005	0.0000	0.4020
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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7400e-003	0.0000	2.7400e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0400e-003	0.1122	0.0489	1.1000e-004		4.8100e-003	4.8100e-003		4.4200e-003	4.4200e-003	0.0000	10.2523	10.2523	3.1900e-003	0.0000	10.3320
<b>Total</b>	<b>9.0400e-003</b>	<b>0.1122</b>	<b>0.0489</b>	<b>1.1000e-004</b>	<b>2.7400e-003</b>	<b>4.8100e-003</b>	<b>7.5500e-003</b>	<b>3.0000e-004</b>	<b>4.4200e-003</b>	<b>4.7200e-003</b>	<b>0.0000</b>	<b>10.2523</b>	<b>10.2523</b>	<b>3.1900e-003</b>	<b>0.0000</b>	<b>10.3320</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.4000e-004	1.3800e-003	0.0000	4.5000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4018	0.4018	1.0000e-005	0.0000	0.4020
<b>Total</b>	<b>1.9000e-004</b>	<b>1.4000e-004</b>	<b>1.3800e-003</b>	<b>0.0000</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>4.6000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.4018</b>	<b>0.4018</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4020</b>

**3.4 Grading - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.9000e-003	0.0000	7.9000e-003	4.3400e-003	0.0000	4.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0990	0.0817	1.3000e-004		6.5400e-003	6.5400e-003		6.2400e-003	6.2400e-003	0.0000	11.1386	11.1386	2.1500e-003	0.0000	11.1923
<b>Total</b>	<b>0.0112</b>	<b>0.0990</b>	<b>0.0817</b>	<b>1.3000e-004</b>	<b>7.9000e-003</b>	<b>6.5400e-003</b>	<b>0.0144</b>	<b>4.3400e-003</b>	<b>6.2400e-003</b>	<b>0.0106</b>	<b>0.0000</b>	<b>11.1386</b>	<b>11.1386</b>	<b>2.1500e-003</b>	<b>0.0000</b>	<b>11.1923</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.5000e-004	2.5200e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.7337	0.7337	2.0000e-005	0.0000	0.7342
<b>Total</b>	<b>3.4000e-004</b>	<b>2.5000e-004</b>	<b>2.5200e-003</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.7337</b>	<b>0.7337</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.7342</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.5600e-003	0.0000	3.5600e-003	1.9600e-003	0.0000	1.9600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0990	0.0817	1.3000e-004		6.5400e-003	6.5400e-003		6.2400e-003	6.2400e-003	0.0000	11.1386	11.1386	2.1500e-003	0.0000	11.1922

Total	0.0112	0.0990	0.0817	1.3000e-004	3.5600e-003	6.5400e-003	0.0101	1.9600e-003	6.2400e-003	8.2000e-003	0.0000	11.1386	11.1386	2.1500e-003	0.0000	11.1922
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.5000e-004	2.5200e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.7337	0.7337	2.0000e-005	0.0000	0.7342
<b>Total</b>	<b>3.4000e-004</b>	<b>2.5000e-004</b>	<b>2.5200e-003</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.7337</b>	<b>0.7337</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.7342</b>

**3.5 Building Construction - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0711	0.7226	0.5077	7.5000e-004		0.0464	0.0464		0.0427	0.0427	0.0000	68.1276	68.1276	0.0212	0.0000	68.6579
<b>Total</b>	<b>0.0711</b>	<b>0.7226</b>	<b>0.5077</b>	<b>7.5000e-004</b>		<b>0.0464</b>	<b>0.0464</b>		<b>0.0427</b>	<b>0.0427</b>	<b>0.0000</b>	<b>68.1276</b>	<b>68.1276</b>	<b>0.0212</b>	<b>0.0000</b>	<b>68.6579</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	8.9000e-003	3.3900e-003	2.0000e-005	4.3000e-004	7.0000e-005	5.0000e-004	1.2000e-004	7.0000e-005	1.9000e-004	0.0000	1.7705	1.7705	1.6000e-004	0.0000	1.7745
Worker	1.2800e-003	9.3000e-004	9.4300e-003	3.0000e-005	3.0900e-003	2.0000e-005	3.1100e-003	8.2000e-004	2.0000e-005	8.4000e-004	0.0000	2.7462	2.7462	6.0000e-005	0.0000	2.7479
<b>Total</b>	<b>1.6300e-003</b>	<b>9.8300e-003</b>	<b>0.0128</b>	<b>5.0000e-005</b>	<b>3.5200e-003</b>	<b>9.0000e-005</b>	<b>3.6100e-003</b>	<b>9.4000e-004</b>	<b>9.0000e-005</b>	<b>1.0300e-003</b>	<b>0.0000</b>	<b>4.5168</b>	<b>4.5168</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>4.5223</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0711	0.7226	0.5077	7.5000e-004		0.0464	0.0464		0.0427	0.0427	0.0000	68.1276	68.1276	0.0212	0.0000	68.6578
<b>Total</b>	<b>0.0711</b>	<b>0.7226</b>	<b>0.5077</b>	<b>7.5000e-004</b>		<b>0.0464</b>	<b>0.0464</b>		<b>0.0427</b>	<b>0.0427</b>	<b>0.0000</b>	<b>68.1276</b>	<b>68.1276</b>	<b>0.0212</b>	<b>0.0000</b>	<b>68.6578</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	8.9000e-003	3.3900e-003	2.0000e-005	4.3000e-004	7.0000e-005	5.0000e-004	1.2000e-004	7.0000e-005	1.9000e-004	0.0000	1.7705	1.7705	1.6000e-004	0.0000	1.7745

Worker	1.2800e-003	9.3000e-004	9.4300e-003	3.0000e-005	3.0900e-003	2.0000e-005	3.1100e-003	8.2000e-004	2.0000e-005	8.4000e-004	0.0000	2.7462	2.7462	6.0000e-005	0.0000	2.7479
<b>Total</b>	<b>1.6300e-003</b>	<b>9.8300e-003</b>	<b>0.0128</b>	<b>5.0000e-005</b>	<b>3.5200e-003</b>	<b>9.0000e-005</b>	<b>3.6100e-003</b>	<b>9.4000e-004</b>	<b>9.0000e-005</b>	<b>1.0300e-003</b>	<b>0.0000</b>	<b>4.5168</b>	<b>4.5168</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>4.5223</b>

### 3.5 Building Construction - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0622	0.6384	0.4903	7.4000e-004		0.0394	0.0394		0.0362	0.0362	0.0000	66.4953	66.4953	0.0210	0.0000	67.0213
<b>Total</b>	<b>0.0622</b>	<b>0.6384</b>	<b>0.4903</b>	<b>7.4000e-004</b>		<b>0.0394</b>	<b>0.0394</b>		<b>0.0362</b>	<b>0.0362</b>	<b>0.0000</b>	<b>66.4953</b>	<b>66.4953</b>	<b>0.0210</b>	<b>0.0000</b>	<b>67.0213</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	8.3000e-003	3.1900e-003	2.0000e-005	4.2000e-004	6.0000e-005	4.8000e-004	1.2000e-004	5.0000e-005	1.8000e-004	0.0000	1.7388	1.7388	1.5000e-004	0.0000	1.7426
Worker	1.1500e-003	8.1000e-004	8.3700e-003	3.0000e-005	3.0700e-003	2.0000e-005	3.0900e-003	8.2000e-004	2.0000e-005	8.4000e-004	0.0000	2.6404	2.6404	6.0000e-005	0.0000	2.6418
<b>Total</b>	<b>1.4600e-003</b>	<b>9.1100e-003</b>	<b>0.0116</b>	<b>5.0000e-005</b>	<b>3.4900e-003</b>	<b>8.0000e-005</b>	<b>3.5700e-003</b>	<b>9.4000e-004</b>	<b>7.0000e-005</b>	<b>1.0200e-003</b>	<b>0.0000</b>	<b>4.3792</b>	<b>4.3792</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>4.3845</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0622	0.6383	0.4903	7.4000e-004		0.0394	0.0394		0.0362	0.0362	0.0000	66.4952	66.4952	0.0210	0.0000	67.0212
<b>Total</b>	<b>0.0622</b>	<b>0.6383</b>	<b>0.4903</b>	<b>7.4000e-004</b>		<b>0.0394</b>	<b>0.0394</b>		<b>0.0362</b>	<b>0.0362</b>	<b>0.0000</b>	<b>66.4952</b>	<b>66.4952</b>	<b>0.0210</b>	<b>0.0000</b>	<b>67.0212</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1000e-004	8.3000e-003	3.1900e-003	2.0000e-005	4.2000e-004	6.0000e-005	4.8000e-004	1.2000e-004	5.0000e-005	1.8000e-004	0.0000	1.7388	1.7388	1.5000e-004	0.0000	1.7426
Worker	1.1500e-003	8.1000e-004	8.3700e-003	3.0000e-005	3.0700e-003	2.0000e-005	3.0900e-003	8.2000e-004	2.0000e-005	8.4000e-004	0.0000	2.6404	2.6404	6.0000e-005	0.0000	2.6418
<b>Total</b>	<b>1.4600e-003</b>	<b>9.1100e-003</b>	<b>0.0116</b>	<b>5.0000e-005</b>	<b>3.4900e-003</b>	<b>8.0000e-005</b>	<b>3.5700e-003</b>	<b>9.4000e-004</b>	<b>7.0000e-005</b>	<b>1.0200e-003</b>	<b>0.0000</b>	<b>4.3792</b>	<b>4.3792</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>4.3845</b>

**3.6 Architectural Coating - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0470					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	8.7900e-003	0.0606	0.0608	1.0000e-004		4.2500e-003	4.2500e-003		4.2500e-003	4.2500e-003	0.0000	8.4257	8.4257	7.1000e-004	0.0000	8.4435
<b>Total</b>	<b>0.0558</b>	<b>0.0606</b>	<b>0.0608</b>	<b>1.0000e-004</b>		<b>4.2500e-003</b>	<b>4.2500e-003</b>		<b>4.2500e-003</b>	<b>4.2500e-003</b>	<b>0.0000</b>	<b>8.4257</b>	<b>8.4257</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>8.4435</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	7.1000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2234	0.2234	0.0000	0.0000	0.2235
<b>Total</b>	<b>1.0000e-004</b>	<b>7.0000e-005</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>2.6000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.2234</b>	<b>0.2234</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.2235</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0470					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.7900e-003	0.0606	0.0608	1.0000e-004		4.2500e-003	4.2500e-003		4.2500e-003	4.2500e-003	0.0000	8.4257	8.4257	7.1000e-004	0.0000	8.4435
<b>Total</b>	<b>0.0558</b>	<b>0.0606</b>	<b>0.0608</b>	<b>1.0000e-004</b>		<b>4.2500e-003</b>	<b>4.2500e-003</b>		<b>4.2500e-003</b>	<b>4.2500e-003</b>	<b>0.0000</b>	<b>8.4257</b>	<b>8.4257</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>8.4435</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	7.1000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2234	0.2234	0.0000	0.0000	0.2235
<b>Total</b>	<b>1.0000e-004</b>	<b>7.0000e-005</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>2.6000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.2234</b>	<b>0.2234</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.2235</b>

### 3.7 Paving - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0183	0.1726	0.1573	2.5000e-004		9.7400e-003	9.7400e-003		9.0300e-003	9.0300e-003	0.0000	21.0594	21.0594	6.0200e-003	0.0000	21.2099
Paving	9.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0184</b>	<b>0.1726</b>	<b>0.1573</b>	<b>2.5000e-004</b>		<b>9.7400e-003</b>	<b>9.7400e-003</b>		<b>9.0300e-003</b>	<b>9.0300e-003</b>	<b>0.0000</b>	<b>21.0594</b>	<b>21.0594</b>	<b>6.0200e-003</b>	<b>0.0000</b>	<b>21.2099</b>

#### Unmitigated Construction Off-Site

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



Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1700e-003	8.2000e-004	8.5000e-003	3.0000e-005	3.1200e-003	2.0000e-005	3.1400e-003	8.3000e-004	2.0000e-005	8.5000e-004	0.0000	2.6811	2.6811	6.0000e-005	0.0000	2.6825
<b>Total</b>	<b>1.1700e-003</b>	<b>8.2000e-004</b>	<b>8.5000e-003</b>	<b>3.0000e-005</b>	<b>3.1200e-003</b>	<b>2.0000e-005</b>	<b>3.1400e-003</b>	<b>8.3000e-004</b>	<b>2.0000e-005</b>	<b>8.5000e-004</b>	<b>0.0000</b>	<b>2.6811</b>	<b>2.6811</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>2.6825</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0183	0.1726	0.1573	2.5000e-004		9.7400e-003	9.7400e-003		9.0300e-003	9.0300e-003	0.0000	21.0594	21.0594	6.0200e-003	0.0000	21.2099
Paving	9.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0184</b>	<b>0.1726</b>	<b>0.1573</b>	<b>2.5000e-004</b>		<b>9.7400e-003</b>	<b>9.7400e-003</b>		<b>9.0300e-003</b>	<b>9.0300e-003</b>	<b>0.0000</b>	<b>21.0594</b>	<b>21.0594</b>	<b>6.0200e-003</b>	<b>0.0000</b>	<b>21.2099</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1700e-003	8.2000e-004	8.5000e-003	3.0000e-005	3.1200e-003	2.0000e-005	3.1400e-003	8.3000e-004	2.0000e-005	8.5000e-004	0.0000	2.6811	2.6811	6.0000e-005	0.0000	2.6825
<b>Total</b>	<b>1.1700e-003</b>	<b>8.2000e-004</b>	<b>8.5000e-003</b>	<b>3.0000e-005</b>	<b>3.1200e-003</b>	<b>2.0000e-005</b>	<b>3.1400e-003</b>	<b>8.3000e-004</b>	<b>2.0000e-005</b>	<b>8.5000e-004</b>	<b>0.0000</b>	<b>2.6811</b>	<b>2.6811</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>2.6825</b>

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0106	0.0344	0.1187	3.4000e-004	0.0290	4.6000e-004	0.0295	7.8000e-003	4.3000e-004	8.2400e-003	0.0000	31.4012	31.4012	1.2600e-003	0.0000	31.4328
Unmitigated	0.0106	0.0344	0.1187	3.4000e-004	0.0290	4.6000e-004	0.0295	7.8000e-003	4.3000e-004	8.2400e-003	0.0000	31.4012	31.4012	1.2600e-003	0.0000	31.4328

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	34.86	34.02	29.04	78,315	78,315
Parking Lot	0.00	0.00	0.00		
Total	34.86	34.02	29.04	78,315	78,315

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741
Parking Lot	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.7795	7.7795	4.5000e-004	9.0000e-005	7.8186
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.8677	7.8677	4.6000e-004	9.0000e-005	7.9072
NaturalGas Mitigated	6.8000e-004	5.7900e-003	2.4600e-003	4.0000e-005	4.7000e-004	4.7000e-004	4.7000e-004	4.7000e-004	4.7000e-004	4.7000e-004	0.0000	6.7039	6.7039	1.3000e-004	1.2000e-004	6.7438
NaturalGas Unmitigated	9.1000e-004	7.7600e-003	3.3000e-003	5.0000e-005	6.3000e-004	6.3000e-004	6.3000e-004	6.3000e-004	6.3000e-004	6.3000e-004	0.0000	8.9854	8.9854	1.7000e-004	1.6000e-004	9.0388

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	168380	9.1000e-004	7.7600e-003	3.3000e-003	5.0000e-005	6.3000e-004	6.3000e-004	6.3000e-004	6.3000e-004	6.3000e-004	6.3000e-004	0.0000	8.9854	8.9854	1.7000e-004	1.6000e-004	9.0388
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>9.1000e-004</b>	<b>7.7600e-003</b>	<b>3.3000e-003</b>	<b>5.0000e-005</b>	<b>6.3000e-004</b>	<b>6.3000e-004</b>	<b>6.3000e-004</b>	<b>6.3000e-004</b>	<b>6.3000e-004</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>8.9854</b>	<b>8.9854</b>	<b>1.7000e-004</b>	<b>1.6000e-004</b>	<b>9.0388</b>

#### Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	125627	6.8000e-004	5.7900e-003	2.4600e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7039	6.7039	1.3000e-004	1.2000e-004	6.7438
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>6.8000e-004</b>	<b>5.7900e-003</b>	<b>2.4600e-003</b>	<b>4.0000e-005</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>6.7039</b>	<b>6.7039</b>	<b>1.3000e-004</b>	<b>1.2000e-004</b>	<b>6.7438</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	32053.9	7.2648	4.2000e-004	9.0000e-005	7.3013
Parking Lot	2660.24	0.6029	3.0000e-005	1.0000e-005	0.6060
<b>Total</b>		<b>7.8677</b>	<b>4.5000e-004</b>	<b>1.0000e-004</b>	<b>7.9072</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	31664.7	7.1766	4.2000e-004	9.0000e-005	7.2127
Parking Lot	2660.24	0.6029	3.0000e-005	1.0000e-005	0.6060

Total		7.7795	4.5000e-004	1.0000e-004	7.8186
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## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0321	1.1600e-003	0.0450	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	0.8219	0.8219	9.0000e-005	1.0000e-005	0.8281
Unmitigated	0.0321	1.1600e-003	0.0450	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	0.8219	0.8219	9.0000e-005	1.0000e-005	0.8281

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.7000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0259					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	8.0000e-005	6.5000e-004	2.8000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7490	0.7490	1.0000e-005	1.0000e-005	0.7535
Landscaping	1.3600e-003	5.2000e-004	0.0447	0.0000		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.0728	0.0728	7.0000e-005	0.0000	0.0746
<b>Total</b>	<b>0.0321</b>	<b>1.1700e-003</b>	<b>0.0450</b>	<b>0.0000</b>		<b>3.0000e-004</b>	<b>3.0000e-004</b>		<b>3.0000e-004</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>0.8219</b>	<b>0.8219</b>	<b>8.0000e-005</b>	<b>1.0000e-005</b>	<b>0.8281</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.7000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0259					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	8.0000e-005	6.5000e-004	2.8000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7490	0.7490	1.0000e-005	1.0000e-005	0.7535
Landscaping	1.3600e-003	5.2000e-004	0.0447	0.0000		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.0728	0.0728	7.0000e-005	0.0000	0.0746
<b>Total</b>	<b>0.0321</b>	<b>1.1700e-003</b>	<b>0.0450</b>	<b>0.0000</b>		<b>3.0000e-004</b>	<b>3.0000e-004</b>		<b>3.0000e-004</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>0.8219</b>	<b>0.8219</b>	<b>8.0000e-005</b>	<b>1.0000e-005</b>	<b>0.8281</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.6392	0.0102	2.5000e-004	0.9683
Unmitigated	0.7989	0.0128	3.1000e-004	1.2104

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	0.390924 / 0.246452	0.7989	0.0128	3.1000e-004	1.2104
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.7989</b>	<b>0.0128</b>	<b>3.1000e-004</b>	<b>1.2104</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	0.312739 / 0.197162	0.6392	0.0102	2.5000e-004	0.9683
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.6392</b>	<b>0.0102</b>	<b>2.5000e-004</b>	<b>0.9683</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
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	MT/yr			
Mitigated	0.5603	0.0331	0.0000	1.3880
Unmitigated	0.5603	0.0331	0.0000	1.3880

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	2.76	0.5603	0.0331	0.0000	1.3880
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.5603</b>	<b>0.0331</b>	<b>0.0000</b>	<b>1.3880</b>

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	2.76	0.5603	0.0331	0.0000	1.3880
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.5603</b>	<b>0.0331</b>	<b>0.0000</b>	<b>1.3880</b>

## 9.0 Operational Offroad



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

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### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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### Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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1431 El Camino Real - Proposed Project - San Mateo County, Summer

**1431 El Camino Real - Proposed Project  
San Mateo County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	6.00	Dwelling Unit	0.11	6,584.00	17
Parking Lot	3.02	1000sqft	0.07	3,023.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	70
<b>Climate Zone</b>	5			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	499.66	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - PG&E CO2 Intensity Adjusted based on 33% RPS by 2020

Land Use - Proposed: 6 condo/townhomes and ~3 ksf of paved driveway/parking

Construction Phase - Estimated construction durations provided by architect

Off-road Equipment - Default

Trips and VMT - Default

Architectural Coating - Default

Vehicle Trips - Default

Woodstoves - Assumed all condo/townhomes would have a gas fireplace

Area Coating - Default

Energy Use - Default energy use

Demolition - Debris tonnage based on CalEEMod factor of 0.046 tons/sf for buildings and CalRecycle factor of 2,400 lbs asphalt debris/yd3

Construction Off-road Equipment Mitigation - Mitigation: compliance with BAAQMD basic dust controls

Energy Mitigation - Exceed 2013 Title 24 by 28% for residences to approximate 2016 Title 24 compliance

Water Mitigation - 20% indoor/outdoor reduction in water assumed for CALGreen compliance

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	1.00	23.00
tblConstructionPhase	NumDays	2.00	21.00
tblConstructionPhase	NumDays	100.00	261.00
tblConstructionPhase	NumDays	5.00	44.00
tblConstructionPhase	NumDays	5.00	66.00
tblFireplaces	NumberGas	0.90	6.00
tblFireplaces	NumberNoFireplace	0.24	0.00
tblFireplaces	NumberWood	1.02	0.00
tblLandUse	BuildingSpaceSquareFeet	6,000.00	6,584.00
tblLandUse	LandUseSquareFeet	6,000.00	6,584.00
tblLandUse	LotAcreage	0.38	0.11
tblProjectCharacteristics	CO2IntensityFactor	641.35	499.66
tblProjectCharacteristics	OperationalYear	2018	2020
tblWoodstoves	NumberCatalytic	0.12	0.00
tblWoodstoves	NumberNoncatalytic	0.12	0.00

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	1.1098	11.1777	8.1738	0.0137	0.8349	0.7100	1.4582	0.4356	0.6533	1.0303	0.0000	1,355.3497	1,355.3497	0.3607	0.0000	1,361.3396
2019	3.5609	19.6722	17.1476	0.0279	0.2121	1.1788	1.3909	0.0564	1.0983	1.1547	0.0000	2,692.0809	2,692.0809	0.6890	0.0000	2,709.3047
<b>Maximum</b>	<b>3.5609</b>	<b>19.6722</b>	<b>17.1476</b>	<b>0.0279</b>	<b>0.8349</b>	<b>1.1788</b>	<b>1.4582</b>	<b>0.4356</b>	<b>1.0983</b>	<b>1.1547</b>	<b>0.0000</b>	<b>2,692.0809</b>	<b>2,692.0809</b>	<b>0.6890</b>	<b>0.0000</b>	<b>2,709.3047</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	1.1098	11.1777	8.1738	0.0137	0.4209	0.7100	1.0442	0.2080	0.6533	0.8028	0.0000	1,355.3497	1,355.3497	0.3607	0.0000	1,361.3396
2019	3.5609	19.6722	17.1476	0.0279	0.2121	1.1788	1.3909	0.0564	1.0983	1.1547	0.0000	2,692.0809	2,692.0809	0.6890	0.0000	2,709.3047
<b>Maximum</b>	<b>3.5609</b>	<b>19.6722</b>	<b>17.1476</b>	<b>0.0279</b>	<b>0.4209</b>	<b>1.1788</b>	<b>1.3909</b>	<b>0.2080</b>	<b>1.0983</b>	<b>1.1547</b>	<b>0.0000</b>	<b>2,692.0809</b>	<b>2,692.0809</b>	<b>0.6890</b>	<b>0.0000</b>	<b>2,709.3047</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>39.54</b>	<b>0.00</b>	<b>14.53</b>	<b>46.26</b>	<b>0.00</b>	<b>10.42</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**2.2 Overall Operational**  
**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1965	0.1219	0.5464	7.7000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	149.1273	149.1273	3.7100e-003	2.7200e-003	150.0299
Energy	4.9700e-003	0.0425	0.0181	2.7000e-004		3.4400e-003	3.4400e-003		3.4400e-003	3.4400e-003		54.2724	54.2724	1.0400e-003	9.9000e-004	54.5949
Mobile	0.0653	0.1845	0.6743	2.0400e-003	0.1710	2.6000e-003	0.1736	0.0458	2.4500e-003	0.0483		205.4915	205.4915	7.8800e-003		205.6886
<b>Total</b>	<b>0.2667</b>	<b>0.3489</b>	<b>1.2388</b>	<b>3.0800e-003</b>	<b>0.1710</b>	<b>0.0182</b>	<b>0.1892</b>	<b>0.0458</b>	<b>0.0180</b>	<b>0.0638</b>	<b>0.0000</b>	<b>408.8912</b>	<b>408.8912</b>	<b>0.0126</b>	<b>3.7100e-003</b>	<b>410.3134</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1965	0.1219	0.5464	7.7000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	149.1273	149.1273	3.7100e-003	2.7200e-003	150.0299
Energy	3.7100e-003	0.0317	0.0135	2.0000e-004		2.5600e-003	2.5600e-003		2.5600e-003	2.5600e-003		40.4921	40.4921	7.8000e-004	7.4000e-004	40.7328
Mobile	0.0653	0.1845	0.6743	2.0400e-003	0.1710	2.6000e-003	0.1736	0.0458	2.4500e-003	0.0483		205.4915	205.4915	7.8800e-003		205.6886
<b>Total</b>	<b>0.2654</b>	<b>0.3381</b>	<b>1.2342</b>	<b>3.0100e-003</b>	<b>0.1710</b>	<b>0.0173</b>	<b>0.1883</b>	<b>0.0458</b>	<b>0.0171</b>	<b>0.0629</b>	<b>0.0000</b>	<b>395.1110</b>	<b>395.1110</b>	<b>0.0124</b>	<b>3.4600e-003</b>	<b>396.4513</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.47</b>	<b>3.09</b>	<b>0.37</b>	<b>2.27</b>	<b>0.00</b>	<b>4.85</b>	<b>0.47</b>	<b>0.00</b>	<b>4.89</b>	<b>1.38</b>	<b>0.00</b>	<b>3.37</b>	<b>3.37</b>	<b>2.06</b>	<b>6.74</b>	<b>3.38</b>

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2018	4/30/2018	5	21	
2	Site Preparation	Site Preparation	5/1/2018	5/31/2018	5	23	
3	Grading	Grading	6/1/2018	6/30/2018	5	21	
4	Building Construction	Building Construction	7/1/2018	7/1/2019	5	261	
5	Architectural Coating	Architectural Coating	4/1/2019	7/1/2019	5	66	
6	Paving	Paving	5/1/2019	7/1/2019	5	44	

Acres of Grading (Site Preparation Phase): 11.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.07

Residential Indoor: 13,333; Residential Outdoor: 4,444; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	6.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	23.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Demolition - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2373	0.0000	0.2373	0.0359	0.0000	0.0359			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.350	1,169.350	0.2254		1,174.985
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>	<b>0.2373</b>	<b>0.6228</b>	<b>0.8601</b>	<b>0.0359</b>	<b>0.5943</b>	<b>0.6302</b>		<b>1,169.350</b>	<b>1,169.350</b>	<b>0.2254</b>		<b>1,174.985</b>
												2	2			7

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0115	0.3943	0.1442	9.3000e-004	0.0190	1.6500e-003	0.0207	5.2000e-003	1.5700e-003	6.7800e-003			104.2208	104.2208	0.0123		104.5279
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0209	0.2533	8.2000e-004	0.0822	5.1000e-004	0.0827	0.0218	4.7000e-004	0.0223			81.7786	81.7786	1.9000e-003		81.8261
<b>Total</b>	<b>0.0445</b>	<b>0.4152</b>	<b>0.3975</b>	<b>1.7500e-003</b>	<b>0.1012</b>	<b>2.1600e-003</b>	<b>0.1033</b>	<b>0.0270</b>	<b>2.0400e-003</b>	<b>0.0290</b>			<b>185.9995</b>	<b>185.9995</b>	<b>0.0142</b>		<b>186.3540</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1068	0.0000	0.1068	0.0162	0.0000	0.0162			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>	<b>0.1068</b>	<b>0.6228</b>	<b>0.7296</b>	<b>0.0162</b>	<b>0.5943</b>	<b>0.6105</b>	<b>0.0000</b>	<b>1,169.3502</b>	<b>1,169.3502</b>	<b>0.2254</b>		<b>1,174.9857</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0115	0.3943	0.1442	9.3000e-004	0.0190	1.6500e-003	0.0207	5.2000e-003	1.5700e-003	6.7800e-003		104.2208	104.2208	0.0123		104.5279
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0209	0.2533	8.2000e-004	0.0822	5.1000e-004	0.0827	0.0218	4.7000e-004	0.0223		81.7786	81.7786	1.9000e-003		81.8261
<b>Total</b>	<b>0.0445</b>	<b>0.4152</b>	<b>0.3975</b>	<b>1.7500e-003</b>	<b>0.1012</b>	<b>2.1600e-003</b>	<b>0.1033</b>	<b>0.0270</b>	<b>2.0400e-003</b>	<b>0.0290</b>		<b>185.9995</b>	<b>185.9995</b>	<b>0.0142</b>		<b>186.3540</b>

### 3.3 Site Preparation - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
<b>Total</b>	<b>0.7858</b>	<b>9.7572</b>	<b>4.2514</b>	<b>9.7600e-003</b>	<b>0.5303</b>	<b>0.4180</b>	<b>0.9483</b>	<b>0.0573</b>	<b>0.3846</b>	<b>0.4418</b>		<b>982.7113</b>	<b>982.7113</b>	<b>0.3059</b>		<b>990.3596</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0165	0.0105	0.1267	4.1000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		40.8893	40.8893	9.5000e-004		40.9130

<b>Total</b>	<b>0.0165</b>	<b>0.0105</b>	<b>0.1267</b>	<b>4.1000e-004</b>	<b>0.0411</b>	<b>2.5000e-004</b>	<b>0.0413</b>	<b>0.0109</b>	<b>2.3000e-004</b>	<b>0.0111</b>		<b>40.8893</b>	<b>40.8893</b>	<b>9.5000e-004</b>		<b>40.9130</b>
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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
<b>Total</b>	<b>0.7858</b>	<b>9.7572</b>	<b>4.2514</b>	<b>9.7600e-003</b>	<b>0.2386</b>	<b>0.4180</b>	<b>0.6566</b>	<b>0.0258</b>	<b>0.3846</b>	<b>0.4103</b>	<b>0.0000</b>	<b>982.7113</b>	<b>982.7113</b>	<b>0.3059</b>		<b>990.3596</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0165	0.0105	0.1267	4.1000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		40.8893	40.8893	9.5000e-004		40.9130
<b>Total</b>	<b>0.0165</b>	<b>0.0105</b>	<b>0.1267</b>	<b>4.1000e-004</b>	<b>0.0411</b>	<b>2.5000e-004</b>	<b>0.0413</b>	<b>0.0109</b>	<b>2.3000e-004</b>	<b>0.0111</b>		<b>40.8893</b>	<b>40.8893</b>	<b>9.5000e-004</b>		<b>40.9130</b>

**3.4 Grading - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>	<b>0.7528</b>	<b>0.6228</b>	<b>1.3755</b>	<b>0.4138</b>	<b>0.5943</b>	<b>1.0081</b>		<b>1,169.3502</b>	<b>1,169.3502</b>	<b>0.2254</b>		<b>1,174.9857</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0209	0.2533	8.2000e-004	0.0822	5.1000e-004	0.0827	0.0218	4.7000e-004	0.0223		81.7786	81.7786	1.9000e-003		81.8261
<b>Total</b>	<b>0.0330</b>	<b>0.0209</b>	<b>0.2533</b>	<b>8.2000e-004</b>	<b>0.0822</b>	<b>5.1000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.7000e-004</b>	<b>0.0223</b>		<b>81.7786</b>	<b>81.7786</b>	<b>1.9000e-003</b>		<b>81.8261</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3387	0.0000	0.3387	0.1862	0.0000	0.1862			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857

Total	1.0643	9.4295	7.7762	0.0120	0.3387	0.6228	0.9615	0.1862	0.5943	0.7805	0.0000	1,169.350 2	1,169.350 2	0.2254		1,174.985 7
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0330	0.0209	0.2533	8.2000e-004	0.0822	5.1000e-004	0.0827	0.0218	4.7000e-004	0.0223		81.7786	81.7786	1.9000e-003		81.8261
<b>Total</b>	<b>0.0330</b>	<b>0.0209</b>	<b>0.2533</b>	<b>8.2000e-004</b>	<b>0.0822</b>	<b>5.1000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.7000e-004</b>	<b>0.0223</b>		<b>81.7786</b>	<b>81.7786</b>	<b>1.9000e-003</b>		<b>81.8261</b>

**3.5 Building Construction - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.532 3	1,146.532 3	0.3569		1,155.455 5
<b>Total</b>	<b>1.0848</b>	<b>11.0316</b>	<b>7.7512</b>	<b>0.0114</b>		<b>0.7087</b>	<b>0.7087</b>		<b>0.6520</b>	<b>0.6520</b>		<b>1,146.532 3</b>	<b>1,146.532 3</b>	<b>0.3569</b>		<b>1,155.455 5</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.2200e-003	0.1336	0.0495	2.7000e-004	6.7500e-003	1.0300e-003	7.7800e-003	1.9400e-003	9.9000e-004	2.9300e-003		30.0111	30.0111	2.6200e-003		30.0765
Worker	0.0198	0.0125	0.1520	4.9000e-004	0.0493	3.0000e-004	0.0496	0.0131	2.8000e-004	0.0134		49.0672	49.0672	1.1400e-003		49.0956
<b>Total</b>	<b>0.0250</b>	<b>0.1461</b>	<b>0.2015</b>	<b>7.6000e-004</b>	<b>0.0560</b>	<b>1.3300e-003</b>	<b>0.0574</b>	<b>0.0150</b>	<b>1.2700e-003</b>	<b>0.0163</b>		<b>79.0783</b>	<b>79.0783</b>	<b>3.7600e-003</b>		<b>79.1721</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555
<b>Total</b>	<b>1.0848</b>	<b>11.0316</b>	<b>7.7512</b>	<b>0.0114</b>		<b>0.7087</b>	<b>0.7087</b>		<b>0.6520</b>	<b>0.6520</b>	<b>0.0000</b>	<b>1,146.5323</b>	<b>1,146.5323</b>	<b>0.3569</b>		<b>1,155.4555</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.2200e-003	0.1336	0.0495	2.7000e-004	6.7500e-003	1.0300e-003	7.7800e-003	1.9400e-003	9.9000e-004	2.9300e-003		30.0111	30.0111	2.6200e-003		30.0765

Worker	0.0198	0.0125	0.1520	4.9000e-004	0.0493	3.0000e-004	0.0496	0.0131	2.8000e-004	0.0134		49.0672	49.0672	1.1400e-003		49.0956
<b>Total</b>	<b>0.0250</b>	<b>0.1461</b>	<b>0.2015</b>	<b>7.6000e-004</b>	<b>0.0560</b>	<b>1.3300e-003</b>	<b>0.0574</b>	<b>0.0150</b>	<b>1.2700e-003</b>	<b>0.0163</b>		<b>79.0783</b>	<b>79.0783</b>	<b>3.7600e-003</b>		<b>79.1721</b>

### 3.5 Building Construction - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892
<b>Total</b>	<b>0.9576</b>	<b>9.8207</b>	<b>7.5432</b>	<b>0.0114</b>		<b>0.6054</b>	<b>0.6054</b>		<b>0.5569</b>	<b>0.5569</b>		<b>1,127.6696</b>	<b>1,127.6696</b>	<b>0.3568</b>		<b>1,136.5892</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6600e-003	0.1256	0.0469	2.7000e-004	6.7500e-003	8.7000e-004	7.6200e-003	1.9400e-003	8.4000e-004	2.7800e-003		29.7014	29.7014	2.5700e-003		29.7657
Worker	0.0179	0.0110	0.1364	4.8000e-004	0.0493	3.0000e-004	0.0496	0.0131	2.8000e-004	0.0134		47.5391	47.5391	1.0100e-003		47.5642
<b>Total</b>	<b>0.0226</b>	<b>0.1366</b>	<b>0.1834</b>	<b>7.5000e-004</b>	<b>0.0560</b>	<b>1.1700e-003</b>	<b>0.0572</b>	<b>0.0150</b>	<b>1.1200e-003</b>	<b>0.0161</b>		<b>77.2405</b>	<b>77.2405</b>	<b>3.5800e-003</b>		<b>77.3300</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892
<b>Total</b>	<b>0.9576</b>	<b>9.8207</b>	<b>7.5432</b>	<b>0.0114</b>		<b>0.6054</b>	<b>0.6054</b>		<b>0.5569</b>	<b>0.5569</b>	<b>0.0000</b>	<b>1,127.6696</b>	<b>1,127.6696</b>	<b>0.3568</b>		<b>1,136.5892</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6600e-003	0.1256	0.0469	2.7000e-004	6.7500e-003	8.7000e-004	7.6200e-003	1.9400e-003	8.4000e-004	2.7800e-003		29.7014	29.7014	2.5700e-003		29.7657
Worker	0.0179	0.0110	0.1364	4.8000e-004	0.0493	3.0000e-004	0.0496	0.0131	2.8000e-004	0.0134		47.5391	47.5391	1.0100e-003		47.5642
<b>Total</b>	<b>0.0226</b>	<b>0.1366</b>	<b>0.1834</b>	<b>7.5000e-004</b>	<b>0.0560</b>	<b>1.1700e-003</b>	<b>0.0572</b>	<b>0.0150</b>	<b>1.1200e-003</b>	<b>0.0161</b>		<b>77.2405</b>	<b>77.2405</b>	<b>3.5800e-003</b>		<b>77.3300</b>

**3.6 Architectural Coating - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.4235					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>1.6900</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	2.9800e-003	1.8400e-003	0.0227	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.9232	7.9232	1.7000e-004		7.9274
<b>Total</b>	<b>2.9800e-003</b>	<b>1.8400e-003</b>	<b>0.0227</b>	<b>8.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>7.9232</b>	<b>7.9232</b>	<b>1.7000e-004</b>		<b>7.9274</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.4235					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>1.6900</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

**Mitigated Construction Off-Site**



	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	2.9800e-003	1.8400e-003	0.0227	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.9232	7.9232	1.7000e-004		7.9274
<b>Total</b>	<b>2.9800e-003</b>	<b>1.8400e-003</b>	<b>0.0227</b>	<b>8.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>7.9232</b>	<b>7.9232</b>	<b>1.7000e-004</b>		<b>7.9274</b>

### 3.7 Paving - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106		1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	4.1700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8341</b>	<b>7.8446</b>	<b>7.1478</b>	<b>0.0113</b>		<b>0.4425</b>	<b>0.4425</b>		<b>0.4106</b>	<b>0.4106</b>		<b>1,055.1823</b>	<b>1,055.1823</b>	<b>0.3016</b>		<b>1,062.7231</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0537	0.0330	0.4093	1.4300e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		142.6173	142.6173	3.0200e-003		142.6927
<b>Total</b>	<b>0.0537</b>	<b>0.0330</b>	<b>0.4093</b>	<b>1.4300e-003</b>	<b>0.1479</b>	<b>9.1000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.4000e-004</b>	<b>0.0401</b>		<b>142.6173</b>	<b>142.6173</b>	<b>3.0200e-003</b>		<b>142.6927</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106	0.0000	1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	4.1700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8341</b>	<b>7.8446</b>	<b>7.1478</b>	<b>0.0113</b>		<b>0.4425</b>	<b>0.4425</b>		<b>0.4106</b>	<b>0.4106</b>	<b>0.0000</b>	<b>1,055.1823</b>	<b>1,055.1823</b>	<b>0.3016</b>		<b>1,062.7231</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0537	0.0330	0.4093	1.4300e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		142.6173	142.6173	3.0200e-003		142.6927
<b>Total</b>	<b>0.0537</b>	<b>0.0330</b>	<b>0.4093</b>	<b>1.4300e-003</b>	<b>0.1479</b>	<b>9.1000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.4000e-004</b>	<b>0.0401</b>		<b>142.6173</b>	<b>142.6173</b>	<b>3.0200e-003</b>		<b>142.6927</b>

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0653	0.1845	0.6743	2.0400e-003	0.1710	2.6000e-003	0.1736	0.0458	2.4500e-003	0.0483		205.4915	205.4915	7.8800e-003		205.6886
Unmitigated	0.0653	0.1845	0.6743	2.0400e-003	0.1710	2.6000e-003	0.1736	0.0458	2.4500e-003	0.0483		205.4915	205.4915	7.8800e-003		205.6886

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	34.86	34.02	29.04	78,315	78,315
Parking Lot	0.00	0.00	0.00		
Total	34.86	34.02	29.04	78,315	78,315

#### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741
Parking Lot	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741

#### 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	3.7100e-003	0.0317	0.0135	2.0000e-004		2.5600e-003	2.5600e-003		2.5600e-003	2.5600e-003		40.4921	40.4921	7.8000e-004	7.4000e-004	40.7328
NaturalGas Unmitigated	4.9700e-003	0.0425	0.0181	2.7000e-004		3.4400e-003	3.4400e-003		3.4400e-003	3.4400e-003		54.2724	54.2724	1.0400e-003	9.9000e-004	54.5949

### 5.2 Energy by Land Use - NaturalGas Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	461.315	4.9700e-003	0.0425	0.0181	2.7000e-004		3.4400e-003	3.4400e-003		3.4400e-003	3.4400e-003		54.2724	54.2724	1.0400e-003	9.9000e-004	54.5949
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>4.9700e-003</b>	<b>0.0425</b>	<b>0.0181</b>	<b>2.7000e-004</b>		<b>3.4400e-003</b>	<b>3.4400e-003</b>		<b>3.4400e-003</b>	<b>3.4400e-003</b>		<b>54.2724</b>	<b>54.2724</b>	<b>1.0400e-003</b>	<b>9.9000e-004</b>	<b>54.5949</b>

### Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Condo/Townhouse	0.344183	3.7100e-003	0.0317	0.0135	2.0000e-004		2.5600e-003	2.5600e-003		2.5600e-003	2.5600e-003			40.4921	40.4921	7.8000e-004	7.4000e-004	40.7328
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>3.7100e-003</b>	<b>0.0317</b>	<b>0.0135</b>	<b>2.0000e-004</b>		<b>2.5600e-003</b>	<b>2.5600e-003</b>		<b>2.5600e-003</b>	<b>2.5600e-003</b>			<b>40.4921</b>	<b>40.4921</b>	<b>7.8000e-004</b>	<b>7.4000e-004</b>	<b>40.7328</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1965	0.1219	0.5464	7.7000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	149.1273	149.1273	3.7100e-003	2.7200e-003	150.0299
Unmitigated	0.1965	0.1219	0.5464	7.7000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	149.1273	149.1273	3.7100e-003	2.7200e-003	150.0299

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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SubCategory	lb/day										lb/day					
Architectural Coating	0.0257					0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Consumer Products	0.1420					0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Hearth	0.0136	0.1161	0.0494	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003	0.0000	148.2353	148.2353	2.8400e-003	2.7200e-003	149.1162
Landscaping	0.0152	5.7500e-003	0.4970	3.0000e-005		2.7300e-003	2.7300e-003		2.7300e-003	2.7300e-003		0.8920	0.8920	8.7000e-004		0.9138
<b>Total</b>	<b>0.1965</b>	<b>0.1219</b>	<b>0.5464</b>	<b>7.7000e-004</b>		<b>0.0121</b>	<b>0.0121</b>		<b>0.0121</b>	<b>0.0121</b>	<b>0.0000</b>	<b>149.1273</b>	<b>149.1273</b>	<b>3.7100e-003</b>	<b>2.7200e-003</b>	<b>150.0299</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.0257						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1420						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0136	0.1161	0.0494	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003	0.0000	148.2353	148.2353	2.8400e-003	2.7200e-003	149.1162	
Landscaping	0.0152	5.7500e-003	0.4970	3.0000e-005		2.7300e-003	2.7300e-003		2.7300e-003	2.7300e-003		0.8920	0.8920	8.7000e-004		0.9138	
<b>Total</b>	<b>0.1965</b>	<b>0.1219</b>	<b>0.5464</b>	<b>7.7000e-004</b>		<b>0.0121</b>	<b>0.0121</b>		<b>0.0121</b>	<b>0.0121</b>	<b>0.0000</b>	<b>149.1273</b>	<b>149.1273</b>	<b>3.7100e-003</b>	<b>2.7200e-003</b>	<b>150.0299</b>	

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

## 9.0 Operational Offroad

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

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### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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### Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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1431 El Camino Real - Proposed Project - San Mateo County, Winter

**1431 El Camino Real - Proposed Project**  
**San Mateo County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	6.00	Dwelling Unit	0.11	6,584.00	17
Parking Lot	3.02	1000sqft	0.07	3,023.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	70
<b>Climate Zone</b>	5			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	499.66	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics - PG&E CO2 Intensity Adjusted based on 33% RPS by 2020
- Land Use - Proposed: 6 condo/townhomes and ~3 ksf of paved driveway/parking
- Construction Phase - Estimated construction durations provided by architect
- Off-road Equipment - Default
- Trips and VMT - Default
- Architectural Coating - Default
- Vehicle Trips - Default
- Woodstoves - Assumed all condo/townhomes would have a gas fireplace
- Area Coating - Default
- Energy Use - Default energy use



Demolition - Debris tonnage based on CalEEMod factor of 0.046 tons/sf for buildings and CalRecycle factor of 2,400 lbs asphalt debris/yd3

Construction Off-road Equipment Mitigation - Mitigation: compliance with BAAQMD basic dust controls

Energy Mitigation - Exceed 2013 Title 24 by 28% for residences to approximate 2016 Title 24 compliance

Water Mitigation - 20% indoor/outdoor reduction in water assumed for CALGreen compliance

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	1.00	23.00
tblConstructionPhase	NumDays	2.00	21.00
tblConstructionPhase	NumDays	100.00	261.00
tblConstructionPhase	NumDays	5.00	44.00
tblConstructionPhase	NumDays	5.00	66.00
tblFireplaces	NumberGas	0.90	6.00
tblFireplaces	NumberNoFireplace	0.24	0.00
tblFireplaces	NumberWood	1.02	0.00
tblLandUse	BuildingSpaceSquareFeet	6,000.00	6,584.00
tblLandUse	LandUseSquareFeet	6,000.00	6,584.00
tblLandUse	LotAcreage	0.38	0.11
tblProjectCharacteristics	CO2IntensityFactor	641.35	499.66
tblProjectCharacteristics	OperationalYear	2018	2020
tblWoodstoves	NumberCatalytic	0.12	0.00
tblWoodstoves	NumberNoncatalytic	0.12	0.00

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	1.1127	11.1831	8.1738	0.0137	0.8349	0.7101	1.4582	0.4356	0.6533	1.0303	0.0000	1,349.2380	1,349.2380	0.3607	0.0000	1,355.2297
2019	3.5694	19.6851	17.1368	0.0277	0.2121	1.1788	1.3909	0.0564	1.0983	1.1547	0.0000	2,679.3603	2,679.3603	0.6888	0.0000	2,696.5816
<b>Maximum</b>	<b>3.5694</b>	<b>19.6851</b>	<b>17.1368</b>	<b>0.0277</b>	<b>0.8349</b>	<b>1.1788</b>	<b>1.4582</b>	<b>0.4356</b>	<b>1.0983</b>	<b>1.1547</b>	<b>0.0000</b>	<b>2,679.3603</b>	<b>2,679.3603</b>	<b>0.6888</b>	<b>0.0000</b>	<b>2,696.5816</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	1.1127	11.1831	8.1738	0.0137	0.4209	0.7101	1.0442	0.2080	0.6533	0.8028	0.0000	1,349.2380	1,349.2380	0.3607	0.0000	1,355.2297
2019	3.5694	19.6851	17.1368	0.0277	0.2121	1.1788	1.3909	0.0564	1.0983	1.1547	0.0000	2,679.3603	2,679.3603	0.6888	0.0000	2,696.5816
<b>Maximum</b>	<b>3.5694</b>	<b>19.6851</b>	<b>17.1368</b>	<b>0.0277</b>	<b>0.4209</b>	<b>1.1788</b>	<b>1.3909</b>	<b>0.2080</b>	<b>1.0983</b>	<b>1.1547</b>	<b>0.0000</b>	<b>2,679.3603</b>	<b>2,679.3603</b>	<b>0.6888</b>	<b>0.0000</b>	<b>2,696.5816</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>39.54</b>	<b>0.00</b>	<b>14.53</b>	<b>46.26</b>	<b>0.00</b>	<b>10.42</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**2.2 Overall Operational**  
**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1965	0.1219	0.5464	7.7000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	149.1273	149.1273	3.7100e-003	2.7200e-003	150.0299
Energy	4.9700e-003	0.0425	0.0181	2.7000e-004		3.4400e-003	3.4400e-003		3.4400e-003	3.4400e-003		54.2724	54.2724	1.0400e-003	9.9000e-004	54.5949
Mobile	0.0605	0.2007	0.7055	1.9400e-003	0.1710	2.6100e-003	0.1737	0.0458	2.4600e-003	0.0483		195.0153	195.0153	8.0400e-003		195.2163
<b>Total</b>	<b>0.2619</b>	<b>0.3651</b>	<b>1.2700</b>	<b>2.9800e-003</b>	<b>0.1710</b>	<b>0.0182</b>	<b>0.1892</b>	<b>0.0458</b>	<b>0.0180</b>	<b>0.0638</b>	<b>0.0000</b>	<b>398.4150</b>	<b>398.4150</b>	<b>0.0128</b>	<b>3.7100e-003</b>	<b>399.8411</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1965	0.1219	0.5464	7.7000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	149.1273	149.1273	3.7100e-003	2.7200e-003	150.0299
Energy	3.7100e-003	0.0317	0.0135	2.0000e-004		2.5600e-003	2.5600e-003		2.5600e-003	2.5600e-003		40.4921	40.4921	7.8000e-004	7.4000e-004	40.7328
Mobile	0.0605	0.2007	0.7055	1.9400e-003	0.1710	2.6100e-003	0.1737	0.0458	2.4600e-003	0.0483		195.0153	195.0153	8.0400e-003		195.2163
<b>Total</b>	<b>0.2607</b>	<b>0.3543</b>	<b>1.2654</b>	<b>2.9100e-003</b>	<b>0.1710</b>	<b>0.0173</b>	<b>0.1883</b>	<b>0.0458</b>	<b>0.0171</b>	<b>0.0630</b>	<b>0.0000</b>	<b>384.6348</b>	<b>384.6348</b>	<b>0.0125</b>	<b>3.4600e-003</b>	<b>385.9790</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.48</b>	<b>2.96</b>	<b>0.36</b>	<b>2.35</b>	<b>0.00</b>	<b>4.84</b>	<b>0.47</b>	<b>0.00</b>	<b>4.88</b>	<b>1.38</b>	<b>0.00</b>	<b>3.46</b>	<b>3.46</b>	<b>2.03</b>	<b>6.74</b>	<b>3.47</b>

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2018	4/30/2018	5	21	
2	Site Preparation	Site Preparation	5/1/2018	5/31/2018	5	23	
3	Grading	Grading	6/1/2018	6/30/2018	5	21	
4	Building Construction	Building Construction	7/1/2018	7/1/2019	5	261	
5	Architectural Coating	Architectural Coating	4/1/2019	7/1/2019	5	66	
6	Paving	Paving	5/1/2019	7/1/2019	5	44	

Acres of Grading (Site Preparation Phase): 11.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.07

Residential Indoor: 13,333; Residential Outdoor: 4,444; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	6.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	23.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Demolition - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2373	0.0000	0.2373	0.0359	0.0000	0.0359			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.350	1,169.350	0.2254		1,174.985
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>	<b>0.2373</b>	<b>0.6228</b>	<b>0.8601</b>	<b>0.0359</b>	<b>0.5943</b>	<b>0.6302</b>		<b>1,169.350</b>	<b>1,169.350</b>	<b>0.2254</b>		<b>1,174.985</b>
												2	2			7

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0119	0.4069	0.1495	9.2000e-004	0.0190	1.6900e-003	0.0207	5.2000e-003	1.6200e-003	6.8200e-003		103.1516	103.1516	0.0124		103.4622
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0366	0.0258	0.2481	7.7000e-004	0.0822	5.1000e-004	0.0827	0.0218	4.7000e-004	0.0223		76.7361	76.7361	1.8300e-003		76.7618
<b>Total</b>	<b>0.0484</b>	<b>0.4327</b>	<b>0.3976</b>	<b>1.6900e-003</b>	<b>0.1012</b>	<b>2.2000e-003</b>	<b>0.1034</b>	<b>0.0270</b>	<b>2.0900e-003</b>	<b>0.0291</b>		<b>179.8878</b>	<b>179.8878</b>	<b>0.0143</b>		<b>180.2440</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1068	0.0000	0.1068	0.0162	0.0000	0.0162			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>	<b>0.1068</b>	<b>0.6228</b>	<b>0.7296</b>	<b>0.0162</b>	<b>0.5943</b>	<b>0.6105</b>	<b>0.0000</b>	<b>1,169.3502</b>	<b>1,169.3502</b>	<b>0.2254</b>		<b>1,174.9857</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0119	0.4069	0.1495	9.2000e-004	0.0190	1.6900e-003	0.0207	5.2000e-003	1.6200e-003	6.8200e-003		103.1516	103.1516	0.0124		103.4622
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0366	0.0258	0.2481	7.7000e-004	0.0822	5.1000e-004	0.0827	0.0218	4.7000e-004	0.0223		76.7361	76.7361	1.8300e-003		76.7818
<b>Total</b>	<b>0.0484</b>	<b>0.4327</b>	<b>0.3976</b>	<b>1.6900e-003</b>	<b>0.1012</b>	<b>2.2000e-003</b>	<b>0.1034</b>	<b>0.0270</b>	<b>2.0900e-003</b>	<b>0.0291</b>		<b>179.8878</b>	<b>179.8878</b>	<b>0.0143</b>		<b>180.2440</b>

### 3.3 Site Preparation - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
<b>Total</b>	<b>0.7858</b>	<b>9.7572</b>	<b>4.2514</b>	<b>9.7600e-003</b>	<b>0.5303</b>	<b>0.4180</b>	<b>0.9483</b>	<b>0.0573</b>	<b>0.3846</b>	<b>0.4418</b>		<b>982.7113</b>	<b>982.7113</b>	<b>0.3059</b>		<b>990.3596</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0129	0.1240	3.8000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		38.3681	38.3681	9.1000e-004		38.3909

Total	0.0183	0.0129	0.1240	3.8000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		38.3681	38.3681	9.1000e-004		38.3909
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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
<b>Total</b>	<b>0.7858</b>	<b>9.7572</b>	<b>4.2514</b>	<b>9.7600e-003</b>	<b>0.2386</b>	<b>0.4180</b>	<b>0.6566</b>	<b>0.0258</b>	<b>0.3846</b>	<b>0.4103</b>	<b>0.0000</b>	<b>982.7113</b>	<b>982.7113</b>	<b>0.3059</b>		<b>990.3596</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0129	0.1240	3.8000e-004	0.0411	2.5000e-004	0.0413	0.0109	2.3000e-004	0.0111		38.3681	38.3681	9.1000e-004		38.3909
<b>Total</b>	<b>0.0183</b>	<b>0.0129</b>	<b>0.1240</b>	<b>3.8000e-004</b>	<b>0.0411</b>	<b>2.5000e-004</b>	<b>0.0413</b>	<b>0.0109</b>	<b>2.3000e-004</b>	<b>0.0111</b>		<b>38.3681</b>	<b>38.3681</b>	<b>9.1000e-004</b>		<b>38.3909</b>

**3.4 Grading - 2018**

**Unmitigated Construction On-Site**



	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>	<b>0.7528</b>	<b>0.6228</b>	<b>1.3755</b>	<b>0.4138</b>	<b>0.5943</b>	<b>1.0081</b>		<b>1,169.3502</b>	<b>1,169.3502</b>	<b>0.2254</b>		<b>1,174.9857</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0366	0.0258	0.2481	7.7000e-004	0.0822	5.1000e-004	0.0827	0.0218	4.7000e-004	0.0223		76.7361	76.7361	1.8300e-003		76.7818
<b>Total</b>	<b>0.0366</b>	<b>0.0258</b>	<b>0.2481</b>	<b>7.7000e-004</b>	<b>0.0822</b>	<b>5.1000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.7000e-004</b>	<b>0.0223</b>		<b>76.7361</b>	<b>76.7361</b>	<b>1.8300e-003</b>		<b>76.7818</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3387	0.0000	0.3387	0.1862	0.0000	0.1862			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857

<b>Total</b>	<b>1.0643</b>	<b>9.4295</b>	<b>7.7762</b>	<b>0.0120</b>	<b>0.3387</b>	<b>0.6228</b>	<b>0.9615</b>	<b>0.1862</b>	<b>0.5943</b>	<b>0.7805</b>	<b>0.0000</b>	<b>1,169.3502</b>	<b>1,169.3502</b>	<b>0.2254</b>		<b>1,174.9857</b>
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0366	0.0258	0.2481	7.7000e-004	0.0822	5.1000e-004	0.0827	0.0218	4.7000e-004	0.0223		76.7361	76.7361	1.8300e-003		76.7818
<b>Total</b>	<b>0.0366</b>	<b>0.0258</b>	<b>0.2481</b>	<b>7.7000e-004</b>	<b>0.0822</b>	<b>5.1000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.7000e-004</b>	<b>0.0223</b>		<b>76.7361</b>	<b>76.7361</b>	<b>1.8300e-003</b>		<b>76.7818</b>

**3.5 Building Construction - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555
<b>Total</b>	<b>1.0848</b>	<b>11.0316</b>	<b>7.7512</b>	<b>0.0114</b>		<b>0.7087</b>	<b>0.7087</b>		<b>0.6520</b>	<b>0.6520</b>		<b>1,146.5323</b>	<b>1,146.5323</b>	<b>0.3569</b>		<b>1,155.4555</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.4800e-003	0.1360	0.0544	2.7000e-004	6.7500e-003	1.0600e-003	7.8000e-003	1.9400e-003	1.0100e-003	2.9500e-003		29.5006	29.5006	2.7000e-003		29.5680
Worker	0.0219	0.0155	0.1489	4.6000e-004	0.0493	3.0000e-004	0.0496	0.0131	2.8000e-004	0.0134		46.0417	46.0417	1.1000e-003		46.0691
<b>Total</b>	<b>0.0274</b>	<b>0.1515</b>	<b>0.2032</b>	<b>7.3000e-004</b>	<b>0.0560</b>	<b>1.3600e-003</b>	<b>0.0574</b>	<b>0.0150</b>	<b>1.2900e-003</b>	<b>0.0163</b>		<b>75.5423</b>	<b>75.5423</b>	<b>3.8000e-003</b>		<b>75.6371</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555
<b>Total</b>	<b>1.0848</b>	<b>11.0316</b>	<b>7.7512</b>	<b>0.0114</b>		<b>0.7087</b>	<b>0.7087</b>		<b>0.6520</b>	<b>0.6520</b>	<b>0.0000</b>	<b>1,146.5323</b>	<b>1,146.5323</b>	<b>0.3569</b>		<b>1,155.4555</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.4800e-003	0.1360	0.0544	2.7000e-004	6.7500e-003	1.0600e-003	7.8000e-003	1.9400e-003	1.0100e-003	2.9500e-003		29.5006	29.5006	2.7000e-003		29.5680

Worker	0.0219	0.0155	0.1489	4.6000e-004	0.0493	3.0000e-004	0.0496	0.0131	2.8000e-004	0.0134		46.0417	46.0417	1.1000e-003		46.0691
<b>Total</b>	<b>0.0274</b>	<b>0.1515</b>	<b>0.2032</b>	<b>7.3000e-004</b>	<b>0.0560</b>	<b>1.3600e-003</b>	<b>0.0574</b>	<b>0.0150</b>	<b>1.2900e-003</b>	<b>0.0163</b>		<b>75.5423</b>	<b>75.5423</b>	<b>3.8000e-003</b>		<b>75.6371</b>

### 3.5 Building Construction - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892
<b>Total</b>	<b>0.9576</b>	<b>9.8207</b>	<b>7.5432</b>	<b>0.0114</b>		<b>0.6054</b>	<b>0.6054</b>		<b>0.5569</b>	<b>0.5569</b>		<b>1,127.6696</b>	<b>1,127.6696</b>	<b>0.3568</b>		<b>1,136.5892</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.8800e-003	0.1278	0.0513	2.7000e-004	6.7500e-003	8.9000e-004	7.6400e-003	1.9400e-003	8.5000e-004	2.8000e-003		29.1922	29.1922	2.6400e-003		29.2582
Worker	0.0199	0.0136	0.1328	4.5000e-004	0.0493	3.0000e-004	0.0496	0.0131	2.8000e-004	0.0134		44.6084	44.6084	9.6000e-004		44.6325
<b>Total</b>	<b>0.0248</b>	<b>0.1414</b>	<b>0.1841</b>	<b>7.2000e-004</b>	<b>0.0560</b>	<b>1.1900e-003</b>	<b>0.0572</b>	<b>0.0150</b>	<b>1.1300e-003</b>	<b>0.0162</b>		<b>73.8005</b>	<b>73.8005</b>	<b>3.6000e-003</b>		<b>73.8907</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892
<b>Total</b>	<b>0.9576</b>	<b>9.8207</b>	<b>7.5432</b>	<b>0.0114</b>		<b>0.6054</b>	<b>0.6054</b>		<b>0.5569</b>	<b>0.5569</b>	<b>0.0000</b>	<b>1,127.6696</b>	<b>1,127.6696</b>	<b>0.3568</b>		<b>1,136.5892</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.8800e-003	0.1278	0.0513	2.7000e-004	6.7500e-003	8.9000e-004	7.6400e-003	1.9400e-003	8.5000e-004	2.8000e-003		29.1922	29.1922	2.6400e-003		29.2582
Worker	0.0199	0.0136	0.1328	4.5000e-004	0.0493	3.0000e-004	0.0496	0.0131	2.8000e-004	0.0134		44.6084	44.6084	9.6000e-004		44.6325
<b>Total</b>	<b>0.0248</b>	<b>0.1414</b>	<b>0.1841</b>	<b>7.2000e-004</b>	<b>0.0560</b>	<b>1.1900e-003</b>	<b>0.0572</b>	<b>0.0150</b>	<b>1.1300e-003</b>	<b>0.0162</b>		<b>73.8005</b>	<b>73.8005</b>	<b>3.6000e-003</b>		<b>73.8907</b>

**3.6 Architectural Coating - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.4235					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>1.6900</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.3100e-003	2.2700e-003	0.0221	7.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.4347	7.4347	1.6000e-004		7.4388
<b>Total</b>	<b>3.3100e-003</b>	<b>2.2700e-003</b>	<b>0.0221</b>	<b>7.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>7.4347</b>	<b>7.4347</b>	<b>1.6000e-004</b>		<b>7.4388</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.4235					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>1.6900</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.3100e-003	2.2700e-003	0.0221	7.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.4347	7.4347	1.6000e-004		7.4388
<b>Total</b>	<b>3.3100e-003</b>	<b>2.2700e-003</b>	<b>0.0221</b>	<b>7.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>7.4347</b>	<b>7.4347</b>	<b>1.6000e-004</b>		<b>7.4388</b>

### 3.7 Paving - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106		1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	4.1700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8341</b>	<b>7.8446</b>	<b>7.1478</b>	<b>0.0113</b>		<b>0.4425</b>	<b>0.4425</b>		<b>0.4106</b>	<b>0.4106</b>		<b>1,055.1823</b>	<b>1,055.1823</b>	<b>0.3016</b>		<b>1,062.7231</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0596	0.0408	0.3983	1.3400e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		133.8251	133.8251	2.8900e-003		133.8975
<b>Total</b>	<b>0.0596</b>	<b>0.0408</b>	<b>0.3983</b>	<b>1.3400e-003</b>	<b>0.1479</b>	<b>9.1000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.4000e-004</b>	<b>0.0401</b>		<b>133.8251</b>	<b>133.8251</b>	<b>2.8900e-003</b>		<b>133.8975</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8300	7.8446	7.1478	0.0113		0.4425	0.4425		0.4106	0.4106	0.0000	1,055.1823	1,055.1823	0.3016		1,062.7231
Paving	4.1700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8341</b>	<b>7.8446</b>	<b>7.1478</b>	<b>0.0113</b>		<b>0.4425</b>	<b>0.4425</b>		<b>0.4106</b>	<b>0.4106</b>	<b>0.0000</b>	<b>1,055.1823</b>	<b>1,055.1823</b>	<b>0.3016</b>		<b>1,062.7231</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0408	0.3983	1.3400e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		133.8251	133.8251	2.8900e-003		133.8975
<b>Total</b>	<b>0.0596</b>	<b>0.0408</b>	<b>0.3983</b>	<b>1.3400e-003</b>	<b>0.1479</b>	<b>9.1000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.4000e-004</b>	<b>0.0401</b>		<b>133.8251</b>	<b>133.8251</b>	<b>2.8900e-003</b>		<b>133.8975</b>



## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0605	0.2007	0.7055	1.9400e-003	0.1710	2.6100e-003	0.1737	0.0458	2.4600e-003	0.0483		195.0153	195.0153	8.0400e-003		195.2163
Unmitigated	0.0605	0.2007	0.7055	1.9400e-003	0.1710	2.6100e-003	0.1737	0.0458	2.4600e-003	0.0483		195.0153	195.0153	8.0400e-003		195.2163

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	34.86	34.02	29.04	78,315	78,315
Parking Lot	0.00	0.00	0.00		
Total	34.86	34.02	29.04	78,315	78,315

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741
Parking Lot	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	3.7100e-003	0.0317	0.0135	2.0000e-004		2.5600e-003	2.5600e-003		2.5600e-003	2.5600e-003		40.4921	40.4921	7.8000e-004	7.4000e-004	40.7328
NaturalGas Unmitigated	4.9700e-003	0.0425	0.0181	2.7000e-004		3.4400e-003	3.4400e-003		3.4400e-003	3.4400e-003		54.2724	54.2724	1.0400e-003	9.9000e-004	54.5949

### 5.2 Energy by Land Use - NaturalGas Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	461.315	4.9700e-003	0.0425	0.0181	2.7000e-004		3.4400e-003	3.4400e-003		3.4400e-003	3.4400e-003		54.2724	54.2724	1.0400e-003	9.9000e-004	54.5949
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>4.9700e-003</b>	<b>0.0425</b>	<b>0.0181</b>	<b>2.7000e-004</b>		<b>3.4400e-003</b>	<b>3.4400e-003</b>		<b>3.4400e-003</b>	<b>3.4400e-003</b>		<b>54.2724</b>	<b>54.2724</b>	<b>1.0400e-003</b>	<b>9.9000e-004</b>	<b>54.5949</b>

### Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Condo/Townhouse	0.344183	3.7100e-003	0.0317	0.0135	2.0000e-004		2.5600e-003	2.5600e-003		2.5600e-003	2.5600e-003			40.4921	40.4921	7.8000e-004	7.4000e-004	40.7328
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>3.7100e-003</b>	<b>0.0317</b>	<b>0.0135</b>	<b>2.0000e-004</b>		<b>2.5600e-003</b>	<b>2.5600e-003</b>		<b>2.5600e-003</b>	<b>2.5600e-003</b>			<b>40.4921</b>	<b>40.4921</b>	<b>7.8000e-004</b>	<b>7.4000e-004</b>	<b>40.7328</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1965	0.1219	0.5464	7.7000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	149.1273	149.1273	3.7100e-003	2.7200e-003	150.0299
Unmitigated	0.1965	0.1219	0.5464	7.7000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	149.1273	149.1273	3.7100e-003	2.7200e-003	150.0299

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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SubCategory	lb/day										lb/day					
Architectural Coating	0.0257					0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Consumer Products	0.1420					0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Hearth	0.0136	0.1161	0.0494	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003	0.0000	148.2353	148.2353	2.8400e-003	2.7200e-003	149.1162
Landscaping	0.0152	5.7500e-003	0.4970	3.0000e-005		2.7300e-003	2.7300e-003		2.7300e-003	2.7300e-003		0.8920	0.8920	8.7000e-004		0.9138
<b>Total</b>	<b>0.1965</b>	<b>0.1219</b>	<b>0.5464</b>	<b>7.7000e-004</b>		<b>0.0121</b>	<b>0.0121</b>		<b>0.0121</b>	<b>0.0121</b>	<b>0.0000</b>	<b>149.1273</b>	<b>149.1273</b>	<b>3.7100e-003</b>	<b>2.7200e-003</b>	<b>150.0299</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.0257						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1420						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0136	0.1161	0.0494	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003	0.0000	148.2353	148.2353	2.8400e-003	2.7200e-003	149.1162	
Landscaping	0.0152	5.7500e-003	0.4970	3.0000e-005		2.7300e-003	2.7300e-003		2.7300e-003	2.7300e-003		0.8920	0.8920	8.7000e-004		0.9138	
<b>Total</b>	<b>0.1965</b>	<b>0.1219</b>	<b>0.5464</b>	<b>7.7000e-004</b>		<b>0.0121</b>	<b>0.0121</b>		<b>0.0121</b>	<b>0.0121</b>	<b>0.0000</b>	<b>149.1273</b>	<b>149.1273</b>	<b>3.7100e-003</b>	<b>2.7200e-003</b>	<b>150.0299</b>	

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

## 9.0 Operational Offroad

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

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### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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### Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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**1431 El Camino Real - Proposed Project**  
**San Mateo County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	4	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	2	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00

Rollers	Diesel	No Change	0	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	8.79000E-003	6.05700E-002	6.07600E-002	1.00000E-004	4.25000E-003	4.25000E-003	0.00000E+000	8.42574E+000	8.42574E+000	7.10000E-004	0.00000E+000	8.44353E+000
Cement and Mortar Mixers	3.88000E-003	2.43000E-002	2.03500E-002	5.00000E-005	9.50000E-004	9.50000E-004	0.00000E+000	3.02462E+000	3.02462E+000	3.10000E-004	0.00000E+000	3.03247E+000
Concrete/Industrial Saws	1.09100E-002	8.22100E-002	7.82100E-002	1.30000E-004	5.61000E-003	5.61000E-003	0.00000E+000	1.12908E+001	1.12908E+001	8.70000E-004	0.00000E+000	1.13126E+001
Cranes	3.50700E-002	4.18610E-001	1.57110E-001	3.80000E-004	1.79400E-002	1.65100E-002	0.00000E+000	3.40910E+001	3.40910E+001	1.07000E-002	0.00000E+000	3.43585E+001
Forklifts	3.31000E-002	2.93950E-001	2.35440E-001	3.00000E-004	2.31300E-002	2.12800E-002	0.00000E+000	2.70916E+001	2.70916E+001	8.50000E-003	0.00000E+000	2.73041E+001
Graders	5.98000E-003	8.19700E-002	2.20200E-002	8.00000E-005	2.66000E-003	2.45000E-003	0.00000E+000	6.98918E+000	6.98918E+000	2.18000E-003	0.00000E+000	7.04358E+000
Pavers	5.54000E-003	6.01500E-002	5.58600E-002	9.00000E-005	2.95000E-003	2.71000E-003	0.00000E+000	8.12914E+000	8.12914E+000	2.57000E-003	0.00000E+000	8.19344E+000
Rollers	4.36000E-003	4.31400E-002	3.67200E-002	5.00000E-005	2.84000E-003	2.61000E-003	0.00000E+000	4.53494E+000	4.53494E+000	1.43000E-003	0.00000E+000	4.57081E+000
Rubber Tired Dozers	3.06000E-003	3.29700E-002	1.14900E-002	2.00000E-005	1.60000E-003	1.47000E-003	0.00000E+000	2.04838E+000	2.04838E+000	6.40000E-004	0.00000E+000	2.06432E+000
Tractors/Loaders/Backhoes	8.10500E-002	8.06420E-001	7.50260E-001	1.00000E-003	5.57100E-002	5.12500E-002	0.00000E+000	9.10121E+001	9.10121E+001	2.85400E-002	0.00000E+000	9.17257E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	8.79000E-003	6.05700E-002	6.07600E-002	1.00000E-004	4.25000E-003	4.25000E-003	0.00000E+000	8.42573E+000	8.42573E+000	7.10000E-004	0.00000E+000	8.44352E+000
Cement and Mortar Mixers	3.88000E-003	2.43000E-002	2.03500E-002	5.00000E-005	9.50000E-004	9.50000E-004	0.00000E+000	3.02462E+000	3.02462E+000	3.10000E-004	0.00000E+000	3.03247E+000
Concrete/Industrial Saws	1.09100E-002	8.22100E-002	7.82100E-002	1.30000E-004	5.61000E-003	5.61000E-003	0.00000E+000	1.12908E+001	1.12908E+001	8.70000E-004	0.00000E+000	1.13126E+001
Cranes	3.50700E-002	4.18610E-001	1.57110E-001	3.80000E-004	1.79400E-002	1.65100E-002	0.00000E+000	3.40910E+001	3.40910E+001	1.07000E-002	0.00000E+000	3.43585E+001
Forklifts	3.31000E-002	2.93950E-001	2.35440E-001	3.00000E-004	2.31300E-002	2.12800E-002	0.00000E+000	2.70916E+001	2.70916E+001	8.50000E-003	0.00000E+000	2.73041E+001
Graders	5.98000E-003	8.19700E-002	2.20200E-002	8.00000E-005	2.66000E-003	2.45000E-003	0.00000E+000	6.98918E+000	6.98918E+000	2.18000E-003	0.00000E+000	7.04357E+000
Pavers	5.54000E-003	6.01500E-002	5.58600E-002	9.00000E-005	2.95000E-003	2.71000E-003	0.00000E+000	8.12913E+000	8.12913E+000	2.57000E-003	0.00000E+000	8.19343E+000
Rollers	4.36000E-003	4.31400E-002	3.67200E-002	5.00000E-005	2.84000E-003	2.61000E-003	0.00000E+000	4.53493E+000	4.53493E+000	1.43000E-003	0.00000E+000	4.57080E+000

Rubber Tired Dozers	3.06000E-003	3.29700E-002	1.14900E-002	2.00000E-005	1.60000E-003	1.47000E-003	0.00000E+000	2.04838E+000	2.04838E+000	6.40000E-004	0.00000E+000	2.06432E+000
Tractors/Loaders/Bac khoes	8.10500E-002	8.06420E-001	7.50260E-001	1.00000E-003	5.57100E-002	5.12500E-002	0.00000E+000	9.10120E+001	9.10120E+001	2.85400E-002	0.00000E+000	9.17256E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18684E-006	1.18684E-006	0.00000E+000	0.00000E+000	1.18434E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.85678E-007	8.85678E-007	0.00000E+000	0.00000E+000	1.76793E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17333E-006	1.17333E-006	0.00000E+000	0.00000E+000	1.16420E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10735E-006	1.10735E-006	0.00000E+000	0.00000E+000	1.09873E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.41973E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23014E-006	1.23014E-006	0.00000E+000	0.00000E+000	1.22049E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.20510E-006	2.20510E-006	0.00000E+000	0.00000E+000	2.18780E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Bac khoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.09876E-006	1.09876E-006	0.00000E+000	0.00000E+000	1.19923E-006

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00
Yes	Clean Paved Road	% PM Reduction	0.00		



Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.55	0.55
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.01	0.00	0.00	0.00	0.55	0.55
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.01	0.00	0.00	0.00	0.55	0.55
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	1.12	0.00	0.00	1.12
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	25.27	25.39	25.45	20.00	25.40	25.40	0.00	25.39	25.39	23.53	25.00	25.39
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	20.00	20.00	20.03	19.35	20.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.07	0.27		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				

No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

### Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

### Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	28.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	20.00	20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

### Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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1431 El Camino Real - Existing Uses - San Mateo County, Annual

**1431 El Camino Real - Existing Uses**  
**San Mateo County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,102.00	11

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	70
<b>Climate Zone</b>	5	<b>Operational Year</b>	2017		
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	559.32	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Operational year of 2017 for existing uses. PG&E CO2 Intensity Adjusted based on 25% RPS by 2016

Land Use - Existing apartments to be demolished

Construction Phase - No construction modeled

Vehicle Trips - Default Weekday Trip Rates adjusted to match traffic information. Saturday and Sunday rates adjusted based on ratio to

Woodstoves - No woodstoves or fireplaces assumed for the existing apartments

Area Coating - Default

Energy Use - Historical (pre-2005 construction) data assumed for existing uses

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	2,769.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	8,307.00	0.00

tblArchitecturalCoating	EF_Parking	150.00	0.00
tblFireplaces	NumberGas	0.60	0.00
tblFireplaces	NumberNoFireplace	0.16	0.00
tblFireplaces	NumberWood	0.68	0.00
tblLandUse	BuildingSpaceSquareFeet	4,000.00	4,102.00
tblLandUse	LandUseSquareFeet	4,000.00	4,102.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	559.32
tblProjectCharacteristics	OperationalYear	2018	2017
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblVehicleTrips	ST_TR	7.16	7.23
tblVehicleTrips	SU_TR	6.07	6.13
tblVehicleTrips	WD_TR	6.59	6.65
tblWoodstoves	NumberCatalytic	0.08	0.00
tblWoodstoves	NumberNoncatalytic	0.08	0.00

## 2.0 Emissions Summary

### 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0198	3.5000e-004	0.0300	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0485	0.0485	5.0000e-005	0.0000	0.0497
Energy	5.4000e-004	4.6000e-003	1.9600e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	8.9662	8.9662	2.9000e-004	1.4000e-004	9.0143
Mobile	8.9700e-003	0.0287	0.1017	2.7000e-004	0.0228	3.9000e-004	0.0232	6.1300e-003	3.7000e-004	6.5000e-003	0.0000	24.9631	24.9631	1.0400e-003	0.0000	24.9892
Waste						0.0000	0.0000		0.0000	0.0000	0.3735	0.0000	0.3735	0.0221	0.0000	0.9253
Water						0.0000	0.0000		0.0000	0.0000	0.0827	0.5037	0.5864	8.5200e-003	2.1000e-004	0.8607
<b>Total</b>	<b>0.0294</b>	<b>0.0337</b>	<b>0.1337</b>	<b>3.0000e-004</b>	<b>0.0228</b>	<b>9.2000e-004</b>	<b>0.0237</b>	<b>6.1300e-003</b>	<b>9.0000e-004</b>	<b>7.0300e-003</b>	<b>0.4562</b>	<b>34.4816</b>	<b>34.9378</b>	<b>0.0320</b>	<b>3.5000e-004</b>	<b>35.8392</b>

#### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0198	3.5000e-004	0.0300	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0485	0.0485	5.0000e-005	0.0000	0.0497
Energy	5.4000e-004	4.6000e-003	1.9600e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	8.9662	8.9662	2.9000e-004	1.4000e-004	9.0143
Mobile	8.9700e-003	0.0287	0.1017	2.7000e-004	0.0228	3.9000e-004	0.0232	6.1300e-003	3.7000e-004	6.5000e-003	0.0000	24.9631	24.9631	1.0400e-003	0.0000	24.9892
Waste						0.0000	0.0000		0.0000	0.0000	0.3735	0.0000	0.3735	0.0221	0.0000	0.9253
Water						0.0000	0.0000		0.0000	0.0000	0.0827	0.5037	0.5864	8.5200e-003	2.1000e-004	0.8607
<b>Total</b>	<b>0.0294</b>	<b>0.0337</b>	<b>0.1337</b>	<b>3.0000e-004</b>	<b>0.0228</b>	<b>9.2000e-004</b>	<b>0.0237</b>	<b>6.1300e-003</b>	<b>9.0000e-004</b>	<b>7.0300e-003</b>	<b>0.4562</b>	<b>34.4816</b>	<b>34.9378</b>	<b>0.0320</b>	<b>3.5000e-004</b>	<b>35.8392</b>

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



## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.9700e-003	0.0287	0.1017	2.7000e-004	0.0228	3.9000e-004	0.0232	6.1300e-003	3.7000e-004	6.5000e-003	0.0000	24.9631	24.9631	1.0400e-003	0.0000	24.9892
Unmitigated	8.9700e-003	0.0287	0.1017	2.7000e-004	0.0228	3.9000e-004	0.0232	6.1300e-003	3.7000e-004	6.5000e-003	0.0000	24.9631	24.9631	1.0400e-003	0.0000	24.9892

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	26.60	28.92	24.52	61,515	61,515
Total	26.60	28.92	24.52	61,515	61,515

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.519116	0.049029	0.235321	0.130359	0.018842	0.005865	0.019139	0.006107	0.003579	0.003526	0.008051	0.000385	0.000682

## 5.0 Energy Detail

Historical Energy Use: Y

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.6377	3.6377	1.9000e-004	4.0000e-005	3.6540
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.6377	3.6377	1.9000e-004	4.0000e-005	3.6540
NaturalGas Mitigated	5.4000e-004	4.6000e-003	1.9600e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.3285	5.3285	1.0000e-004	1.0000e-004	5.3602
NaturalGas Unmitigated	5.4000e-004	4.6000e-003	1.9600e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.3285	5.3285	1.0000e-004	1.0000e-004	5.3602

**5.2 Energy by Land Use - NaturalGas**

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	99853.1	5.4000e-004	4.6000e-003	1.9600e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.3285	5.3285	1.0000e-004	1.0000e-004	5.3602
<b>Total</b>		<b>5.4000e-004</b>	<b>4.6000e-003</b>	<b>1.9600e-003</b>	<b>3.0000e-005</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>5.3285</b>	<b>5.3285</b>	<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>5.3602</b>

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	99853.1	5.4000e-004	4.6000e-003	1.9600e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.3285	5.3285	1.0000e-004	1.0000e-004	5.3602
<b>Total</b>		<b>5.4000e-004</b>	<b>4.6000e-003</b>	<b>1.9600e-003</b>	<b>3.0000e-005</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>		<b>3.7000e-004</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>5.3285</b>	<b>5.3285</b>	<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>5.3602</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	14338.4	3.6377	1.9000e-004	4.0000e-005	3.6540
<b>Total</b>		<b>3.6377</b>	<b>1.9000e-004</b>	<b>4.0000e-005</b>	<b>3.6540</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	14338.4	3.6377	1.9000e-004	4.0000e-005	3.6540

Total		3.6377	1.9000e-004	4.0000e-005	3.6540
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## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0198	3.5000e-004	0.0300	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0485	0.0485	5.0000e-005	0.0000	0.0497
Unmitigated	0.0198	3.5000e-004	0.0300	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0485	0.0485	5.0000e-005	0.0000	0.0497

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.8900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0160					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.3000e-004	3.5000e-004	0.0300	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0485	0.0485	5.0000e-005	0.0000	0.0497

<b>Total</b>	<b>0.0198</b>	<b>3.5000e-004</b>	<b>0.0300</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>0.0485</b>	<b>0.0485</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.0497</b>
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**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.8900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0160					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.3000e-004	3.5000e-004	0.0300	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0485	0.0485	5.0000e-005	0.0000	0.0497
<b>Total</b>	<b>0.0198</b>	<b>3.5000e-004</b>	<b>0.0300</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>0.0485</b>	<b>0.0485</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.0497</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.5864	8.5200e-003	2.1000e-004	0.8607
Unmitigated	0.5864	8.5200e-003	2.1000e-004	0.8607

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.260616 / 0.164301	0.5864	8.5200e-003	2.1000e-004	0.8607
<b>Total</b>		<b>0.5864</b>	<b>8.5200e-003</b>	<b>2.1000e-004</b>	<b>0.8607</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.260616 / 0.164301	0.5864	8.5200e-003	2.1000e-004	0.8607
<b>Total</b>		<b>0.5864</b>	<b>8.5200e-003</b>	<b>2.1000e-004</b>	<b>0.8607</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.3735	0.0221	0.0000	0.9253
Unmitigated	0.3735	0.0221	0.0000	0.9253

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1.84	0.3735	0.0221	0.0000	0.9253
<b>Total</b>		<b>0.3735</b>	<b>0.0221</b>	<b>0.0000</b>	<b>0.9253</b>

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	1.84	0.3735	0.0221	0.0000	0.9253
<b>Total</b>		<b>0.3735</b>	<b>0.0221</b>	<b>0.0000</b>	<b>0.9253</b>

## 9.0 Operational Offroad

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

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### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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### Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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1431 El Camino Real - Existing Uses - San Mateo County, Summer

**1431 El Camino Real - Existing Uses**  
**San Mateo County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,102.00	11

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	70
<b>Climate Zone</b>	5	<b>Operational Year</b>		2017	
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	559.32	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Operational year of 2017 for existing uses. PG&E CO2 Intensity Adjusted based on 25% RPS by 2016

Land Use - Existing apartments to be demolished

Construction Phase - No construction modeled

Vehicle Trips - Default Weekday Trip Rates adjusted to match traffic information. Saturday and Sunday rates adjusted based on ratio to weekday

Woodstoves - No woodstoves or fireplaces assumed for the existing apartments

Area Coating - Default

Energy Use - Historical (pre-2005 construction) data assumed for existing uses

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	2,769.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	8,307.00	0.00

tblArchitecturalCoating	EF_Parking	150.00	0.00
tblFireplaces	NumberGas	0.60	0.00
tblFireplaces	NumberNoFireplace	0.16	0.00
tblFireplaces	NumberWood	0.68	0.00
tblLandUse	BuildingSpaceSquareFeet	4,000.00	4,102.00
tblLandUse	LandUseSquareFeet	4,000.00	4,102.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	559.32
tblProjectCharacteristics	OperationalYear	2018	2017
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblVehicleTrips	ST_TR	7.16	7.23
tblVehicleTrips	SU_TR	6.07	6.13
tblVehicleTrips	WD_TR	6.59	6.65
tblWoodstoves	NumberCatalytic	0.08	0.00
tblWoodstoves	NumberNoncatalytic	0.08	0.00

## 2.0 Emissions Summary

### 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1140	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5942	0.5942	6.0000e-004	0.0000	0.6091
Energy	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003		32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760
Mobile	0.0586	0.1621	0.6095	1.7200e-003	0.1419	2.3300e-003	0.1442	0.0380	2.2000e-003	0.0402		172.6325	172.6325	6.8700e-003		172.8043
<b>Total</b>	<b>0.1755</b>	<b>0.1912</b>	<b>0.9535</b>	<b>1.9000e-003</b>	<b>0.1419</b>	<b>6.1800e-003</b>	<b>0.1481</b>	<b>0.0380</b>	<b>6.0500e-003</b>	<b>0.0440</b>	<b>0.0000</b>	<b>205.4114</b>	<b>205.4114</b>	<b>8.0900e-003</b>	<b>5.9000e-004</b>	<b>205.7894</b>

#### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1140	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5942	0.5942	6.0000e-004	0.0000	0.6091
Energy	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003		32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760
Mobile	0.0586	0.1621	0.6095	1.7200e-003	0.1419	2.3300e-003	0.1442	0.0380	2.2000e-003	0.0402		172.6325	172.6325	6.8700e-003		172.8043
<b>Total</b>	<b>0.1755</b>	<b>0.1912</b>	<b>0.9535</b>	<b>1.9000e-003</b>	<b>0.1419</b>	<b>6.1800e-003</b>	<b>0.1481</b>	<b>0.0380</b>	<b>6.0500e-003</b>	<b>0.0440</b>	<b>0.0000</b>	<b>205.4114</b>	<b>205.4114</b>	<b>8.0900e-003</b>	<b>5.9000e-004</b>	<b>205.7894</b>

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

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0586	0.1621	0.6095	1.7200e-003	0.1419	2.3300e-003	0.1442	0.0380	2.2000e-003	0.0402		172.6325	172.6325	6.8700e-003		172.8043
Unmitigated	0.0586	0.1621	0.6095	1.7200e-003	0.1419	2.3300e-003	0.1442	0.0380	2.2000e-003	0.0402		172.6325	172.6325	6.8700e-003		172.8043

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	26.60	28.92	24.52	61,515	61,515
Total	26.60	28.92	24.52	61,515	61,515

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.519116	0.049029	0.235321	0.130359	0.018842	0.005865	0.019139	0.006107	0.003579	0.003526	0.008051	0.000385	0.000682

## 5.0 Energy Detail

Historical Energy Use: Y

## 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
NaturalGas Mitigated	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003			32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760
NaturalGas Unmitigated	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003			32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Low Rise	273.57	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003			32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760
<b>Total</b>		<b>2.9500e-003</b>	<b>0.0252</b>	<b>0.0107</b>	<b>1.6000e-004</b>		<b>2.0400e-003</b>	<b>2.0400e-003</b>		<b>2.0400e-003</b>	<b>2.0400e-003</b>			<b>32.1847</b>	<b>32.1847</b>	<b>6.2000e-004</b>	<b>5.9000e-004</b>	<b>32.3760</b>

### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.27357	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003		32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760
<b>Total</b>		<b>2.9500e-003</b>	<b>0.0252</b>	<b>0.0107</b>	<b>1.6000e-004</b>		<b>2.0400e-003</b>	<b>2.0400e-003</b>		<b>2.0400e-003</b>	<b>2.0400e-003</b>		<b>32.1847</b>	<b>32.1847</b>	<b>6.2000e-004</b>	<b>5.9000e-004</b>	<b>32.3760</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1140	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5942	0.5942	6.0000e-004	0.0000	0.6091
Unmitigated	0.1140	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5942	0.5942	6.0000e-004	0.0000	0.6091

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0878					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0104	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003		0.5942	0.5942	6.0000e-004		0.6091
<b>Total</b>	<b>0.1140</b>	<b>3.8900e-003</b>	<b>0.3333</b>	<b>2.0000e-005</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>	<b>0.0000</b>	<b>0.5942</b>	<b>0.5942</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>0.6091</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0878					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0104	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003		0.5942	0.5942	6.0000e-004		0.6091
<b>Total</b>	<b>0.1140</b>	<b>3.8900e-003</b>	<b>0.3333</b>	<b>2.0000e-005</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>	<b>0.0000</b>	<b>0.5942</b>	<b>0.5942</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>0.6091</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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1431 El Camino Real - Existing Uses - San Mateo County, Winter

**1431 El Camino Real - Existing Uses**  
**San Mateo County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	4.00	Dwelling Unit	0.25	4,102.00	11

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	70
<b>Climate Zone</b>	5	<b>Operational Year</b>		2017	
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	559.32	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Operational year of 2017 for existing uses. PG&E CO2 Intensity Adjusted based on 25% RPS by 2016

Land Use - Existing apartments to be demolished

Construction Phase - No construction modeled

Vehicle Trips - Default Weekday Trip Rates adjusted to match traffic information. Saturday and Sunday rates adjusted based on ratio to weekday

Woodstoves - No woodstoves or fireplaces assumed for the existing apartments

Area Coating - Default

Energy Use - Historical (pre-2005 construction) data assumed for existing uses

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	2,769.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	8,307.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00

tblFireplaces	NumberGas	0.60	0.00
tblFireplaces	NumberNoFireplace	0.16	0.00
tblFireplaces	NumberWood	0.68	0.00
tblLandUse	BuildingSpaceSquareFeet	4,000.00	4,102.00
tblLandUse	LandUseSquareFeet	4,000.00	4,102.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	559.32
tblProjectCharacteristics	OperationalYear	2018	2017
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblVehicleTrips	ST_TR	7.16	7.23
tblVehicleTrips	SU_TR	6.07	6.13
tblVehicleTrips	WD_TR	6.59	6.65
tblWoodstoves	NumberCatalytic	0.08	0.00
tblWoodstoves	NumberNoncatalytic	0.08	0.00

**2.0 Emissions Summary**

**2.2 Overall Operational**  
**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1140	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5942	0.5942	6.0000e-004	0.0000	0.6091
Energy	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003		32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760
Mobile	0.0545	0.1770	0.6389	1.6300e-003	0.1419	2.3400e-003	0.1442	0.0380	2.2100e-003	0.0402		163.7449	163.7449	7.0100e-003		163.9201
<b>Total</b>	<b>0.1714</b>	<b>0.2061</b>	<b>0.9830</b>	<b>1.8100e-003</b>	<b>0.1419</b>	<b>6.1900e-003</b>	<b>0.1481</b>	<b>0.0380</b>	<b>6.0600e-003</b>	<b>0.0441</b>	<b>0.0000</b>	<b>196.5238</b>	<b>196.5238</b>	<b>8.2300e-003</b>	<b>5.9000e-004</b>	<b>196.9052</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1140	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5942	0.5942	6.0000e-004	0.0000	0.6091
Energy	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003		32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760
Mobile	0.0545	0.1770	0.6389	1.6300e-003	0.1419	2.3400e-003	0.1442	0.0380	2.2100e-003	0.0402		163.7449	163.7449	7.0100e-003		163.9201
<b>Total</b>	<b>0.1714</b>	<b>0.2061</b>	<b>0.9830</b>	<b>1.8100e-003</b>	<b>0.1419</b>	<b>6.1900e-003</b>	<b>0.1481</b>	<b>0.0380</b>	<b>6.0600e-003</b>	<b>0.0441</b>	<b>0.0000</b>	<b>196.5238</b>	<b>196.5238</b>	<b>8.2300e-003</b>	<b>5.9000e-004</b>	<b>196.9052</b>

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

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0545	0.1770	0.6389	1.6300e-003	0.1419	2.3400e-003	0.1442	0.0380	2.2100e-003	0.0402		163.7449	163.7449	7.0100e-003		163.9201
Unmitigated	0.0545	0.1770	0.6389	1.6300e-003	0.1419	2.3400e-003	0.1442	0.0380	2.2100e-003	0.0402		163.7449	163.7449	7.0100e-003		163.9201

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	26.60	28.92	24.52	61,515	61,515
Total	26.60	28.92	24.52	61,515	61,515

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.519116	0.049029	0.235321	0.130359	0.018842	0.005865	0.019139	0.006107	0.003579	0.003526	0.008051	0.000385	0.000682

## 5.0 Energy Detail

Historical Energy Use: Y

## 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
NaturalGas Mitigated	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003			32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760
NaturalGas Unmitigated	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003			32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Apartments Low Rise	273.57	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003			32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760
<b>Total</b>		<b>2.9500e-003</b>	<b>0.0252</b>	<b>0.0107</b>	<b>1.6000e-004</b>		<b>2.0400e-003</b>	<b>2.0400e-003</b>		<b>2.0400e-003</b>	<b>2.0400e-003</b>			<b>32.1847</b>	<b>32.1847</b>	<b>6.2000e-004</b>	<b>5.9000e-004</b>	<b>32.3760</b>

### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.27357	2.9500e-003	0.0252	0.0107	1.6000e-004		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003		32.1847	32.1847	6.2000e-004	5.9000e-004	32.3760
<b>Total</b>		<b>2.9500e-003</b>	<b>0.0252</b>	<b>0.0107</b>	<b>1.6000e-004</b>		<b>2.0400e-003</b>	<b>2.0400e-003</b>		<b>2.0400e-003</b>	<b>2.0400e-003</b>		<b>32.1847</b>	<b>32.1847</b>	<b>6.2000e-004</b>	<b>5.9000e-004</b>	<b>32.3760</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1140	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5942	0.5942	6.0000e-004	0.0000	0.6091
Unmitigated	0.1140	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	0.5942	0.5942	6.0000e-004	0.0000	0.6091

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0878					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0104	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003		0.5942	0.5942	6.0000e-004		0.6091
<b>Total</b>	<b>0.1140</b>	<b>3.8900e-003</b>	<b>0.3333</b>	<b>2.0000e-005</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>	<b>0.0000</b>	<b>0.5942</b>	<b>0.5942</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>0.6091</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0878					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0104	3.8900e-003	0.3333	2.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003		0.5942	0.5942	6.0000e-004		0.6091
<b>Total</b>	<b>0.1140</b>	<b>3.8900e-003</b>	<b>0.3333</b>	<b>2.0000e-005</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>	<b>0.0000</b>	<b>0.5942</b>	<b>0.5942</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>0.6091</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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



**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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### 1431 El Camino Real - Existing Uses San Mateo County, Mitigation Report

#### Construction Mitigation Summary

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

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr						Unmitigated mt/yr						
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr						Mitigated mt/yr						
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

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

Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
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### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)
No	Clean Paved Road	% PM Reduction	0.00	

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			

	Transit Improvements	Transit Improvements Subtotal	0.00	
		Land Use and Site Enhancement Subtotal	0.00	
No	Commute	Implement Trip Reduction Program		
No	Commute	Transit Subsidy		
No	Commute	Implement Employee Parking "Cash Out"		
No	Commute	Workplace Parking Charge		
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00	
No	Commute	Market Commute Trip Reduction Option	0.00	
No	Commute	Employee Vanpool/Shuttle	0.00	2.00
No	Commute	Provide Ride Sharing Program		
	Commute	Commute Subtotal	0.00	
No	School Trip	Implement School Bus Program	0.00	
		Total VMT Reduction	0.00	

### Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	

No	% Electric Chainsaw
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**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

**Solid Waste Mitigation**

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	





# **APPENDIX B**

## *Historical Resources Compliance Report*



**HISTORICAL RESOURCES COMPLIANCE REPORT  
FOR  
THE 1431 EL CAMINO REAL PROJECT  
CITY OF BURLINGAME, SAN MATEO COUNTY, CALIFORNIA**


**E-FIS Project Number Goes Here**

*Prepared for:*

**City of Burlingame**  
501 Primrose Road  
Burlingame, California 94010  
Contact: Catherine Keylon, Senior Planner

and

**California Department of Transportation, District 4**  
Office of Permits, MS 5E  
P.O. Box 23660  
Oakland, California 94623-0660

Prepared by  \_\_\_\_\_ Date October 25, 2017  
Samantha Murray, MA  
Principal Architectural Historian  
DUDEK  
465 Magnolia Avenue  
Larkspur, California 94939

Reviewed for approval by \_\_\_\_\_ Date \_\_\_\_\_  
Name [PQS discipline/level]  
[Caltrans address]

Approved by \_\_\_\_\_ Date \_\_\_\_\_  
Name [District Environmental Branch name]  
[Caltrans address]

October 2017



# HISTORICAL RESOURCES COMPLIANCE REPORT FOR THE 1431 EL CAMINO REAL PROJECT

City of Burlingame, San Mateo County, California

PREPARED FOR:

## **CITY OF BURLINGAME**

501 Primrose Road

Burlingame, California 94010

Contact: Catherine Keylon, Senior Planner

PREPARED BY:

Sarah Corder, MFA, Samantha Murray, MA,

Sarah Brewer, and Adam Giacinto, MA, RPA

## **DUDEK**

465 Magnolia Avenue

Larkspur, California 94939

**OCTOBER 2017**



# TABLE OF CONTENTS

SECTION	PAGE
1	SUMMARY OF FINDINGS ..... 6
2	PROJECT DESCRIPTION ..... 9
2.1	Project Location .....9
2.2	Scope of Project.....9
2.3	Project Area Limits .....10
3	CONSULTING PARTIES AND PUBLIC PARTICIPATION ..... 12
3.1	Native American Heritage Commission .....12
3.2	Native American Groups .....12
3.3	Local Historical Groups .....13
4	SUMMARY OF IDENTIFICATION EFFORTS ..... 15
4.1	CHRIS Records Search.....15
4.2	Building Development Research.....25
5	CEQA HISTORICAL RESOURCES IDENTIFIED ..... 27
5.1	Newly Evaluated Resources within PAL .....27
5.2	Previously Evaluated Historical Resources within PAL.....27
5.3	Archaeological Resources .....28
6	LIST OF IDENTIFIED HISTORICAL RESOURCES ..... 31
7	STATE-OWNED CULTURAL RESOURCES FINDINGS ..... 33
7.1	Finding of No Adverse Effect with Standard Conditions (FNAE-SC).....33
7.2	SOIS Action Plan .....34
7.3	ESA Action Plan.....35
8	BIBLIOGRAPHY ..... 37

## ATTACHMENTS

- A Maps and Figures
- B Tribal Outreach
- C **Confidential** CHRIS Records Search Results
- D DPR Form Set: 1431-1433 El Camino Real
- E SOIS Action Plan
- F ESA Action Plan

## TABLES

Table 1. City of Burlingame List of California Native American Tribal Contacts.....	12
Table 2. Previous Technical Studies within a 1-Mile Radius of the Project Area .....	15
Table 3. Previously Recorded Resources within a 1-Mile Radius of the Project Area.....	21



# 1 SUMMARY OF FINDINGS

**Project Description:** The City of Burlingame (City) proposes to demolish an existing four-unit (two-story) apartment building along with the detached five-car garage structure at the rear and construct a new six-unit (three-story) townhouse complex, totaling 3,858 square feet and a proposed height of 35 feet. The property at 1431-1433 El Camino Real was constructed in 1947 according to San Mateo County Assessor records.

**Purpose and Scope of the Investigation:** The City retained Dudek to prepare a cultural resources study in support of the proposed 1431 El Camino Real Project (project or proposed project). The intent of this report is to achieve compliance with the California Environmental Quality Act (CEQA) for the project as it relates to historical resources. Further, the proposed project would encroach on a State of California right-of-way and requires an Encroachment Permit issued by California Department of Transportation (Caltrans) District 4. Therefore, Dudek prepared a cultural resources report in the format of a Historical Resources Compliance Report, which is used by Caltrans for projects without federal involvement. This report was prepared in accordance with Caltrans' most recent edition of the Standard Environmental Reference, Volume 2, Cultural Resources.

**Results of the Investigation:** Dudek conducted a pedestrian-level survey of the building located at 1431-1433 El Camino Real on September 6, 2017. The property was recorded and evaluated on State of California Department of Parks and Recreation Series 523 Forms (DPR forms, Attachment D) for historical significance in consideration of National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and City designation criteria and integrity requirements. As a result of the significance evaluation, the subject property does not appear eligible for inclusion in the NRHP, CRHR, or local register due to a lack of significant historical associations and compromised integrity. Pursuant to California Public Resources Code (PRC) Section 15064.5(a), 1431 El Camino Real does not appear to be a historical resource for the purposes of CEQA.

Two NRHP-listed properties were also identified within/adjacent to the proposed project area: two young elm trees that are contributing elements of the Howard-Ralston Eucalyptus Tree Rows (P-41-002191), and a non-contributing segment of El Camino Real (P-41-002192). In consideration of adequate protections for the NRHP-listed trees, Caltrans PQS has determined that a Finding of No Adverse Effect with Standard Conditions (FNAE-SC) is appropriate for the proposed project. This will include preparation of both Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer (SOIS) and Environmentally Sensitive Areas (ESA) Actions Plans (Attachments E and F).

No archaeological resources were identified within the project site or immediate vicinity as a result of the California Historical Resources Information System (CHRIS) records search or Native American correspondence. However, it is always possible that intact archaeological deposits are present at subsurface

levels. Based on geomorphological evidence, and known buried cultural deposits in the Bay Area, the project site should be treated as potentially sensitive for archaeological resources. The project site is situated within Quaternary Alluvial deposits (generally less than 11,000 years old), which are generally considered to have formed too recently to support the presence of paleontological deposits. Therefore, the area is considered to be of low sensitivity for encountering significant paleontological deposits. Standard protection measures for unanticipated discoveries of human remains, archaeological resources, and paleontological resources have been provided.

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## 2 PROJECT DESCRIPTION

### 2.1 Project Location

The proposed project site is located at 1431-1433 El Camino Real in the City of Burlingame, San Mateo County, on Assessor's Parcel Number 026-013-110 (see Figure 1, Regional Map, and Figure 2, Vicinity Map, in Attachment A). The closest highways to the proposed project site are U.S. Route 101 and Highway 280.

### 2.2 Scope of Project

The proposed project site is located in an R-3 zoning district and is surrounded by either R-1 or R-3 zoning districts with a lot size of 7,722 square feet. The proposed project would include the demolition of an existing four-unit (two-story) apartment building along with the detached five-car garage structure at the rear and construction of a new six-unit (three-story) townhouse, totaling 3,858 square feet and a proposed height of 35 feet. The property at 1431 El Camino Real was constructed in 1947 according to San Mateo County Assessor records. Therefore, the existing building at 1431 El Camino Real requires evaluation for historical significance to determine if the proposed project has the potential to impact historical resources, as defined by CEQA.

The proposed building would have 6 units side by side and would be 3-stories in height with an occupant load of 48. Proposed units would be 2-bedrooms and 2.5 bathroom units with unit sizes ranging from 1,004 square feet to 1,195 square feet and the average unit size would be 1,097 square feet. Each unit would have ground level parking garage that will accommodate 2 parking spaces. Above the garage would be two living levels for residents. There would also be 2 at-grade guest parking spaces located in the right rear corner and a dedicated service vehicle space located in the front setback area. All entrances to each of the units would be located on the north facing (driveway) side of the project. The project would include 6 two-bedroom, 2.5-bathroom townhouse units and the unit size ranging from 1,083 square feet through 1,190 square feet. The proposed project would have 1,000 square feet of common open space in the rear yard and a minimum of 75 square feet of private open space per unit in the form of private balconies. Exterior lighting would include wall sconces at unit entries and possibly some soft lighting at front yard landscaping, mail area, and rear yard trash enclosure.

The project also proposes to relocate one of the young elms adjacent to the sidewalk within the Caltrans right-of-way. Because this tree is a contributor to the NRHP-listed Howard-Ralston Eucalyptus Tree Rows (P-41-002191), it will be replanted directly south of its current location to avoid any adverse effects to the resource.

The proposed project will encroach onto a state right-of-way and requires an Encroachment Permit issued by Caltrans District 4. Therefore, Dudek prepared a cultural resources report in the format of a Historical

Resources Compliance Report, which is used by Caltrans for projects without federal involvement. The report combines identification, evaluation, impact assessment, and mitigation into a single document. This report was prepared in accordance with the guidance provided in Caltrans Standard Environmental Reference, Volume 2, Cultural Resources.

### 2.3 Project Area Limits

In coordination with the City, Dudek Principal Architectural Historian Samantha Murray, MA, delineated the Project Area Limits (PAL) map (Attachment A, Figure 3, Project Area Limits. Based on a review of the proposed project description and design plans, it was determined that the PAL should include the limits of Assessor's Parcel Number 026-013-110 as well as the portion of the Caltrans ROW where improvements will be made. This includes the existing sidewalk, curb, gutters, driveways directly in front of the building, as well as any landscaping improvements to the sidewalk planter where one young elm tree is proposed for removal and relocation. Because this tree is a contributor to the NRHP-listed Howard-Ralston Eucalyptus Tree Rows (P-41-002191), it will be relocated directly south of its current location to avoid any adverse effects to the resource. The vertical limits of the project area is 35 feet above ground surface (the proposed height of the new building) and 36 inches below grade (the maximum depth of ground disturbance).

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## 3 CONSULTING PARTIES AND PUBLIC PARTICIPATION

### 3.1 Native American Heritage Commission

Dudek sent a request to the Native American Heritage Commission (NAHC) to search the Sacred Lands File for any Native American cultural resources on August 11, 2017. Dudek received a reply from the NAHC on August 22, 2017, stating a negative finding for any cultural resources within the Sacred Lands File. A list of Native American tribes who may be affiliated with any cultural resources within the boundaries of the project area was included in the letter (Attachment B).

### 3.2 Native American Groups

The proposed project is subject to compliance with Assembly Bill (AB) 52 (PRC Section 21074), which requires consideration of impacts to “tribal cultural resources” as part of the CEQA process, and that the lead agency (the City) notify California Native American tribal representatives (that have requested notification) who are traditionally or culturally affiliated with the geographic area of the proposed project. The City, with the assistance of Dudek, will contact all NAHC-listed California Native American tribal representatives that have requested project notification pursuant to AB 52. No responses have been received to-date. The City’s current list includes the California Native American tribal contacts listed in Table 1.

**Table 1. City of Burlingame List of California Native American Tribal Contacts**

Contact Person	Tribe	Contact Information		
		Address	Phone	Email
Irenne Zwielerlein, Chairperson	Amah Mutsun Tribal Band of Mission San Juan Bautista	789 Canada Road, Woodside, California, 94062	650.400.4806	amahmutsuntribal@gmail.com
Tony Cerda, Chairperson	Costanoan Rumsen Carmel Tribe	244 E. 1st Street Pomona, California, 91766	909.629.6081	rumsen@aol.com
Ann Marie Sayers, Chairperson	Indian Canyon Mutsun Band of Costanoan	P.O. Box 28 Hollister, California, 95024	831.637.4238	ams@indiancanyon.org
Rosemary Cambra, Chairperson	Muwekma Ohlone Indian Tribe of the SF Bay Area	P.O. Box 360791 Milpitas, California, 95036	408.314.1898	muwekma@muwekma.org
Andrew Galvan	The Ohlone Indian Tribe	P.O. Box 3152 Fremont, California, 94539	510.882.0527	chochenyo@AOL.com

Source: City of Burlingame AB 52 contact list, last updated September 20, 2017

### 3.3 Local Historical Groups

#### **Burlingame Historical Society**

Dudek contacted the Burlingame Historical Society on September 18, 2017, for any relevant information pertaining to the subject property, but received no response.



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## 4 SUMMARY OF IDENTIFICATION EFFORTS

### 4.1 CHRIS Records Search

A records search of the PAL and the surrounding 1-mile radius was completed by Northwest Information Center staff on September 13, 2017 (Confidential Attachment C). This search included the center’s collection of mapped prehistoric, historical and built-environment resources, DPR Site Records, technical reports, and archival resources. Additional sources consulted included the NRHP, California Inventory of Historical Resources/CRHR and listed Office of Historic Preservation Archaeological Determinations of Eligibility, California Inventory of Historic Resources, historical maps, and local inventories.

A total of 40 studies have been conducted within a 1-mile radius of the project area, which produced a total of 72 reports (Table 2). Of those, one study has been conducted within the project area, S-32166. There are 62 previously recorded resources within a 1-mile radius of the project area (Table 3). Resource, P-41-002191, the Howard-Ralston Eucalyptus Tree Rows, lies within the project area. P-41-002192, El Camino Real, lies directly adjacent to the project area.

#### Previous Technical Studies

Of the 40 studies conducted in the 1-mile radius of the project area, only one study occurred adjacent to the project area. Study S-32166, written by William Kostura in 1999 for Caltrans, contains two reports. The first is entitled *Historic Resources Compliance Report Including Report on the Finding of Adverse Effect for the Proposed Widening of State Highway 82 Between Bellevue Avenue and [Floribunda] Avenue in Hillsborough, San Mateo County, EA 253600, 04-SM-82, K.P. 21.9/22.1, P.M. 13.6/13.7*; the second report is entitled *Historical Architectural Survey Report for the Proposed Widening of State Highway 82 in Hillsborough, San Mateo County*. The recording of the Howard-Ralston Eucalyptus Rows (P-41-002191), occurred during the course of this study, along with the evaluation of El Camino Real (P-41-002192), in Burlingame and Hillsborough.

**Table 2. Previous Technical Studies within a 1-Mile Radius of the Project Area**

Report	Authors	Year	Title	Publisher	In PAL
S-003147	David Chavez	1980	Cultural Resources Evaluation for the Airport Boulevard Widening Project, Burlingame, California	—	No
S-004885	G. V. Scott	1974	The Millbrae Avenue Interchange, 04-SM-101, PM 17.9/18.1, Millbrae I/C, 04210-392680	Caltrans	No
S-010402	Rebecca Loveland Anastasio, Donna M. Garaventa, Stuart A. Guedon, Robert M. Harmon, and John W. Schoenfelder	1988	A Cultural Resources Assessment for San Francisco Resource Supply Study (San Mateo Substation to Martin Substation), Daly City to City of San Mateo, San Mateo County, California	Basin Research Associates Inc.	No
S-011396		1989	Technical Report of Cultural Resources Studies for the Proposed WTG-WEST, Inc., Los Angeles to San Francisco and Sacramento, California: Fiber Optic Cable Project	BioSystems Analysis Inc.	No

HISTORICAL RESOURCES COMPLIANCE REPORT  
1431 EL CAMINO REAL PROJECT

**Table 2. Previous Technical Studies within a 1-Mile Radius of the Project Area**

Report	Authors	Year	Title	Publisher	In PAL
S-012201	David Chavez and Jan M. Hupman	1990	Cultural Resources Evaluation for the San Francisco International Airport Master Plan EIR, San Mateo County, California	David Chavez & Associates	No
S-017192	Laurence H. Shoup, Mark Brack, Nancy Fee, and Bruno Giberti	1994	BART-San Francisco Airport Extension Project, Draft Environmental Impact Report/Supplemental Environmental Impact Statement, Historic Architectural Survey Technical Report	Archaeological/Historical Consultants	No
S-017192a	Laurence H. Shoup and Ward Hill	1995	Bart-SFP Extension Project, Draft Environmental Impact Report/Supplemental Environmental Impact Statement, Historic Architectural Survey Technical Report, Volume II: Alternative VI, Highway 380 to Trousdale Drive in Burlingame	Archaeological/Historical Consultants	No
S-017192b	Cherilyn Widdell	1995	UMTA900828A; Project: BART Extension from Colma to San Francisco International Airport	Office of Historic Preservation	No
S-017993	Brian Hatoff, Barb Voss, Sharon Waechter, Stephen Wee, and Vance Bente	1995	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project	Woodward-Clyde Consultants	No
S-020508	Suzanne Baker and Ward Hill	1998	Archaeological Survey and Historic Architectural Survey of the Low Level Windshear Alert System (LLWAS) Project, Sites #4, #5 and #8, San Mateo County, California	Archaeological/Historical Consultants	No
S-020508a	Keith A. Lusk, Cherilyn E. Widdell, and Daniel Abeyta	1998	Low Level Windshear Alert System (LLWAS) at San Francisco International Airport, San Mateo County	Federal Aviation Administration; California Office of Historic Preservation	No
S-021879	Marvis Baird, Dini Brown, Marie Japs, Gay Kochmich, Millie Millhauser, Carol Moye, Susan Lehmann, Katherine Solomonson, Alan Michelson, Mitch Postel, Marion Holmes, Linda Wickert, Eileen Murray, Robin O'Connell Dotey Schafer, Betty Wood, and Margery Wood	1990	Town of Hillsborough Historic Building Survey	San Mateo County Historical Association	No
S-022978	Mike Avina	2000	Final Cultural Resources Inventory Report for Williams Communications, Inc. Fiber Optic Cable System Installation Project, San Francisco to Santa Clara, San Francisco, San Mateo, and Santa Clara Counties: Addendum 1	Jones & Stokes	No
S-025132	George McKale and James Allen	2002	A Cultural and Paleontological Resources Study of a Portion of Mills High School, Millbrae, San Mateo County, California	LSA Associates Inc.	No
S-025174	John Holson, Cordelia Sutch, and Stephanie Pau	2002	Cultural Resources Report for San Bruno to Mountain View Internodal Level 3 Fiber Optics Project in San Mateo and Santa Clara Counties, California	Pacific Legacy Inc.	No
S-026045	Richard Carrico, Theodore Cooley, and William Eckhardt	2000	Cultural Resources Reconnaissance Survey and Inventory Report for the Metromedia Fiber optic Cable Project, San Francisco Bay Area and Los Angeles Basin Networks	Mooney & Associates	No

HISTORICAL RESOURCES COMPLIANCE REPORT  
1431 EL CAMINO REAL PROJECT

Table 2. Previous Technical Studies within a 1-Mile Radius of the Project Area

Report	Authors	Year	Title	Publisher	In PAL
S-026297	Colin I. Busby	2002	Historic Properties Survey Report, Route 101 Auxiliary Lanes Project, Third Avenue to Millbrae Avenue, San Mateo County, California; 04-SM-101, K.P. 21.7/28.8 (P.M. 13.5-17.9) EA 26420K	Basin Research Associates Inc.	No
S-026297a	Ward Hill	2002	Historic Architectural Survey Report Route 101 Auxiliary Lanes Project Third Avenue to Millbrae Avenue San Mateo County, California 04-SM-101 KP 21.7/28.8 (PM13.5/17.9) EA 26420K	Basin Research Associates Inc.	No
S-026297b	Knox Mellon	2002	Archaeological Survey Report, Route 101 Auxiliary Lanes Project, Third Avenue to Millbrae Avenue, San Mateo County, California; 04-SM-101 KP 21.7/28.8 (PM 13.5/17.9) EA 26420K	Basin research Associates Inc.	No
S-026297c	Knox Mellon and David A. Nicol	2002	FHWA020807A; HAD-CA, File No. US 101 Auxiliary Lane, 04-SM-101 PM13.5/17.9, EA 04-245-26420K [Further Section 106 Consultation on the Proposed Construction of Auxiliary Lanes on State Route 101, San Mateo County]	Office of Historic Preservation; Department of Parks and Recreation	No
S-027715	Carolyn Losee	2003	Cingular BA-101-01 "Our Lady of Angels Catholic Church" Site: Archaeological Monitoring Recommended (letter report)	Archaeological Resources Technology	No
S-027930	Kyle Brown, Adam Marlow, James Allan, and William Self	2003	Cultural Resource Assessment of Alternative Routes for PG&E's Jefferson-Martin Transmission Line, San Mateo County, California	William Self Associates Inc.	No
S-029496		2001	Nextel Communications (On-Air), CA 0176C Broadway, 1177 Airport Road, Burlingame, California.	Earth Touch Inc.	No
S-029657	Wendy J. Nelson, Tamara Norton, Larry Chiea, and Reinhard Pribish	2002	Archaeological Inventory for the Caltrain Electrification Program Alternative in San Francisco, San Mateo, and Santa Clara Counties, California	Far Western Anthropological Research Group Inc.	No
S-029657a	Rand F. Herbert	2002	Finding of No Adverse Effect, Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties, California	JRP Historical Consulting Services	No
S-029657b	Parsons	2002	Historic Property Survey for the Proposed Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties, California	Parsons; JRP Historical Consulting Services; Far Western Anthropological Research Group Inc.	No
S-029657c	Knox Mellon	2002	FTA021021A; Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties	Office of Historic Preservation	No
S-029657d	Meta Bunse	2003	Final Finding of Effect Amendment, Caltrain Electrification Project, San Francisco, San Mateo, and Santa Clara Counties, California	JRP Historical Consulting Services	No
S-029657e	Rand F. Herbert	2001	Draft Finding of No Adverse Effect, Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties, California	JRP Historical Consulting Services	No
S-029657f	Sharon A. Waechter, Jack Meyer, and Laura Leach-Palm	2008	Cultural Resources Addendum for the Caltrain Electrification Program Alternative: San Francisco, San Mateo, and Santa Clara Counties, California	Far Western Anthropological Research Group Inc.	No
S-032166	William Kostura	1999	Historic Resources Compliance Report Including Report on the Finding of Adverse Effect for the Proposed Widening of State Highway 82 Between Bellevue Avenue and [Floribunda] Avenue in Hillsborough, San Mateo County, EA 253600, 04-SM-82, K.P. 21.9/22.1, P.M. 13.6/13.7	California Department of Transportation, District 04	Adjacent
S-032166a	William Kostura	1999	Historical Architectural Survey Report for the Proposed Widening of State Highway 82 in Hillsborough, San Mateo County	California Department of Transportation, District 04	Adjacent

HISTORICAL RESOURCES COMPLIANCE REPORT  
1431 EL CAMINO REAL PROJECT

**Table 2. Previous Technical Studies within a 1-Mile Radius of the Project Area**

Report	Authors	Year	Title	Publisher	In PAL
S-032250	Philippe Lapin	2003	Historic Property Survey Report, Mission Bells Project, State Route 82/Interstate 101, San Mateo and Santa Clara Counties, California	California Department of Transportation, District 04	No
S-032788		2002	Historic Resources Evaluation Report Draft, Burlingame Wastewater Treatment Facility, Proposed Improvements, Burlingame, California	Carey & Co. Inc.	No
S-033061	Nancy Sikes, Cindy Arrington, Bryon Bass, Chris Corey, Kevin Hunt, Steve O'Neil, Catherine Pruet, Tony Sawyer, Michael Tuma, Leslie Wagner, and Alex Wesson	2006	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	SWCA Environmental Consultants	No
S-033061a		2006	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	SWCA Environmental Consultants	No
S-033061b	Nancy E. Sikes	2007	Final Report of Monitoring and Findings for the Qwest Network Construction Project (letter report)	SWCA Environmental Consultants	No
S-036274	Dean Martorana	2009	Historic Property Survey Report, US 101/Broadway Interchange Reconstruction Project, San Mateo County, California, EA 235840, 4-SMC-101 PM 16.30-17.06	URS Corporation	No
S-036274a	Cheryl Brookshear	2009	Historical Resources Evaluation Report, US 101/Broadway Interchange Reconstruction Project, San Mateo County, California, Post Mile 4-SMC-101 16.30-17.06 EA 235840, US 101, San Mateo County	JRP Historical Consulting LLC	No
S-036274b	Dean Martorana	2009	Archaeological Survey Report, US 101/Broadway Interchange Reconstruction Project, San Mateo County, California, EA 235840, 4-SMC-101 PM 16.30-17.06	URS Corporation	No
S-036313		2009	Crystal Springs Pipeline No. 2 Replacement Project, San Francisco and San Mateo Counties, California: Historic Context and Archaeological Survey Report	ESA+Orion	No
S-036313a	Rancy S. Wiberg	2009	Technical Report, Extended Archaeological Survey, Crystal Springs Pipeline No. 2, Segments 2 and 3 Between Sites 8 and 9, City of San Mateo and Town of Hillsborough	Holman & Associates	No
S-036456	Dana E. Supernowicz	2009	Colocation ("CO") Submission Packet, FCC Form 621, Mike Harvey Acura, Project Number: SF-03116A	EarthTouch Inc.	No
S-036456a	Dana E. Supernowicz	2009	Cultural Resources Study of the Mike Harvey Acura Project, T-Mobile Site No. SF03116A, 1070 Broadway Street, Burlingame, San Mateo County, California 94010	Historic Resource Associates	No
S-036757	Matthew R. Clark	2010	NHPA Section 106 Compliance for the Town of Hillsborough SCADA Upgrade Project, Type A Installations, San Mateo County, California	Holman and Associates	No
S-037875	Loma Billat	2011	Collocation ("CO") Submission Packet, FCC Form 621, Rollins Road PGE Lattice, SF53341C	EarthTouch Inc.	No
S-038036	Carrie D. Wills, M.A. and Kathleen A. Crawford, M.A.	2010	Cultural Resources Records Search and Site Visit for AESCO Job Number 20101651-B3541, Exenet Systems Candidate BGM-139A (Burlingame Network 139A), 1457 Drake Avenue, Burlingame, San Mateo County, California	Michael Brandman Associates	No
S-038063	Neal Kaptain	2009	Smart Corridors Geoarchaeological Sensitivity Research (letter report)	LSA Associates Inc.	No
S-038147	Dana Supernowicz	2009	Collocation Submission Packet, New Life Community Church, SF13050A	EarthTouch Incorporated	No
S-038147a	Dana Supernowicz	2009	Cultural Resources Study of the New Life Community Church Project, T-Mobile Site no. SF13050A, 1430 Palm Drive, Burlingame, San Mateo County, California 94010	Historic Resource Associates	No

HISTORICAL RESOURCES COMPLIANCE REPORT  
1431 EL CAMINO REAL PROJECT

**Table 2. Previous Technical Studies within a 1-Mile Radius of the Project Area**

Report	Authors	Year	Title	Publisher	In PAL
S-038914	Randy Wiberg	2011	Crystal Springs Pipeline No. 2, Replacement Project, Site 12, City of Burlingame	Holman & Associates	No
S-039000	Dana E. Supernowicz and Jon L. Brady	2004	Cultural Resources Study of Canyon Road/Summit Project, AT&T Wireless Services Site No. SNFCCA1786, Shinryo En Buddhist Temple, 2220 Summit Drive, Burlingame, San Mateo County, California 94010	Historic Resource Associates	No
S-039104	Brian F. Byrd, John E. Berg, Philip Kaijankoski, Jack Meyer, Jeffrey Rosenthal, Jelmer W. Eerlans, Anna Fritschi, Howard Spero, and Eric Wohlgemuth	2012	Archaeological Investigations for the State Route 82 Signal Interconnect and Intersection Modification Project, San Mateo County, California, 04-SMA-82 PM 0.0/15.9, EA 04-24992	Far Western Anthropological Research Group Inc.	No
S-039104a	Brett Rushing	2010	Historic Property Treatment Plan for the State Route 82 Signal Interconnect and Intersection Modification Project, 04-SM-82 PM 0.0/15.9, EA 24992	Caltrans	No
S-039958	David Brunzell	2012	Cultural Resources Assessment of the Crown Castle Hillsborough Project, San Mateo County, California (BCR Consulting Project No. SYN1210) (letter report)	BCR Consulting	No
S-042892	Jennifer Thomas	2012	0211-01 103.6EW Station 15+89 ECDA Project (Cluster #1) - Cultural Resources Study (letter report)	Far Western Anthropological Research Group Inc.	No
S-045365	Heidi Koenig	2014	Peninsula Health Care District Memory Care and Assisted Living Facility Project, City of Burlingame, San Mateo County, Draft Cultural Resources Survey Report	Environmental Science Associates	No
S-046663	Michael Konzak and Adrian Praetzellis	2014	Cultural Resources Inventory Report for Caltrain Base Stations 4 and 5, in the Cities of Burlingame and San Mateo, San Mateo County, California	Anthropological Studies Center, Sonoma State University	No
S-046663a	Michael Konzak and Adrian Praetzellis	2014	Cultural Resources Inventory Report for Caltrain Base Stations 4 and 5, in the Cities of Burlingame and San Mateo, TCNS Number: 98618, San Mateo County, California	Anthropological Studies Center, Sonoma State University	No
S-046663b	Carol Roland-Nawi and Michael Konzak	2014	FCC_2014_0813_007; Caltrain Positive Train Control Project (PTC) Base Station 04, Burlingame & 05, San Mateo	Office of Historic Preservation; Anthropological Studies Center, Sonoma State University	No
S-047840	Carrie D. Wills and Kathleen Crawford	2015	FCC Form 621 (SF03083A), Collocation ("CO") Submission Packet, SF083 Peninsula Professional, 1828 El Camino Real, Burlingame, CA 94010	Environmental Assessment Specialists Inc.	No
S-047840a	Carrie D. Wills	2015	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SF03083A (SF083 Peninsula Professional), 1828 El Camino Real, Burlingame, San Mateo County, California (letter report)	Environmental Assessment Specialists Inc.	No
S-047840b	Carrie D. Wills and Kathleen A. Crawford	2015	Direct APE Historic Architectural Assessment for T-Mobile West, LLC Candidate SF03083A (SF083 Peninsula Professional), 1828 El Camino Real, Burlingame, San Mateo County, California (letter report)	Environmental Assessment Specialists Inc.	No
S-047840c	Julianne Polanco	2015	FCC_2015_1109_003; SF03083A (SF083 Peninsula Professional) 1828 El Camino Real, Burlingame, San Mateo County, Collocation	Office of Historic Preservation	No
S-047843	Carolyn Losee and Stephen Geist	2015	FCC Form 621 Collocation Submission Packet, Highway 101-Broadway, CCL00530 / FA10095911, 1070 Broadway, Burlingame, San Mateo County, CA 94010, GE2G Project Number: 310521	Geist Engineering & Environmental Group Inc.	No

**Table 2. Previous Technical Studies within a 1-Mile Radius of the Project Area**

Report	Authors	Year	Title	Publisher	In PAL
S-047843a	Carrie D. Wills and Sarah L. Farley	2010	FCC Form 621, Collocation Submission Packet, AT&T Mobility, LLC, Hwy 101-Broadway, CNU0530, 1070 Broadway, Burlingame, CA 94010, San Mateo County	Michael Brandman Associates (MBA) on behalf of EnviroBusiness Inc. d/b/a EBI Consulting	No
S-047843b	Carolyn Losee	2015	Cultural Resources Investigation for AT&T Mobility CNU0530 "Highway 101 - Broadway" 1070 Broadway, Burlingame, San Mateo County, California 94010 (update) (letter report)	Archaeological Resources Technology	No
S-047843c	Carolyn Losee	2015	Cultural Resources Investigation for AT&T Mobility CNU0530 "Highway 101 - Broadway" 1070 Broadway, Burlingame, San Mateo County, California 94010 (letter report)	Archaeological Resources Technology	No
S-047843d	Carrie D. Wills and Kathleen A. Crawford	2010	Cultural Resources Records Search and Site Visit for AT&T Mobility, LLC Candidate CNU0530 (Hwy 101 - Broadway), 1070 Broadway, Burlingame, San Mateo County, California	Michael Brandman Associates	No
S-047843e	Julianne Polanco and Paula Carr	2015	FCC_2015_1016_003; FCC 100601C; CNU0530 "Highway 101-Broadway" 1070 Broadway, Burlingame, Collocation	Office of Historic Preservation	No
S-048343	Daniel Shoup	2016	Historic Property Survey Report: Carolan Avenue Complete Streets Project CML 5171(021) Burlingame, San Mateo County	Archaeological/Historical Consultants	No
S-048343a	Daniel Shoup	2016	Archaeological Survey Report: Carolan Avenue Complete Streets Project CML 5171(021) Burlingame, San Mateo County	Archaeological/Historical Consultants	No

### Previously Recorded Cultural Resources

One previously recorded resource is located within the proposed PAL: the NRHP-listed Howard-Ralston Eucalyptus Tree Row (P-41-002191). One additional resource is located directly adjacent to the PAL: El Camino Real (P-41-002192).

**The Howard-Ralston Eucalyptus Tree Rows (P-41-002191).** One NRHP-listed resource lies within the project area. The Howard-Ralston Eucalyptus Tree Rows (P-41-002191) is a 1.76-mile-long landscaping effort dating from 1873 to 1876 that consists of a row of trees lining each side of the historic El Camino Real from Ray Drive/Rosedale Avenue in Burlingame on the northwest to Peninsula Avenue in Hillsborough on the southwest. The current Historic Property Data File for San Mateo County indicates that the resource was formally listed in the NRHP in 2011. The trees are predominantly mature blue gum and manna gum eucalyptus, which can reach over 100 feet tall and over 5 feet in diameter. English elm trees also contribute to the resource, although their numbers have slowly declined due to Dutch Elm disease. Although there are no mature trees within the PAL, the recently planted saplings adjacent to the sidewalk are considered historically significant since they represent an on-going effort to maintain the feel and intent of the original tree-lined El Camino Real. The NRHP Registration form for the resource states the following about the more recently planted trees (Pfaff 2011:5):

Since 2004, Caltrans has had an ongoing agreement with SHPO regarding removals and replacements of trees within the Resource Area...In keeping with McLaren's original design



intent, as trees have had to be replaced, elm trees have been planted and will continue to be planted in the future. Since 2006, Caltrans has planted 44 non-historic, contributing elm saplings to rehabilitate the resource. Burlingame Planning Commission requirements led to the planting of 5 more elms in 2009-10. Cal Fire has planted 33 additional contributing elm saplings in March 2011. Of the 82 total, 5 have died, leaving 77 new contributing elms. New elm trees, replacing lost elm trees in kind, are considered to be contributing elements of the resource and thus contribute to the integrity of materials and design of the Tree Rows as they carry out McLaren’s original design of a landscaped, shaded avenue.

This resource is listed in the NRHP under Criterion A (property associated with events that have made a significant contribution to the broad patterns of our history) and Criterion C (property embodying distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction). Its nomination lies in its association with the inception of Burlingame and Hillsborough, and with figures of historical importance to the region, William C. Ralston and George H. Howard. Also considered is a long history of protection and sense of identity for the community of Burlingame. The trees are also an example of the work master landscaper John McLaren put forth to transform the landscape of the area from an otherwise barren environment (Kostura 1999). Map IV in Study S-32166 shows that the landscaping between Hillside Drive and Adeline Drive on the south side of El Camino Real, adjacent to the project area, exhibits poor integrity(Attachment A, Figure 4).

**El Camino Real (P-41-002192).** El Camino Real, the “Kings Highway,” was established in the Spanish Era (1776–1800s) as a means to travel between the missions in California. The segment of the highway that runs adjacent to the project area was evaluated in 1999 by William Kostura. The evaluation found that the segment of El Camino Real that runs between Ray Drive and Peninsular Avenue in Burlingame and Hillsborough (i.e., the segment adjacent to the proposed project) lacks integrity to the period of significance and is a non-contributing portion of the larger resource. Paving, widening, and development during the 1940s have greatly reduced the integrity of the Spanish Era resource (Kostura 1999).

**Table 3. Previously Recorded Resources within a 1-Mile Radius of the Project Area**

Primary No.	Trinomial	Resource Name	Resource Type	Age	Recording Events	In PAL
P-41-000038	CA-SMA-000034	Nelson 373	Site, Other	Prehistoric	((none), [none])	No
P-41-000039	CA-SMA-000035	Nelson 374	Other	Prehistoric, Unknown	((none), [none])	No
P-41-000040	CA-SMA-000036	Nelson 375	Site	Prehistoric	((none), [none])	No
P-41-000077	CA-SMA-000074	Mills Estate	Site	Prehistoric	1950 (L.L. Valdivia, [none]); 1952 (Heizer, Meighan, [none]); 1990 (Barb Bocek, Campus Archeology, Stanford University)	No



**Table 3. Previously Recorded Resources within a 1-Mile Radius of the Project Area**

Primary No.	Trinomial	Resource Name	Resource Type	Age	Recording Events	In PAL
P-41-000078	CA-SMA-000075	SMA 75	Site	Prehistoric	1950 (Evans, Lathrap, [none])	No
P-41-000079	CA-SMA-000076	[none]	Site	Prehistoric	1952 (Meighan, [none])	No
P-41-000090	CA-SMA-000087	San Mateo Shellmound F	Site	Prehistoric	1936 (Jerome Hamilton, [none]); 1954 (Alan Brown, [none])	No
P-41-000093	CA-SMA-000090	SMA-90	Site	Prehistoric	1954 (A. Elsasser, [none])	No
P-41-000094	CA-SMA-000091	SMA-91	Site	Prehistoric	1954 (L.L. Valdivia, [none])	No
P-41-000105	CA-SMA-000102	[none]	Site	Prehistoric	1968 (Hons, Robertson, San Francisco State College); 2009 (Denise Jurich, Jesse Martinez, Emilie Zelazo, PBS&J)	No
P-41-000108	CA-SMA-000105	SMA-105	Site	Prehistoric	1969 (Schenk, [none])	No
P-41-000126	CA-SMA-000124	San Mateo Shellmound E	Site	Prehistoric	1936 (J. Hamilton, [none]); 1969 (Schenk, [none])	No
P-41-000165	CA-SMA-000165H	Southern Pacific Depot	Building	Historic	1983 (John W. Snyder, Caltrans); 2000 (Chris McMorris, JRP Historical Consulting Services)	No
P-41-000228	CA-SMA-000230H	Kohl Mansion, The Oaks, Mercy High School	Building	Historic	1981 (Jeanmarie Montgomery, Merch High School); 1981 (T. McGregor, [none])	No
P-41-000302	CA-SMA-000300	Albemarle Way	Site	Prehistoric	1989 (B. Bocek, Campus Archaeology, Stanford University)	No
P-41-000310	CA-SMA-000316	C-791	Site	Prehistoric	1936 (J. Hamilton, [none]); 1995 ([none], Woodward-Clyde Consultants); 2010 (Jessie Martinez, PBS&J)	No
P-41-000311	CA-SMA-000317	Broadway Car Wash	Site	Prehistoric	1936 (J. Hamilton, [none]); 1936 (J. Hamilton, [none]); 1990 (B. Bocek, Stanford University); 1995 ([none], Woodward-Clyde Consultants); 2010 (Jesse Martinez, PBS&J)	No
P-41-000416	—	CT-7	Structure	Historic	1995 (Hatoff, Voss, Waechter, Wee, Bente, Woodward-Clyde Consultants)	No
P-41-000417	—	CT-8	Structure	Historic	1995 ([none], Woodward-Clyde Consultants); 2009 ([none], JRP Historical Consulting)	No
P-41-000498	—	C-San Mateo-6	Site	Prehistoric	2000 (Mike Avina, Jones & Stokes); 2009 (Denise Jurich, Jesse Martinez, Emilie Zelazo, PBS&J)	No
P-41-000637	—	Chinese Fishing Village Site	Site	Historic	1980 (Nancy Wey, Chinese American Survey)	No

**Table 3. Previously Recorded Resources within a 1-Mile Radius of the Project Area**

Primary No.	Trinomial	Resource Name	Resource Type	Age	Recording Events	In PAL
P-41-000640	CA-SMA-000172H	Southern Pacific Depot	Building	Historic	1977 (Francis Baxter, Millbrae Historical Society); 1979 (J. Cooper, Cabrillo College)	No
P-41-001917	—	Danvers House (von Antwerp Estate)	Building	Historic	1990 (Wickert, San Mateo Co. Hist. Assoc)	No
P-41-001924	—	Villa Roma	Building	Historic	1990 (Solomonson; Wickert, San Mateo Co. Hist. Assoc)	No
P-41-001925	—	1905 Forest View	Building	Historic	1990 ([unreadable], San Mateo Co. Hist. Assoc)	No
P-41-001926	—	2077 Forest View	Building	Historic	1990 (Michelson; Wickert, San Mateo Co. Hist. Assoc)	No
P-41-001927	—	2100 Forest View	Building	Historic	1990 (Wickert; Solomonson, San Mateo Co. Hist. Assoc)	No
P-41-001928	—	Mountford S. Wilson House	Building	Historic	1990 (Wickert, San Mateo Co. Hist. Assoc)	No
P-41-001929	—	2141 Forest View	Building	Historic	1990 ([unreadable], San Mateo Co. Hist. Assoc)	No
P-41-001933	—	Edgecourt Gates; George A. Pope Estate Gates	Structure	Historic	1990 (Wickert, San Mateo Co. Hist. Assoc.)	No
P-41-001941	—	Crosby Home	Building	Historic	1990 (Wickert, San Mateo Co. Hist. Assoc)	No
P-41-001943	—	La Dophine	Building, Structure	Historic	1980 (Marvis Baird, San Mateo County Historical Association); 2006 (Nancy E. Stoltz, [none])	No
P-41-001983	—	Lilienthal House	Building	Historic	1990 (Michelson; Wickert, San Mateo Co. Hist. Assoc)	No
P-41-001984	—	[none]	Building	Historic	1990 (Solomonson, Wickert, San Mateo Co. Hist. Assoc.)	No
P-41-002078	—	Broadway Overpass	Structure	Historic	2001 (Marjorie Dobkin, Ward Hill, [none])	No
P-41-002079	—	949 Rollins Road	Building	Historic	2001 (Marjorie Dobkin, Ward Hill, [none])	No
P-41-002191	—	Howard-Ralston Eucalyptus Tree Rows	Other	Historic	1999 (William Kostura, Caltrans, District 4); 2011 (Jennifer Pfaff, Burlingame Historical Society)	Yes
P-41-002192	—	El Camino Real	Structure	Historic	1963 ([none], [none]); 1999 (William Kostura, Caltrans District 4); 2008 (Denise Jurich, Jesse Martinez, PBS&J); 2011 (Andrew Hope, Caltrans)	Adjacent
P-41-002226	—	Mike Harvey Acura Building	Building	Historic	2009 (Dana E. Supernowicz, Historic Resource Associates)	No
P-41-002260	—	1299 Bayshore Highway	Building	Historic	2009 (Brookshear, Clementi, JRP Historical Consulting)	No

**Table 3. Previously Recorded Resources within a 1-Mile Radius of the Project Area**

Primary No.	Trinomial	Resource Name	Resource Type	Age	Recording Events	In PAL
P-41-002261	—	1322-28 Marsten Road	Building	Historic	2009 (Cheryl Brookshear, Karen Clementi, JRP Historical Consulting)	No
P-41-002262	—	1320 Marsten Road	Building	Historic	2009 (Cheryl Brookshear, Karen Clementi, JRP Historical Consulting)	No
P-41-002263	—	1244-1246 Rollins Road	Building	Historic	2009 (Cheryl Brookshear, Karen Clementi, JRP Historical Consulting)	No
P-41-002264	—	1222 Rollins Road	Building	Historic	2009 (Cheryl Brookshear, Karen Clementi, JRP Historical Consulting)	No
P-41-002265	—	1212-1220 Rollins Road	Building	Historic	2009 (Cheryl Brookshear, Karen Clementi, JRP Historical Consulting)	No
P-41-002266	—	1221 Rollins Road	Building	Historic	2009 (Cheryl Brookshear, Karen Clementi, JRP Historical Consulting)	No
P-41-002267	—	1213 Rollins Road	Building	Historic	2009 (Cheryl Brookshear, Karen Clementi, JRP Historical Consulting)	No
P-41-002285	—	New Life Community Church	Building	Historic	2009 (Dana E. Supernowicz, Historical Resource Associates)	No
P-41-002308	—	Shinnyo En Buddhist Temple	Building	Historic	2004 (Dana E. Supernowicz, Historical Resource Associates)	No
P-41-002399	—	HST-92P	Site	Prehistoric	2010 (Jesse Martinez, PBS&J)	No
P-41-002443	—	MP 13.90 and 14.31	Structure	Historic	2000 (Meta Bunse/Rand Herbert, JRP Historical Consulting Services)	No
P-41-002444	—	Culvert near California Drive MP 14.84	Structure	Historic	2000 (Meta Bunse/Rand Herbert, JRP Historical Consulting Services)	No
P-41-002471	—	T-Mobile West, LLC SF03083A/SF083 Peninsula Professional	Building	Historic	2015 (Kathleen Crawford, Crawford Historic Services)	No
P-41-002505	—	1038 Morrell Avenue	Building	Historic	2009 (James Williams, PBS&J)	No
P-41-002516	—	840 Edgehill Drive	Building	Historic	2009 (James Williams, Amber Grady, Richard Brandi, PBS&J)	No
P-41-002517	—	873 California Drive	Building	Historic	2009 (James Williams, PBS&J)	No
P-41-002518	—	1107 California Drive	Building	Historic	2009 (James Williams, Richard Brandi, PBS&J)	No

**Table 3. Previously Recorded Resources within a 1-Mile Radius of the Project Area**

Primary No.	Trinomial	Resource Name	Resource Type	Age	Recording Events	In PAL
P-41-002519	---	1131 California Drive	Building	Historic	2009 (James Williams, PBS&J)	No
P-41-002521	---	1279 California Drive	Building	Historic	2009 (James Williams, Amber Grady, PBS&J)	No
P-41-002522	---	1283 California Drive	Building	Historic	2009 (James Williams, PBS&J)	No
P-41-002523	---	881 California Drive	Building	Historic	2009 (James Williams, PBS&J)	No
P-41-002536	---	10 Gulttard Road	Building	Historic	2010 (Amber Grady, James Williams, PBS&J)	No

## 4.2 Building Development Research

### **Burlingame Building Division of the Community Development Department**

Dudek staff visited the Burlingame Building Division of the Community Development Department on September 6, 2017. Dudek obtained all relevant and available permit and building development information for the subject property.

### **San Bruno Public Library**

Dudek contacted Susan Goetz at the San Bruno Public Library on September 18, 2017, for any relevant information they may have about Burlingame. No response was received.

### **San Mateo County Tax Assessor's Office**

The San Mateo County Tax Assessor's office provided the date of construction for the property, but was unable to provide any additional information.

### **ParcelQuest**

Dudek staff used the ParcelQuest system to obtain a property record for the property.

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## 5 CEQA HISTORICAL RESOURCES IDENTIFIED

### 5.1 Newly Evaluated Resources within PAL

**Caltrans PQS evaluated the following resource(s) within the PAL and has determined that pursuant to PRC 15064.5(a) they are not historical resource(s) for purposes of CEQA because they do not meet the California Register of Historical Resources criteria outlined in PRC 5024.1.**

**1431-1433 El Camino Real:** Caltrans PQS Sarah Corder, MFA, and Samantha Murray, MA, identified one building within the PAL over 45 years of age that had not been previously evaluated for historical significance. Pursuant to PRC Section 15064.5(a), 1431-1433 El Camino Real (constructed 1947) does not appear to be a historical resource for the purposes of CEQA because it does not meet the CRHR criteria outlined in PRC Section 5024.1. No important historical associations were identified for the subject property, and it does not appear to be significant for its architecture due to a lack of requisite integrity. The building also does not appear eligible for local designation with the City of Burlingame for the same reasons. See the Department of Parks and Recreation Series 523 forms (DPR forms) in Attachment D for the full significance evaluation. No mitigation is recommended for this property.

### 5.2 Previously Evaluated Historical Resources within PAL

**The following resource(s) within the PAL previously were listed or determined eligible for the NRHP, previously determined to meet CRHR eligibility criteria, and/or previously determined to be historical resource(s) for purposes of CEQA pursuant to PRC 15064.5(a) and the determination(s) is/are still valid.**

**Howard-Ralston Eucalyptus Tree Rows (P-41-002191):** One NRHP-listed resource (listed in 2011) is located within the project area: two young elm trees that contribute to the Howard-Ralston Eucalyptus Tree Rows (P-41-002191). A third mature tree is located adjacent to the northern boundary of the project area. Although the Tree Rows within and around the proposed project area are noted to have poor integrity (Figure 4, Attachment A), it appears that younger trees/saplings that were planted to replace lost mature trees, and are considered contributors to the larger resource (see discussion in Section 4.1). The project proposes to remove one tree from the sidewalk planter within the Caltrans ROW so that it is not adversely affected during widening of the adjacent driveway. Following completion of construction activities, the tree will be replanted directly south of its current location, within the same sidewalk planter. SOIS and ESA Action Plans (Sections 7.2 and 7.3) have been prepared to reduce impacts to the Tree Rows below a level of significance.

**El Camino Real (P-41-002192):** Listed in the NRHP in 1963, this resource is located directly adjacent to the proposed project area. While the larger resource is listed in the NRHP, the segment of El Camino

Real that is adjacent to the PAL (between Ray Drive and Peninsular Avenue) was previously evaluated and found not eligible for the NRHP due to a lack of integrity to the period of significance, and is considered a non-contributing portion of the larger resource (Kostura 1999). No mitigation is recommended for this property.

### 5.3 Archaeological Resources

No archaeological resources were identified within the project site or immediate vicinity as a result of the CHRIS records search or Native American coordination. In addition, both surface and subsurface deposits in the area have been heavily disturbed through construction of the existing building occupying the site. However, it is always possible that intact archaeological deposits are present at subsurface levels. Based on geomorphological evidence and known buried cultural deposits in the Bay Area, the project site should be treated as potentially sensitive for archaeological resources. The project site is situated within Quaternary Alluvial deposits (generally less than 11,000 years old), which are generally considered to have formed too recently to support the presence of paleontological deposits. Management recommendations to reduce potential impacts to unanticipated archaeological and paleontological resources and human remains during construction activities are provided in Section 7.2.

#### Unanticipated Discovery of Archaeological Resources

All construction crew members should be alerted to the potential to encounter sensitive archaeological material. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether additional study is warranted. Prehistoric archaeological deposits may be indicated by the presence of discolored or dark soil, fire-affected material, concentrations of fragmented or whole marine shell, burned or complete bone, non-local lithic materials, or the characteristic observed to be atypical of the surrounding area. Common prehistoric artifacts may include modified or battered lithic materials; lithic or bone tools that appeared to have been used for chopping, drilling, or grinding; projectile points; fired clay ceramics or non-functional items; and other items. Historic-age deposits are often indicated by the presence of glass bottles and shards, ceramic material, building or domestic refuse, ferrous metal, or old features such as concrete foundations or privies. Depending upon the significance of the find under CEQA (14 CCR 15064.5(f); PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted.

### **Unanticipated Discovery of Human Remains**

In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the county coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the county coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the county coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete his/her inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

### **Unanticipated Discovery of Paleontological Resources**

Paleontological resources are limited, nonrenewable resources of scientific, cultural, and educational value and are afforded protection under state laws and regulations (CEQA). Paleontological resources are explicitly afforded protection by CEQA, specifically in Section V(c) of CEQA Guidelines Appendix G, the Environmental Checklist Form, which addresses the potential for adverse impacts to “unique paleontological resource[s] or site[s] or . . . unique geological feature[s]” (14 CCR 15000 et seq.). Further, CEQA provides that, generally, a resource shall be considered “historically significant” if it has yielded or may be likely to yield information important in prehistory (14 CCR 15064.5 [a][3][D]).

In the event that paleontological resources (silicified shell, bone, or other features) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified paleontologist can evaluate the significance of the find. This analysis should comply with guidelines and significance criteria specified by the Society of Vertebrate Paleontology. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted.



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## 6 LIST OF IDENTIFIED HISTORICAL RESOURCES

None of the following resources meet the criteria for inclusion in the NRHP, CRHR, or local designation, and are not historical resources under CEQA. The complete evaluation of 1431-1433 El Camino Real on DPR forms is provided in Attachment D:

Name	Address/Location	Community	OHP Status Code	Map Reference #
1431-1433 El Camino Real	1431-1433 El Camino Real	Burlingame	6Z	n/a (see Figure 3. PAL)

The following resource(s) within the PAL previously were listed or determined eligible for inclusion in the National Register of Historic Places, previously determined to meet California Register of Historical Resources eligibility criteria, and/or previously determined to be historical resource(s) for purposes of CEQA pursuant to PRC 15064.5(a) and the determination(s) is/are still valid:

Name	Address/Location	Community	OHP Status Code	Map Reference #
Howard-Ralston Eucalyptus Tree Rows (P-41-002191)	Borders both sides of El Camino Real (SR-82) for 1.76 miles between Chapin Avenue and Rosedale Avenue.	Burlingame, CA	1S/1D	n/a (see Figure 3. PAL)
El Camino Real (P-41-002192)	Segment between Ray Drive and Peninsular Avenue_	Burlingame, CA	1CL (however the segment adjacent to the PAL is non-contributing)	n/a (see Figure 3. PAL)

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## 7 STATE-OWNED CULTURAL RESOURCES FINDINGS

### 7.1 Finding of No Adverse Effect with Standard Conditions (FNAE-SC)

Pursuant to PRC 5024(f) and PRC 5024.5 Caltrans and SHPO agree that in order to avoid adverse effects to state-owned historical resources, the Caltrans District may propose a finding of “No Adverse Effect with Standard Conditions” (FNAE-SC) when the appropriate standard conditions are imposed and the finding is documented in the HRCR.

#### **HRCR to CSO**

In consultation with Caltrans District 4, it was determined that a Finding of No Adverse Effect with Standard Conditions is appropriate for the proposed project. The documents required to support this finding include this HRCR with an attached SOIS and ESA Action Plan. The SOIS portion of the plan discusses the City’s commitment to replant the elm tree proposed for relocation within the same planter, and in line with the rest of the NRHP-listed resource. The ESA portion of the plan describes the actions that will be taken to protect the adjacent tree from adverse effects.

#### ***Howard-Ralston Eucalyptus Tree Rows (P-41-002191) within the PAL***

Caltrans, in accordance with PRC 5024 Memorandum of Understanding Stipulation X.B.1.b. and Attachment 5, has determined a Finding of No Adverse Effect with Standard Conditions – SOIS is appropriate for this project/activity because the proposed work on following State-owned historical resources(s)—which have been determined eligible for or are listed in the National Register of Historic Places/as a California Historical Landmark(s), meets the Secretary of the Interior’s Standards for the Treatment of Historic Properties. Caltrans is hereby notifying CSO of this finding, Samantha Murray, MA, who meets the Professionally Qualified Staff Standards in PRC 5024 Memorandum of Understanding Attachment 1 as Principal Architectural Historian has reviewed the documentation and determined that the proposed work meets the Secretary of the Interior’s Standards for the Treatment of Historic Properties. [List the property(ies) and whether they are on the Master List, and include description of work below or indicate below the title of the HRCR attachment that contains the description; attach SOIS Action Plan (Attachment E).

- The Howard-Ralston Tree Rows along State Route 82, El Camino Real, in the cities of Burlingame and Hillsborough, San Mateo is a State-owned resource listed in the NRHP in 2011 under Criteria A and C, with a Period of Significance of 1873 to 1930.

### *Howard-Ralston Eucalyptus Tree Rows (P-41-002191) Adjacent to the PAL*

Pursuant to PRC 5024 Memorandum of Understanding Stipulation X.B.1.a, and Attachment 5, Caltrans has determined a Finding of No Adverse Effect with Standard Conditions - ESA, is appropriate because the following State-owned historical resource(s)—which have been determined eligible for or are listed in the National Register of Historic Place or for are eligible or are register as California Historical Landmark(s) — will be protected through the establishment of ESA(s). Caltrans is hereby notifying CSO of this finding. Samantha Murray, MA, who meets the Professionally Qualified Staff Standards in PRC 5024 Memorandum of Understanding Attachment 1 as a Principal Architectural Historian has reviewed the documentation and determined that the proposed ESA is appropriate (see Attachment F).

- The Howard-Ralston Tree Rows along State Route 82, El Camino Real, in the cities of Burlingame and Hillsborough, San Mateo is a State-owned resource listed in the NRHP in 2011 under Criteria A and C, with a Period of Significance of 1873 to 1930.

## 7.2 SOIS Action Plan

An FNAE-SC-SOIS is appropriate when a project or activity's effects to a state-owned historical resource may be considered not adverse if the work is consistent with the SOIS, and is carried out in accordance with Attachment 5 of the MOU.

When an undertaking's activities include stabilization, maintenance, repairs, rehabilitation, or alterations, use of SOIS can avoid adverse effects to historic built-environment properties. The SOIS Action Plan (Attachment E) describes how the proposed project will comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties – Rehabilitation as described in Stipulation X.B.1.b of the Section 106 PA. To support a finding of No Adverse Effect with Standard Conditions-SOIS this document was prepared in accordance with Stipulation X.b.1 of the Section 106 PA and Attachment 5, and to ensure compliance with CEQA.

The SOIS (36 CFR part 67.7) provide a general approach to historic preservation practices and the treatment of historic properties. Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Relocation of the northernmost elm tree (Figure 3, Attachment A) to the southern portion of the sidewalk planter area will ensure that the tree is not impacted by creation of a driveway on the northern side of the PAL. The new location will be in line with the rest of the historic Tree Rows and the relocated tree will continue to be a contributing element of the NRHP-listed resource. Implementation of the SOIS Action Plan (Attachment E) will ensure protection of the NRHP-listed resource throughout construction.

### 7.3 ESA Action Plan

An FNAE-SC-ESA is appropriate when a project or activity's effects to state-owned historical resources, or properties considered to be eligible pursuant to Stipulation VIII.C.3 or 4, will be avoided by designation and enforcement of ESAs as described in Attachment 5 to this MOU.

The ESA Action Plan discusses the ESA methodology that will protect historic properties during construction, documents the protective measures required, identifies responsible parties and their appropriate tasks, outlines an anticipated schedule and process and how these ESAs will be implemented and enforced during construction. The ESA Action Plan also details how the ESA will be integrated into the final bid solicitation package and how the responsible parties will track and verify the successful implementation of the ESA Action Plan at the various phases of the project development process. Although the project has been designed to avoid adverse impacts to historic properties, it has the potential to affect adjacent trees that are not proposed for relocation. The ESA Action Plan has been established as a precautionary measure to protect the adjacent NRHP-listed Howard-Ralston Eucalyptus Tree Rows (P-41-002191) during all project-related activities.

The proposed project does not include work within the property footprint for the ESA; however due to the adjacent tree's proximity to the proposed undertaking, it may be vulnerable during project construction. As such, avoidance measures must be taken to ensure the proposed project avoids this ESA. Prior to project construction, the ESA footprint will be clearly delineated on project plans, and will include notations as outlined in the Caltrans Standard Specifications (2010), stating: 1). Do not enter the ESA unless authorized; 2). If the ESA is breached, immediately secure the area and stop all operations within 60 feet of the ESA boundary and notify the Engineer; 3). If the ESA is damaged, the Department determines what efforts are necessary to remedy the damage and who performs the remedy.

The importance of maintaining and enforcing the ESA boundaries will be discussed during the pre-construction meeting with construction personnel. During the meeting it will be stressed that no construction activity (including storage or staging or equipment or materials) should occur within ESA. At least one calendar week prior to the commencement of construction activities all responsibilities parties shall perform a field review of the ESA location to ensure that they are sufficiently familiar with the area. For the duration of the construction, the project Landscape Architect/Arborist will perform spot inspections to ensure that project personnel are fully aware of the ESA boundary and that the measures outlined in the plans are being followed. Following completion of project construction, the Local Agency Project Manager will inform the Caltrans Architectural Historian when work is finished.

The ESA for the proposed project includes the young elms within the sidewalk planter and the adjacent mature eucalyptus tree to the north (adjacent to where the northern driveway is proposed). The ESA Action Plan table is included in Attachment F of this document.

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## 8 BIBLIOGRAPHY

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

Kostura, W. 1999. *Historic Resources Compliance Report including Report of the Finding of Adverse Affect for the Proposed Widening of State Highway 82 Between Bellevue Avenue and Floribunda Avenue in Hillsborough, San Mateo County*. Prepared for Caltrans District 4.



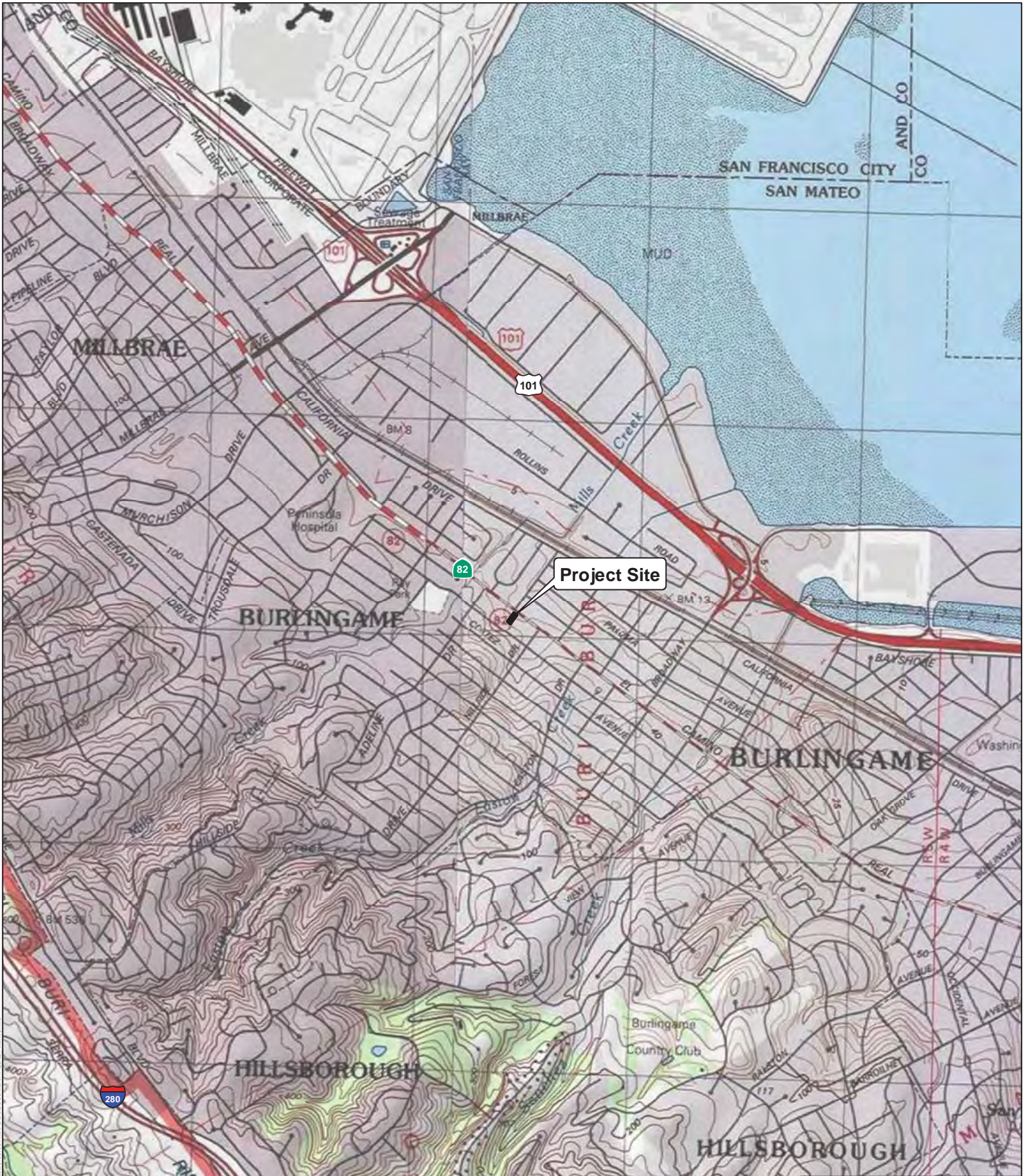
# ATTACHMENT A


Maps and Figures









 Project Boundary

SOURCE: USGS 7.5-Minute Series San Mateo Quadrangle  
Township 4S; Range 5W; Section 14



1431 El Camino Real Project

**FIGURE 2**  
Vicinity Map

File: 8112017 - Last saved by: user@dudek.com  
 Path: Z:\Projects\1431 El Camino Real\MapDocs\FIGURE 2 - Vicinity Map.dwg



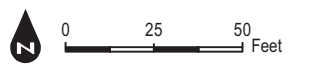
Project Area Limits Map  
 San Mateo County  
 1431 El Camino Real Project

Caltrans PQS \_\_\_\_\_ Date \_\_\_\_\_

Local Assistance Engineer \_\_\_\_\_ Date \_\_\_\_\_



- Project Area Limits
- Parcel Boundary
- El Camino Real (P-41-002192)
- Existing Trees part of Howard-Ralston Eucalyptus Tree Row (P-41-002191)**
- Tree to Remain
- Tree to be Relocated



SOURCE: Bing Maps (Accessed 2017)

1431 El Camino Real Project

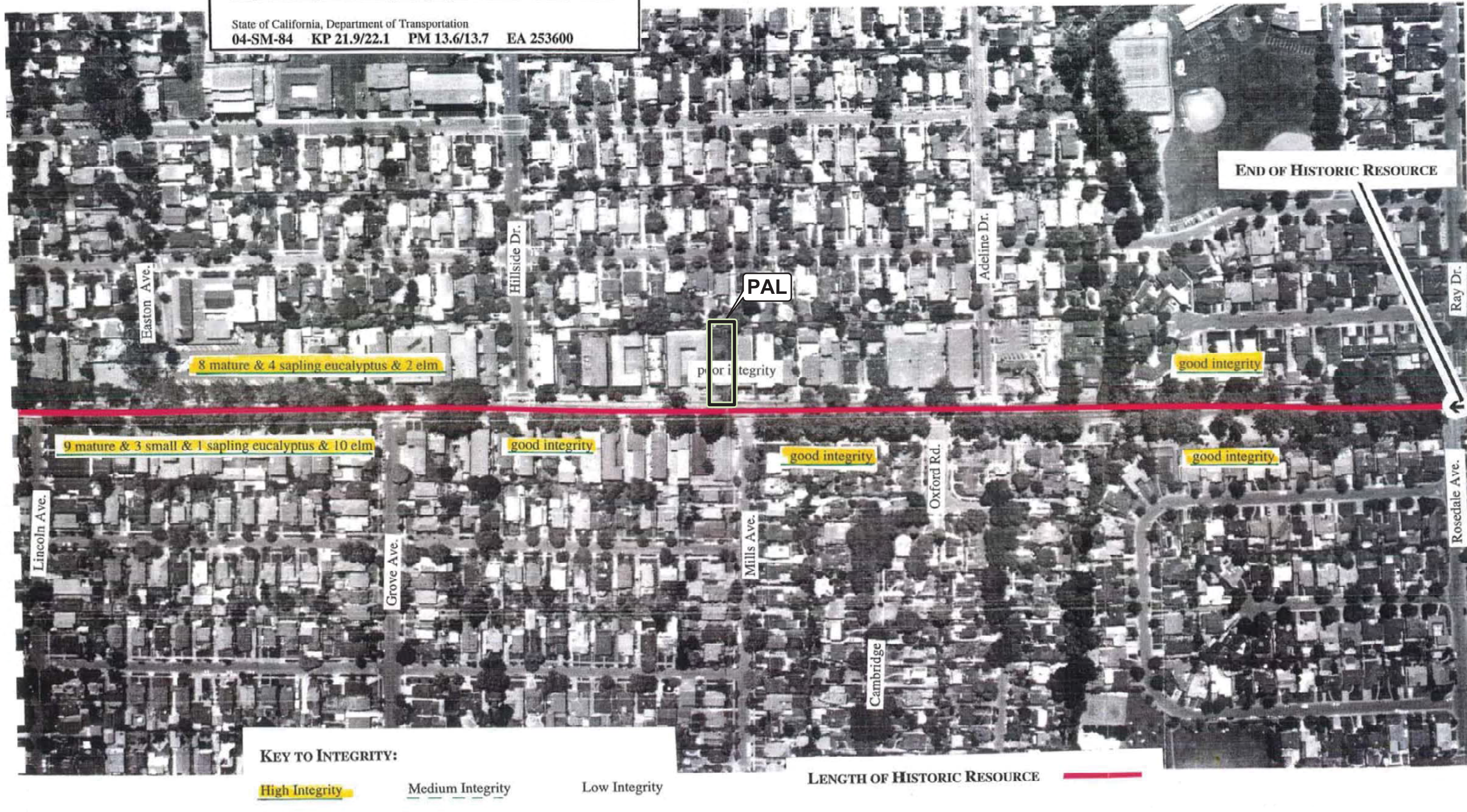
**FIGURE 3**  
 Project Area Limits Map

2018-10-02-17 - List saved by: [unreadable] - Path: \\[unreadable] - Project: 1431 El Camino Real - Project Area Limits Map - Project Area Limits Map.mxd



**Map IV: Map Illustrating Integrity of Tree Rows, Page 5 of 6**

State of California, Department of Transportation  
 04-SM-84 KP 21.9/22.1 PM 13.6/13.7 EA 253600



SOURCE: Kostura 1999

**FIGURE 4**  
 Integrity of Howard-Ralston Eucalyptus Tree Rows Around the Project Area



# ATTACHMENT B

Tribal Outreach





**NATIVE AMERICAN HERITAGE COMMISSION**

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



August 22, 2017

Adam Giacinto  
Dudek

Email to: [agiacinto@dudek.com](mailto:agiacinto@dudek.com)

RE: 1431 El Camino Real, San Mateo County

Dear Mr. Giacinto,

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

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

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

Sincerely,

Frank Lienert  
Associate Governmental Program Analyst

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

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244 E. 1st Street Ohlone/Costanoan  
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(909) 629-6081

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

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Rosemary Cambra, Chairperson  
P.O. Box 360791 Ohlone / Costanoan  
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muwekma@muwekma.org  
(408) 314-1898  
(510) 581-5194

The Ohlone Indian Tribe  
Andrew Galvan  
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Fremont , CA 94539 Bay Miwok  
chochenyo@AOL.com Plains Miwok  
(510) 882-0527 Cell Patwin  
  
(510) 687-9393 Fax

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

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

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

**This list is only applicable for contacting local Native Americans with regard to cultural resources assessments for the proposed 1431 El Camino Real, San Mateo County**

# ATTACHMENT C

Confidential CHRIS Records Search Results



# ATTACHMENT D

DPR Form Set: 1431-1433 El Camino Real



State of California & The Resources Agency  
 DEPARTMENT OF PARKS AND RECREATION  
**PRIMARY RECORD**

Primary #  
 HRI #  
 Trinomial  
**NRHP Status Code 6Z**

Other Listings  
 Review Code                      Reviewer                      Date

Page 1 of 16 \*Resource Name or #: (Assigned by recorder) 1431-1433 El Camino Real

P1. Other Identifier: \_\_\_\_\_

\*P2. Location:  Not for Publication     Unrestricted

\*a. County San Mateo and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

\*b. USGS 7.5' Quad San Mateo Date 1995 T 4S ; R 5W;   of   of Sec  ; MD B.M.

c. Address 1431-1433 El Camino Real City Burlingame Zip 94010

d. UTM: (Give more than one for large and/or linear resources) Zone 10S , 555325.17mE/ 4160298.07 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate) APN 026-013-110.  
 The subject property is located on the southwest side of El Camino Real where Mills Avenue intersects El Camino Real.

\*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)  
 The subject property is a 4,102-square-foot multi-family residence constructed in 1947 and located within the City of Burlingame. The Minimal Traditional style building is situated on a mid-block lot with a similar setback to surrounding buildings. The multifamily residential building is two stories, roughly rectangular in plan, and has a multi-gabled roof that is clad in composition shingles. The exterior of the building is clad in stucco on the first story and horizontal siding on the second story. **See Continuation Sheet**

\*P3b. Resource Attributes: (List attributes and codes) HP3. Multiple Family Property

\*P4. Resources Present:  Building     Structure     Object     Site     District     Element of District     Other (Isolates, etc.)

P5b. Description of Photo: (view, date, accession #) Overview of NW elevation; view to SE; acc#P9060002

\*P6. Date Constructed/Age and Source:  Historic     Prehistoric  
 Both  
1947 (San Mateo County Assessor)

\*P7. Owner and Address:  
 \_\_\_\_\_  
 \_\_\_\_\_

\*P8. Recorded by: (Name, affiliation, and address) S. Brewer and S. Corder  
Dudek: 38 N Marengo Avenue  
Pasadena, CA 91104

\*P9. Date Recorded: 9/6/2017

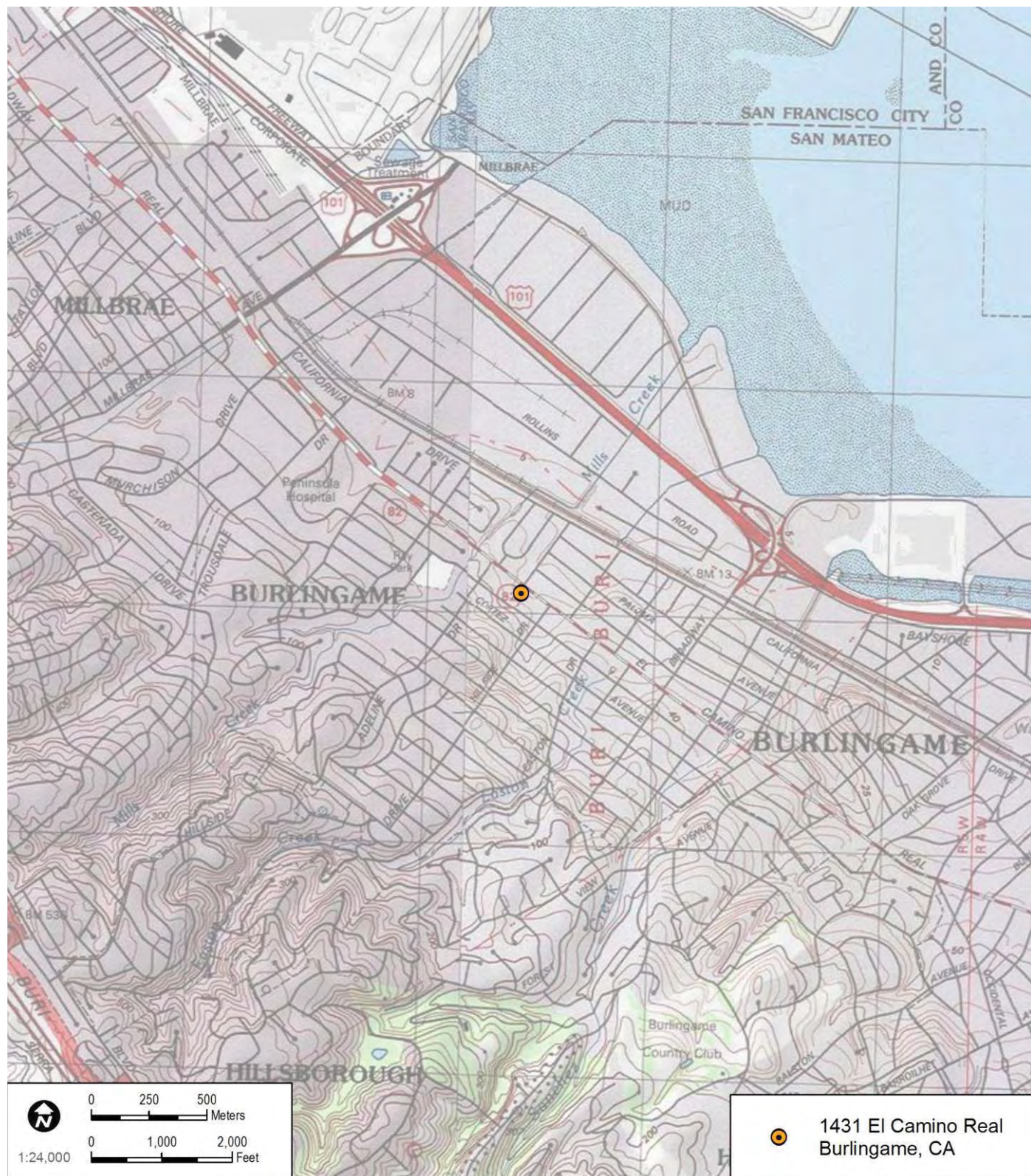
\*P10. Survey Type: (Describe)  
Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.")  
Historical Resources  
Compliance Report for the  
1431 El Camino Real Project,  
City of Burlingame, San  
Mateo County, California  
(Dudek 2017)



\*Attachments:  NONE     Location Map     Continuation Sheet     Building, Structure, and Object Record  
 Archaeological Record     District Record     Linear Feature Record     Milling Station Record     Rock Art Record  
 Artifact Record     Photograph Record     Other (List): \_\_\_\_\_







State of California & The Resources Agency Primary #  
 DEPARTMENT OF PARKS AND RECREATION HRI#  
**BUILDING, STRUCTURE, AND OBJECT RECORD**

\*Resource Name or # (Assigned by recorder) 1431-1433 El Camino Real \*NRHP Status Code 6Z  
 Page 3 of 16

B1. Historic Name: \_\_\_\_\_  
 B2. Common Name: \_\_\_\_\_  
 B3. Original Use: Multi-family residence B4. Present Use: Multi-family residence  
 \*B5. Architectural Style: Minimal Traditional

\*B6. Construction History: (Construction date, alterations, and date of alterations)  
 Constructed in 1947 (San Mateo County Assessor). The following building permits were also found for the property: repair of leak in the bedroom and check of the gas line from 1968 (BBP# R445), alteration permit with no details from 1970 (BBP#S177), reroof in 1971 (BBP#T5), termite repair to the rear steps and a section of subflooring in 1973 (BBP#U946), wet sandblasting in 1976 (BBP#W522), dry rot and fungus repair in 1981 (BBP#3918), reroof with composition shingles in 1984 (BBP#8806), reroof in 1989 (BBP#1722), new water heater in 1989 (BBP#8862), water damage repair to garage and upgrade of electrical service to 200 amps in 1993 (BBP#9300886), reroof with composition shingles in 2005 (BBP#R05-0023), and service work performed by M.F. Electrical in 2014 (BBP#E14-0034). Observed alterations to the building (for which there are no associated building permits) include the following: replacement doors, replacement windows, replacement porch columns on main entry porch, replacement porch railings, addition of exterior lighting, and addition of a satellite dish.

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_  
 \*B8. Related Features: \_\_\_\_\_

B9a. Architect: Unknown b. Builder: H.L. Peterson Construction Company  
 \*B10. Significance: Theme \_\_\_\_\_ Area \_\_\_\_\_

Period of Significance \_\_\_\_\_ Property Type \_\_\_\_\_ Applicable Criteria N/A  
 (Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Historical Overview of Burlingame

Prior to European settlement, the grasslands and oak forests of the City were home to the Ohlone Indian Tribe. Ohlone is a collective term used for multiple Native American groups that were living on the land between what is now Monterey and San Francisco prior to European settlement in the area. In the very early years, Ohlone buildings were constructed using reeds from the nearby bay and creeks. Shell mounds in the area also suggest that a large portion of their food supply came from the bay. The tribe primarily lived off shellfish from the bay, and they were known to be a peaceful tribe. Hunting camps were found in nearby San Bruno, but the shell mounds in the area suggest that hunting was likely a secondary source of food (Carey & Co. 2008; Levy 1978).

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: See Continuation Sheet

B13. Remarks:

\*B14. Evaluator: Sarah Corder and Samantha Murray

\*Date of Evaluation: 9/6/2017

(This space reserved for official comments.)



## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 4 of 16

### \*P3a. Description (Continued):

Entry points to the building are located on the side elevations (southeast elevation and northwest elevation), which are accessed by porches on these elevations. There is a driveway located to the southeast of the building that leads to a one-story, five-car garage structure at the rear of the parcel. Significant alterations to the building include the following: replacement windows, replacement doors, replacement porch railings, addition of exterior lighting, and the addition of classical style detailing on the main entry porch.

Northeast Elevation: The northeast (street-facing) elevation features a somewhat regular fenestration that is interrupted by a large exterior end brick chimney offset to the east of center. All original windows on this elevation were replaced with vinyl horizontal sliding windows. The windows also have wooden shutters with diamond cutout designs. While there is no entry point located on this elevation, there is a small staircase with a decorative metal railing that currently exists on the north corner of the building that provides access to the side (northwest) elevation. Like all other elevations of the building, the northeast elevation is clad in stucco on the first story and horizontal siding on the second story (see Figure 1).

Southeast Elevation: The southeast elevation features the three main entry points for the building's rental units. Like the other elevations, the elevation is clad in stucco on the first story and horizontal siding on the second story. The elevation features a two-story, central entry porch accessed by two steps from the driveway along the southeast elevation. The porch is configured with three entry points, two side entry points that feature original six-paneled doors, and a main entry door that features a replacement four-paneled door with a divided fanlight that features a classical style door surround, which are not original to the building. While the configuration of the porch and its location appear to be original, there have been multiple alterations to it over the years, including replacement of the entry door for unit 1433, the addition of classical style detailing in the porch columns and door surround, and replacement of the original railings with metal railings. Fenestration on this elevation is irregular, and all windows on this elevation were replaced with vinyl horizontal sliders. This elevation also features faux balconies under the second-story windows, which appear to be original to the building (see Figures 1, 2, and 3).

Southwest Elevation: The southwest (rear) elevation features a somewhat regular fenestration that is interrupted by a large exterior end brick chimney offset to the east of center. All original windows on this elevation were replaced with vinyl horizontal sliding windows. While there is no entry point located on this elevation, there is a small staircase providing access to the northwest elevation located on the west corner of the building. Like all other elevations of the building, the southwest elevation is clad in stucco on the first story and horizontal siding on the second story (see Figure 3).

Northwest Elevation: The northwest elevation features side entry points for the building's rental units. Like the other elevations, this elevation is clad in stucco on the first story and horizontal siding on the second story. The elevation features a large two-story projecting porch with access on the first and second floors to the rental units. The porch is accessed from both the northeast and southwest elevations of the house. The majority of the porch appears to be original and the woodwork features angular notching and Y-bracing. Fenestration on this elevation is irregular, and all windows are replacement vinyl horizontal sliders. Another change to the elevation is the small porch on the northern corner. It appears to have been added after original construction and is distinguished by the use of a metal railing, similar to the metal railing added to the main entry porch (see Figures 4 and 5).

Garage Building: There is a one-story garage located to the rear of the property. The garage features a low-pitched roof and is clad in stucco. The five-bay garage likely provides parking and storage for the residents of the apartment building to the front of the lot (see Figure 6).

## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 5 of 16

### Identified Alterations

As detailed in the construction history discussion (see DPR section B6), the following exterior alterations have been made to the building:

- Replacement windows
- Replacement doors
- Replacement porch features and balustrade on southeast elevation
- Replacement porch features on the northwest elevation
- Reroofed
- Addition of exterior lighting
- Addition of satellite dishes

### **\*B10. Significance (Continued):**

European expansion into the region began in 1765 with the funding of an expedition to settle California requested by Visitor-General José de Gálvez. The request for an expedition was granted in an effort to secure a portion of California for imperial rule under Spain. In 1769, Captain Gaspar de Portolá led an expedition to Alta California. It was not until the De Anza Expedition in 1776 that civilian settlement took off in the area under the leadership of Juan Bautista de Anza. Early settlers in this expedition were predominately peasants from Spanish, Mexican, and indigenous backgrounds that camped in an area to the north of Burlingame Creek (BHS 2013; Postel 2014).

Although Spain was successful in the establishment of the mission system in the region, it was overtaken by the Mexican Empire in the 1820s. Once overtaken, the mission system became secularized and new ranchos emerged throughout the peninsula. Ranchos allowed the commercial transactions and functions once conducted by the missions to be privatized and split up among numerous individuals during the 1820s and 1830s. This created large tracts of land that could be used for agricultural goods and services, such as dairies and cattle grazing. Two examples of privatization and rancho development directly related to Burlingame are Rancho San Mateo and Rancho Buri Buri (BHS 2013).

The story of the Rancho Buri Buri started in 1835 when Jose Antonio Sanchez Jr. and his family were granted ownership of the land by the Mexican government upon his retirement from the military after 45 years of service. The land grant was for approximately 15,000 acres and included land from South San Francisco to Burlingame. The Sanchez family constructed two identical adobes in present-day Millbrae. After Sanchez's death in 1843, the rancho was divided among his family, who subsequently sold portions of the rancho to land speculators. Over time, the rancho was divided and developed into cities, including Burlingame (Postel 2014).

The story of Rancho San Mateo began in 1822 when Mexican Governor Pio Pico granted the land to his secretary Cayetano Arenas. While given to Arenas, the land was not his for long and fell into the hands of William Davis Merry Howard and his business partner Henry Mellus. Howard and Mellus were owners of a San Francisco-based mercantile shop at the time. However, Mellus's retirement led to the ownership of the entire property by Howard until his death in 1856 (BHS 2013). Following his death, the rancho was split into thirds going to three of the Howard family members: his wife Agnes, his son William Henry Howard, and his father-in-law Joseph Henry Poett (BHS 2013). Following the division of the property, the chain of ownership is a little unclear with a variety of people involved in the property, including William Ralston (founder of Bank of California) and Darius Ogden Mills (president of Bank of California) (BHS 2013; PR 2017).

William Ralston began purchasing property in the Peninsula during the 1860s. Once he settled into his new estate and holdings, Ralston invited many famous people to visit his new home.

## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 6 of 16

One such visitor was Anson Burlingame shortly after his appointment from President Lincoln to be minister to China. Burlingame was inspired by the developments in the area made by Ralston and purchased approximately 1,000 acres of Ralston's estate that he planned to use following his service in China. Following the death of Anson Burlingame in 1870, Ralston named the early town after him. It is also interesting to note the Ralston was an advocate for planting rows of eucalyptus trees along newly laid out streets in the town as an effort to beautify the city (Carey & Co. 2008; COB 2017).

Development of the area continued throughout the nineteenth century, including development of a Burlingame Country Club in 1893, followed by a post office, train station, and residential and commercial development. Transportation advancements and the establishment of the country club and train station in the 1890s made Burlingame a desirable and growing city, as evident by the first residential subdivision in 1896. The original 6,000-square-foot subdivision included 1,000 parcels. The City developed a series of residential and commercial areas on a grid system with tree-lined streets (Carey & Co. 2008; COB 2017).

While development continued on an upward trajectory into the twentieth century, disaster struck in nearby San Francisco in 1906 with a massive earthquake. The earthquake caused numerous fires across San Francisco that lasted for 3 days and destroyed approximately 28,000 buildings. The quake killed approximately 3,000 people and left 250,000 homeless. The massive homeless population led to a huge increase in housing requirements outside of the city, thus making cities like Burlingame, Millbrae, and San Bruno perfect spots for relocation and emergency housing. The influx of people following the earthquake in 1906 was one of many factors contributing to the decision to make the town of Burlingame official. In 1908, the Town of Burlingame was incorporated and was eventually reclassified as a city (Brown 2010; LAT 2016).

One of the early additions to the City was the Easton Addition, which was made up of two 1,500-acre properties owned by Ansel Easton and D.O. Mills. According to Burlingame Properties, the property was defined as follows: "The Easton estate extended from Sanchez Creek north to Mills Creek (near present day Adeline Drive) and the Mills estate extended from Mills Creek to El Portal Creek (near present day Mills Avenue)" (BP 2017).

In the years following the incorporation of Burlingame in 1908, Ansel Easton's son, Ansel Mills Easton, chose to subdivide his parents estate and develop the area. Development continued in the Easton Addition until World War I and resumed following World War I. Like other cities in the country, there was a housing boom in Burlingame to support returning soldiers (BP 2017).

Burlingame continued to grow throughout the twentieth century with 35 additional subdivisions created between the years of 1912 and 1963. Evidence of this growth and development is clear when comparing the 1921 Sanborn maps to the 1949 Sanborn maps, as blocks went from having a couple of houses to there being only a couple of vacant lots on blocks. According to the Burlingame Downtown Specific Plan Inventory of Historic Resources, Burlington had the following by the mid-1930s: "4,000 single-family homes, 83 apartment buildings, 15 duplexes, and over 250 businesses. The town evolved into a mature city with fire and police departments, a new jail, several newspapers, six elementary schools, and one high school. Over fifty civic, religious, and social organizations had been established to serve the 13,000 residents" (Carey & Co. 2008).

Prosperity and growth in Burlingame continued in the years of prosperity following World War II and by the time of the U.S. Census in 1960, there were 24,063 residents of the City. The 1949 Sanborn map also shows a shift to more apartment buildings to handle the housing needs during this boom period. Neighborhoods that were generally single-family residences are represented in the 1949 map as being a mix of single-family and multifamily units (City Directory 1965; Sanborn 1921, 1949).



## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 7 of 16

### Historical Overview of 1431-1433 El Camino Real

A review of historic maps and aerial photographs was conducted as part of the archival research effort for this property. Sanborn maps were available for the City in 1908, 1913, 1921, and 1949. The section of El Camino Real, where the subject property is located, was not included on the 1908 and 1913 maps; however, it is included on the 1921 and 1949 maps. In 1921, the subject property is not present on the map, but the block in which it is located is on the map. The neighborhood is in its early stages of development at this time with only two buildings located on the side of the block where the subject property was constructed in 1947.

The neighborhood as a whole developed slowly over time with single-family residences. However, by 1949, most of the blocks in the neighborhood feature dwellings and there are few vacant parcels. For instance, on the side of the block where the subject property is located there are only three vacant parcels. The 1949 map also shows the subject property in a similar scale and mass to the building that stands today. It is listed as a two-story building with four apartments and there is a one-story building located to the rear of the property. The apartment building is also sharing the parcel with a one-story single-family residence. Within the same block, there are three other multifamily units listed on the 1949 map.

Historic aerial photographs from the following years were reviewed for the property: 1946, 1956, 1968, 1980, 1987, 1993, 2002, 2005, 2009, 2010, and 2012. The property is not visible in the 1946 photograph, but is visible in the other years. The building does not show changes to the scale and massing over time, which is consistent with the building permits reviewed for the property. The aerial photographs also show that the buildings on the block are transitioning from small family homes to larger multifamily complexes. The neighborhood growth seen on the 1949 Sanborn map was the start of a continuous pattern of development in the area that led to heavy, higher-density development over time (NETR 2017; Sanborn 1921, 1949).

A review of Burlingame Building Permit (BBP) records indicates that the original permit for new construction was filed in 1946 by Charles E. Markis for a new apartment building with H.L. Peterson Construction Company of San Francisco listed as the builder (BBP#E910), which is consistent with the 1947 date of construction provided by the San Mateo County Assessor. Numerous permits for alteration of the subject property were also identified (see DPR section B6). The building permit folder also contained multiple letters and reports pertaining to the property, including the following: an inspection report from Always Reliable Termite Control was also found in the property record folder for repairs pertaining to termite damage and fungus in 1960 (ARTC 1960), letter confirming special use permit being granted for the property to be used for a "Home for Aged Persons" in 1968 (COB 1968), letter regarding possible sale of property and continuation of rest home usage for the property in 1975 (COB 1975), and a letter pertaining to a request to return the building to a standard rental property instead of a rest home in 1985 (COB 1985).

Building permit research found the following people listed as owners of the property:

- 1946: Charles E. Markis
- 1960: A. Plotkin
- 1968-1971: Grace H. Duda
- 1971-1976: Grace Strong
- 1981: Gene Schrader
- 1985-1986: Nellie Jimenez
- 1989-1993: Francisca Arroyo
- 2005-2006: Ken S. Leung
- 2014: Jay Leupp

## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 8 of 16

City directory research revealed that the property was used as a rental property with up to four separate rental units. There were a series of renters over the years and most of them were short-term rentals based on the available City directories. One of the more notable of the renters was Raymond MacDougall, a paint mixer, who lived at the property with his wife in 1956. An article from the San Mateo Times (SMT) in 1956 shows that MacDougall was involved in a traffic accident in which his vehicle struck an 11-year-old boy on a bicycle. The boy was treated at a nearby hospital and no charges were filed at that time against MacDougall (SMT 1956a). MacDougall's issues continued on March 10 when he was shot and killed at the subject property. The SMT reported that MacDougall and his wife were part of a domestic dispute involving MacDougall's wife Mae's ex-husband Edgar Brittain. Issues between the three appear to have been ongoing for months prior to the shooting. Brittain had a history of violence toward his wife during their marriage, and once divorced he continued to threaten her repeatedly according to the SMT. Brittain was tried and convicted for the murder and sentenced to life in prison (SMT 1956b-1956j). No other significant information was found about the renters of the property.

City directory research indicates that the only owners to live at the property were Grace Duda and Grace Strong, which is likely due to their work with the property when it was a rest home for the elderly throughout the 1960s and 1970s. The conversion of the property into a rest home for the elderly started in 1968 when building owner Grace Duda filed for a boarding house license for the property (SMT 1968). A review of building permits and records show that the Duda's intention was to convert a portion of the apartment building into a rest home for the elderly known as El Camino Rest Home. Based on information found during archival research, it appears that the conversion of the property was successful and at least the first floor of the building functioned as the El Camino Rest Home until at least 1977 first under the ownership of Grace Duda and then under Grace Strong for a maximum of five residents. A newspaper clipping from 1976 also suggests that the property continued after Grace Strong, under Bridie Nee, but there was no evidence to show if Bridie Nee owned the property or was just managing the El Camino Rest Home. In 1985, a letter was sent to owner Nellie Jimenez from the City regarding the conversion of the property from a rest home to its original configuration. Based on this letter, it appears that the building may have functioned as the El Camino Rest Home into the 1980s, but there was no additional evidence to support this scenario (Burlingame City Directories; COB 1968, 1975, 1985; SMT 1968, 1970, 1971, 1973, 1974a, 1974b, 1976).

### Architectural Style of 1431-1433 El Camino Real

#### *Minimal Traditional (c. 1935-1950)*

The Minimal Traditional architecture movement flourished during the 1940s in response to worker housing needs for World War II production facilities and to fulfill the housing needs for returning soldiers. The Minimal Tradition movement offered small, low-cost, and easy-to-produce housing forms. The Small House movement began after the Great Depression with the establishment of the Federal Housing Administration (FHA) and its guidelines for new homes that could be easily built and insured. The work of the FHA helped revive the housing industry in the United States during the Depression and for many years after. The FHA also provided guidance on how to design and build these small houses as further incentive for American families to participate in the Small House movement. The groundwork laid by the FHA's emphasis on small houses got people into the housing market and helped to alleviate housing needs during the population booms before, during, and after World War II.

Minimal Traditional homes were often part of planned communities, but there are also examples spread throughout older neighborhoods in the United States. One of the most famous planned communities employing the Minimal Traditional style was Levittown, New York. The ease of construction and cost-effective nature of the materials used to construct Minimal Traditional homes made them popular with land developers and government entities needing a lot of housing in a short period. In addition to ease of construction and cost-effective materials, the

## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 9 of 16

following are characteristics of the Minimal Traditional style of architecture (McAlester 2015):

- One to two stories in height
- Gabled or hipped roofs with minimal overhangs
- Double-hung, multi-lite windows
- Minimal detailing at the roofline, including scalloped trim
- Wooden shutters with cutout features
- Mass-produced and cost-effective materials
- Modern materials, including concrete and asbestos siding
- Rectangular or L-shaped in plan
- Emphasis on practicality in design; no overly designed features or elements
- Typically built by builders and not architect-designed
- Typically constructed as part of large tract developments in a variety of floor plans to provide choices for buyers

### NRHP/CRHR Statement of Significance

In consideration of the project site's history and requisite integrity, Dudek finds the subject property not eligible for listing in the NRHP or CRHR based on the following significance evaluation and in consideration of national and state eligibility criteria.

*Criterion A/1: Associated with events that have made a significant contribution to the broad patterns of our history.*

Archival research did not find any associations with events that have made a significant contribution to the broad patterns of local or regional history. The subject property is one of many multifamily residences from approximately the same period of construction (1930s-1950s), and no historical associations or patterns of development were identified. Residential development in Burlingame was based on housing booms caused by the advances in transportation, the San Francisco Earthquake of 1906, and post-war prosperity following World War I and World War II. Cities like Burlingame became a haven for those left homeless from the quake in 1906. Combined with reliable rail transportation to and from San Francisco, Burlingame became a desirable commuter town. Following World War I and World War II, housing was needed for returning service members who were ready to settle down and start families in Burlingame. These patterns of development were seen across the United States in the years leading up to and following World War II, when residential development became a priority to house a growing post-war population. Due to a lack of significant associations with events important to history, the subject property does not appear eligible under NRHP/CRHR Criteria A/1.

*Criterion B/2: Associated with the lives of persons significant in our past.*

All owner and occupant names identified with the subject property were researched for possible significance. Archival research failed to indicate any associations with significant persons. For these reasons, the subject property does not appear eligible under NRHP/CRHR Criteria B/2.

*Criterion C/3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.*

To support a rapidly growing population in the years surrounding World War II, builders in Burlingame turned to one of the popular architectural styles of the time, Minimal Traditional. The subject property was constructed in 1947 when Burlingame (and much of the United States)

## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 10 of 16

was experiencing a residential boom in response to post-war prosperity. Although the subject property retains the most basic elements of the Minimal Traditional style (i.e., two-stories in height, minimal detailing at the roofline, wooden shutters with cutout details, mass-produced and cost-effective materials, variety of cladding, and rectangular in plan), the building exhibits substantial alterations that have compromised its integrity, including replacement windows, replacement doors, replacement porch elements and railings, replacement roofing, addition of classical detailing on main entry porch, and addition of exterior lighting. The result is a relatively altered and unremarkable example of a Minimal Traditional multifamily residence. Archival building permit research identified the original builder as H.L. Peterson Construction Company of San Francisco, which is consistent with the Minimal Traditional style of architecture being the choice of local building companies to construct homes during that era. For this reason, the property is not likely to be the work of a master architect or important creative individual. Finally, the subject property does not appear eligible as a contributor to a historic district since the surrounding buildings exhibit a variety of architectural styles and construction periods. For these reasons, the subject property does not appear eligible under NRHP/CRHR Criteria C/3.

*Criterion D/4: Have yielded, or may be likely to yield, information important in prehistory or history.*

There is no evidence to suggest that this property has the potential to yield information important to state or local history, nor is it associated with a known archaeological resource. Therefore, the property is recommended not eligible under NRHP/CRHR Criterion D/4.

### **City of Burlingame Statement of Significance**

City historic resource designation criteria closely follow those of the NRHP and CRHR with regard to consideration of important events, people, and architectural merit. Based on the NRHP/CRHR criteria discussion above, the subject property is recommended as not eligible for listing under all City designation criteria as shown in City of Burlingame Municipal Code Ord. 1899 Section 2 (2014).

### **Integrity Discussion**

Location: The building is sited on the original location of construction in its original orientation. Therefore, the subject property retains integrity of location.

Design: The building has been subject to several alterations over time that have significantly compromised its integrity of design, including replacement windows, replacement doors, replacement porch elements and railings, replacement roofing, addition of classical detailing on main entry porch, and addition of exterior lighting. Therefore, the building does not maintain integrity of design.

Setting: The subject property was originally built in a primarily single-family residential neighborhood based on the 1949 Sanborn map, however, over the years the single family properties were replaced by larger multi-family properties. Therefore, the subject property does not retain integrity of setting.

Materials: Numerous alterations to the house have compromised the property's material integrity, including replacement windows, replacement doors, replacement porch elements and railings, replacement roofing, addition of classical detailing on main entry porch, and addition of exterior lighting. All of these alterations introduced new materials to the subject property that were not part of the original design. Therefore, the building does not maintain integrity of materials.

Workmanship: Similar to the issue with materials, the physical evidence of craftsman's skills



## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 11 of 16

in constructing the original building was compromised by the exterior alterations to the building. Therefore, the building no longer retains its integrity of workmanship.

Feeling: The alterations made to the subject property do not significantly impact the building's ability to correlate as a multifamily residence designed in the Minimal Traditional style of architecture. Therefore, the property retains its integrity of feeling.

Association: The property has no direct links with important events or people. Therefore, the building does not have integrity of association.

In summary, the subject property appears not eligible under NRHP and CRHR designation criteria. Further, the property no longer retains integrity of setting, design, materials, or workmanship. Consequently, the property does not maintain the requisite integrity to warrant listing in the NRHP or CRHR.



Figure 1. Overview of Northeast Elevation (View To West) IMG #: P9060008

## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 12 of 16



Figure 2. Detail of First Story of Entry Point on Southeast Elevation (View to Northwest) IMG#: P9060009



Figure 3. Overview of Southwest and Southeast Elevations (View to North) IMG#: P9060014



## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 13 of 16



Figure 4. Overview of the Northeast and Northwest Elevations (View to South) IMG #: P9060006



Figure 5. Detail of First Story of Entry Point On Northwest Elevation (View to South) IMG#: P9060007

## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 14 of 16



Figure 6. Garage Located to Rear of Building (View to Southwest) IMG#: P9060012

## CONTINUATION SHEET

Property Name: 1431-1433 El Camino Real

Page 15 of 16

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Property Name: 1431-1433 El Camino Real

Page 16 of 16

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# ATTACHMENT E

SOIS Action Plan





SOIS ACTION PLAN FOR THE 1431 EL CAMINO REAL PROJECT			
STAGE	RESPONSIBLE PARTIES *denotes primary responsibility	TASK	DATE TASK COMPLETED
Pre-Construction	Qualified Architectural Historian* Local Agency Project Manager Local Agency Engineer	A Qualified Architectural Historian will ensure that SOIS requirements for the project are clearly described and illustrated in the plans, specifications and estimates (PS&E).	
	Local Agency Project Manager* Local Agency Engineer Qualified Architectural Historian	The Local Agency will submit the PS&E package to Caltrans for review at the 35%, 65%, and 100% stages.	
	Caltrans Architectural Historian* Caltrans Environmental Branch Chief Caltrans Local Assistance Engineer	The Caltrans Architectural Historian will review for approval the PS&E package at the 35%, 65%, and 100% stages to ensure that SOIS requirements for the project are clearly described and illustrated in the PS&E package.	
	Caltrans Architectural Historian* Caltrans Environmental Branch Chief Caltrans Local Assistance Engineer	Caltrans Architectural Historian will ensure the SOIS Action Plan is included in Environmental Commitment Record (ECR).	
	Local Agency Project Manager* Local Agency Engineer Qualified Architectural Historian	The Local Agency will notify the Caltrans Architectural Historian that construction is commencing two weeks prior to commencement.	
During Construction	Caltrans Environmental Construction-Liaison*	The Caltrans Environmental Construction-Liaison will conduct spot inspections as needed to ensure the ECR	
	Local Agency Project Manager* Local Agency Engineer Qualified Architectural Historian	A Qualified Architectural Historian will review any proposed project changes to ensure changes are consistent with the SOIS. The Local Agency will submit any proposed project changes to the Caltrans Architectural Historian for review and approval.	
	Caltrans Architectural Historian* Caltrans Environmental Branch Chief Caltrans Local Assistance Engineer Caltrans Environmental Construction-Liaison	The Caltrans Architectural Historian will review for approval any proposed project changes to ensure changes are consistent with the SOIS. The other consulting parties will be notified of approved changes.	

SOIS ACTION PLAN FOR THE 1431 EL CAMINO REAL PROJECT			
<b>Post Construction</b>	Local Agency Project Manager* Local Agency Engineer Qualified Architectural Historian Caltrans Environmental Construction-Liaison	The Local Agency Project Manager will inform the Caltrans Architectural Historian when construction is complete.	
<b>Responsible Parties as of October 25, 2017</b>	Caltrans Architectural Historian** TBD Caltrans Environmental Branch Chief TBD Caltrans Local Assistance Engineer Caltrans Environmental Construction-Liaison TBD Local Agency Project Manager TBD Local Agency Engineer TBD Qualified Architectural Historian*** TBD  **The Caltrans Architectural Historian must be a PQS Principal Architectural Historian. ***The Qualified Architectural Historian is a representative of the Local Agency and must meet the Secretary of the Interior's Professional Qualification Standards for Architectural History or Historic Architecture.		

# ATTACHMENT F

ESA Action Plan



ESA ACTION PLAN FOR THE 1431 EL CAMINO REAL PROJECT			
STAGE	RESPONSIBLE PARTIES *denotes primary responsibility	TASK	DATE TASK COMPLETED
Pre-Construction	Project Landscape Architect & Arborist* Caltrans District 4 Principal Investigator	Project Landscape Architect & Arborist will ensure that the ESA for adjacent contributing trees is clearly described and illustrated on the work plan. Caltrans District 4 Principal Investigator will review and approve the work plan.	
	Project Landscape Architect & Arborist*	Project Landscape Architect & Arborist will identify an appropriate location within the Howard-Ralston Tree Rows for a planting for relocating the impacted tree.	
During Construction	Project Landscape Architect & Arborist*	Project Landscape Architect & Arborist will review for approval any proposed project changes to ensure changes are consistent with the ESA. The other consulting parties will be informed of approved changes.	
Post Construction	Project Landscape Architect & Arborist* Caltrans District 4 PQS Principal Investigator City of Burlingame, Community Development Director	Project Landscape Architect & Arborist will inform Caltrans District 4 Principal Investigator and City of Burlingame when the project has been completed as per the ESA Action Plan.	
	Project Landscape Architect & Arborist*	Project Landscape Architect & Arborist will document the planting of the new elm.	
Responsible Parties as of October 25, 2017	Caltrans District 4 PQS Principal Investigator TBD Local Agency Project Manager TBD Project Landscape Architect/Arborist TBD		



# **APPENDIX C**

*Project Application to the Planning Commission*







# APPLICATION TO THE PLANNING COMMISSION

**Type of application:**

- Design Review
- Conditional Use Permit
- Variance
- Special Permit
- Parcel #: 026-013-110
- Zoning / Other: R-3

**PROJECT ADDRESS:** 1431 EL CAMINO REAL

**APPLICANT**

Name: SEE ARCHITECT/DESIGNER

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

**PROPERTY OWNER**

Name: GGH INVESTMENT LLC

Address: 110 ROBLER AVE

City/State/Zip: HILLSBOROUGH, CA 94010

Phone: 510-857-4507

E-mail: GRACELI\_1999@YAHOO.COM

**ARCHITECT/DESIGNER**

Name: LEVY DESIGN PARTNERS

Address: 90 SOUTH PARK

City/State/Zip: SAN FRANCISCO, CA 94107

Phone: 415-777-0561

E-mail: TOBY@LEVYDESIGNPARTNERS.COM

Burlingame Business License #: 28317

**RECEIVED**

SEP 30 2016

CITY OF BURLINGAME  
CDD-PLANNING DIV.

**Authorization to Reproduce Project Plans:**

I hereby grant the City of Burlingame the authority to reproduce upon request and/or post plans submitted with this application on the City's website as part of the Planning approval process and waive any claims against the City arising out of or related to such action. TSC (Initials of Architect/Designer)

**PROJECT DESCRIPTION:** DEMOLITION OF 2-STORY BUILDING; NEW CONSTRUCTION OF SIX THREE-STORY TOWNHOMES.

**AFFIDAVIT/SIGNATURE:** I hereby certify under penalty of perjury that the information given herein is true and correct to the best of my knowledge and belief.

**Applicant's signature:** [Signature] Date: 9/29/2016

I am aware of the proposed application and hereby authorize the above applicant to submit this application to the Planning Commission.

**Property owner's signature:** [Signature] Date: 9/30/2016

Date submitted: \_\_\_\_\_





**CITY OF BURLINGAME  
VARIANCE APPLICATION**

*Parking Lifts*

The Planning Commission is required by law to make findings as defined by the City's Ordinance (Code Section 25.54.020 a-d). Your answers to the following questions can assist the Planning Commission in making the decision as to whether the findings can be made for your request. Please type or write neatly in ink. Refer to the back of this form for assistance with these questions.

- a. ***Describe the exceptional or extraordinary circumstances or conditions applicable to your property which do not apply to other properties in this area.***

Open space, service delivery, and setback requirements limit ground floor square footage available for parking. Variance for vehicular lifts helps project meet planning requirements while minimizing visual impact on neighborhood in comparison to other properties in area (who use exposed parking solutions).

- b. ***Explain why the variance request is necessary for the preservation and enjoyment of a substantial property right and what unreasonable property loss or unnecessary hardship might result from the denial of the application.***

Variance would reduce square footage to be used to meet on-site parking requirements. Higher efficiency allows for more "softscape" landscaping improvements and reduces negative visual impact on neighborhood.

- c. ***Explain why the proposed use at the proposed location will not be detrimental or injurious to property or improvements in the vicinity or to public health, safety, general welfare or convenience.***

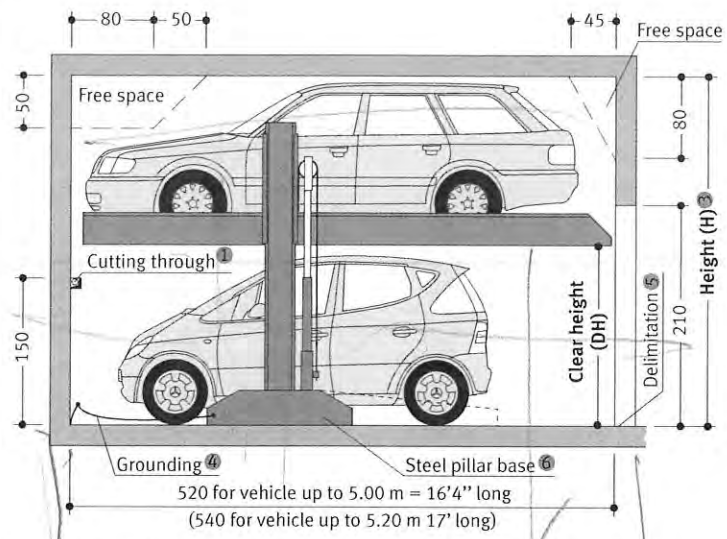
Variance allows for better efficiency and minimum square footage used for parking. In comparison, existing adjacent buildings, use more space for parking and expose cars to street. With vehicular lifts, all residential unit parking can be provided in private garages hidden from street. Vehicular lifts would improve overall aesthetics and negative affect building has on surrounding neighborhood.

- d. ***How will the proposed project be compatible with the aesthetics, mass, bulk and character of the existing and potential uses on adjoining properties in the general vicinity?***

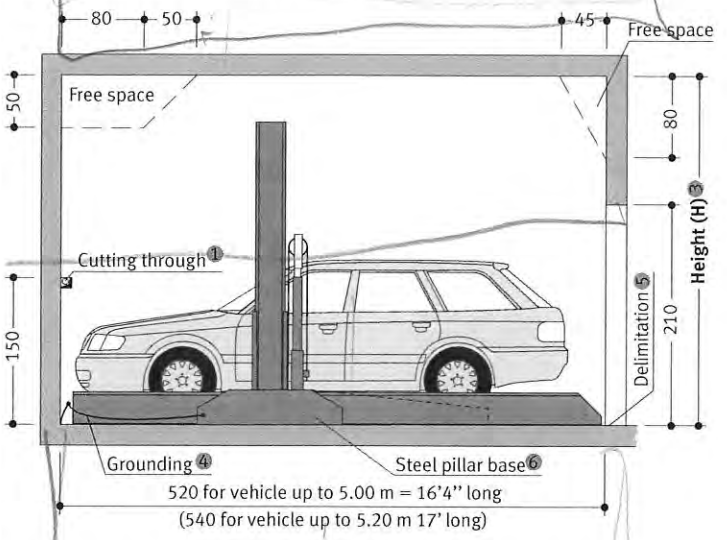
Project is similar in mass, bulk, and character to existing adjacent buildings. However, vehicular lift variance would allow for improvements in overall aesthetics as cars would use less space allowing them to be hidden from street in private, covered garages. Variance would improve overall impact of project on adjoining properties.

- Page 1  
Section  
Dimensions  
Car data
- Page 2  
Width  
dimensions
- Page 3  
Approach  
Load plan  
Installation
- Page 4  
Electrical  
installation  
Technical  
data
- Page 5  
To be per-  
formed by  
the customer  
Description

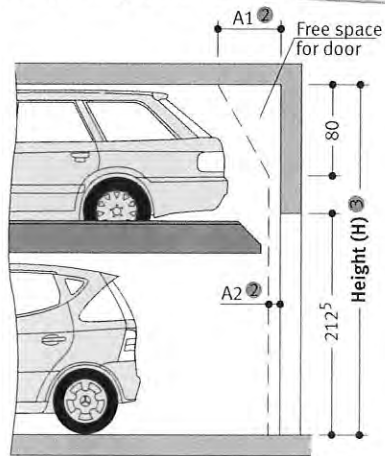
### SingleVario 2061



Before lowering the platform, the vehicle parked in the lower parking space must be driven off!



#### Garage with door in front of the car parking system



#### Notes

- 1 For dividing walls: cutting through 10 x 10 cm (for pipes).
- 2 Dimensions A1, A2 and A3 must be coordinated with the door supplier.
- 3 If the total height is greater, the max. vehicle height for the upper parking space increases accordingly.
- 4 Potential equalization from foundation grounding connection to system (provided by the customer).
- 5 In compliance with DIN EN 14 010, 10 cm wide yellow-black markings compliant to ISO 3864 must be applied by the customer to the edge of the platform in the access area to mark the danger zone in front of the supporting surface of the upper platform edge (see »Load Plan«, Page 3)
- 6 Variable steel pillar bases in two sizes (see »Load Plan«, Page 3).
- 7 Maximum load of 2,500 kg for extra charge.

## Product Data SingleVario 2061



Loadable up to 2,500 kg  
A system for any height  
subsequently adjustable!

#### Dimensions:

All space requirements are minimum finished dimensions. Tolerances for space requirements  $\pm 3_0$ . Dimensions in cm.  
EB (single platform) = 2 vehicles

Type	H	DH**
2061-160	320	160
2061-170*	330	170
2061-180	340	180
2061-190	350	190
2061-200	360	200
2061-210	370	210

\* = standard type    \*\* = without car

#### Suitable for:

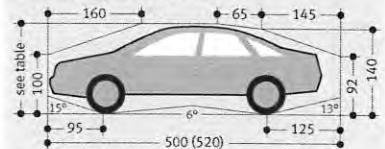
Standard passenger car, station wagon/Van/SUV. Height and length according to contour.

Type	H	car height	
		upper	lower
2061-160	320	150	150
2061-170*	330	150	160
2061-180	340	150	170
2061-190	350	150	180
2061-200	360	150	190
2061-210	370	150	200

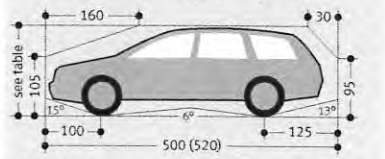
\* = standard type

- width 190 cm
- weight 7 max. 2000/2500 kg
- wheel load max. 500/625 kg

#### Standard passenger car



#### Standard station wagon/Van/SUV



Standard passenger cars are vehicles without any sports options such as spoilers, low-profile tyres etc.



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Page 1  
Section  
Dimensions  
Car data

Page 2  
Width  
dimensions

Page 3  
Approach  
Load plan  
Installation

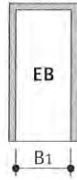
Page 4  
Electrical  
installation  
Technical  
data

Page 5  
To be per-  
formed by the  
customer  
Description

## Width for basement garage

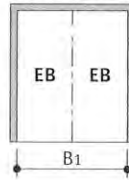
### Dividing walls

#### Single Platform (EB)



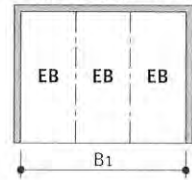
usable platform width	B1
230*	260
240	270
250	280
260	290
270	300

#### Double arrangement (2 x EB)



usable platform width	B1
230*	520
240	540
250	560
260	580
270	600

#### Tripple arrangement (3 x EB)

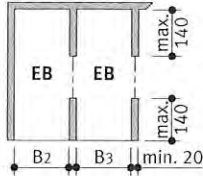


usable platform width	B1
230*	780
240	810
250	840
260	870
270	900

Carriageway in accordance with local regulations

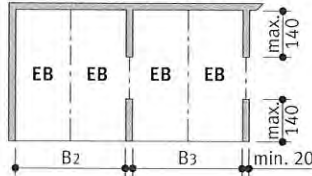
### Columns in system zone

#### Single Platform (EB)



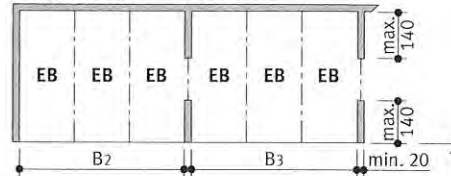
usable platform width	B2	B3
230*	255	250
240	265	260
250	275	270
260	285	280
270	295	290

#### Double arrangement (2 x EB)



usable platform width	B2	B3
230*	515	510
240	535	530
250	555	550
260	575	570
270	595	590

#### Tripple arrangement (3 x EB)

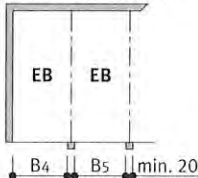


usable platform width	B2	B3
230*	775	770
240	805	800
250	835	830
260	865	860
270	895	890

Carriageway in accordance with local regulations

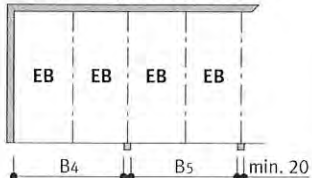
### Columns outside of system zone

#### Single Platform (EB)



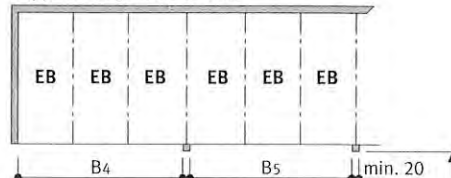
usable platform width	B4	B5
230*	250	240
240	260	250
250	270	260
260	280	270
270	290	280

#### Double arrangement (2 x EB)



usable platform width	B4	B5
230*	510	500
240	530	520
250	550	540
260	570	560
270	590	580

#### Tripple arrangement (3 x EB)

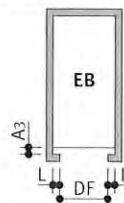


usable platform width	B4	B5
230*	770	760
240	800	790
250	830	820
260	860	840
270	890	860

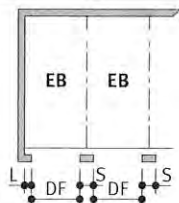
Carriageway in accordance with local regulations

## Widths for garage with door in front of car parking system

### Single platform (EB)



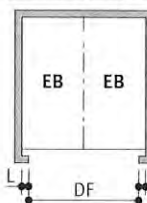
usable platform width	door entrance width DF	L	S
230*	237 <sup>5</sup>	12 <sup>5</sup>	25
240	250	12 <sup>5</sup>	25
250	250	15	30
260	260	15	30
270	270	15	30



A3 = seat-engaging surface (dimensions require coordination with door supplier.)

Allround door dimensions require coordination between door supplier and local agency of Klaus Multiparking.

### Double arrangement (2 x EB)



usable platform width	door entrance width DF	L	S
230*	475	22 <sup>5</sup>	45
240	500	20	40
250	520	20	40
260	540	20	40
270	560	20	40

Carriageway in accordance with local regulations

\* = standard width (parking space width 2.30 m)

⊕ = no standard width for doors!

### Please note:

End parking spaces are generally more difficult to drive into. Therefore we recommended for end parking spaces our wider platforms. Parking on standard width platforms with larger vehicles may make getting into and out of the vehicle difficult. This depends on type of vehicle, approach and above all on the individual driver's skill.

Page 1  
Section  
Dimensions  
Car data

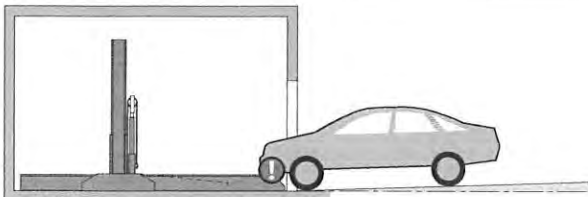
Page 2  
Width  
dimensions

Page 3  
Approach  
Load plan  
Installation

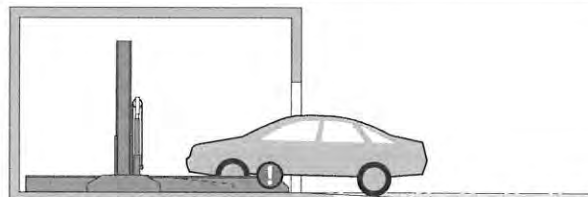
Page 4  
Electrical  
installation  
Technical  
data

Page 5  
To be per-  
formed by the  
customer  
Description

### Approach



maximum descending slope 4 %



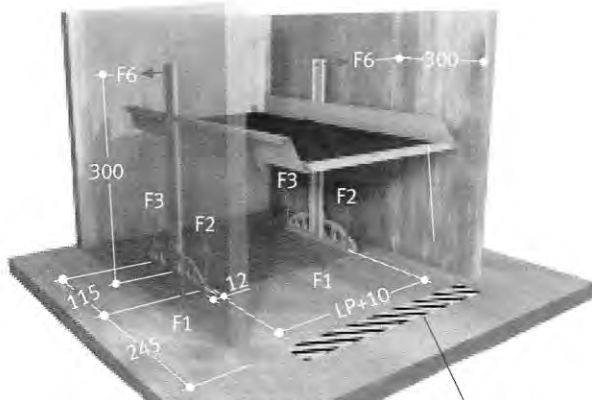
maximum ascending slope 14 %

**!** The illustrated maximum approach angles must not be exceeded. Incorrect approach angles will cause serious manoeuvring & positioning problems on the parking system for which the local agency of Klaus accepts no responsibility.

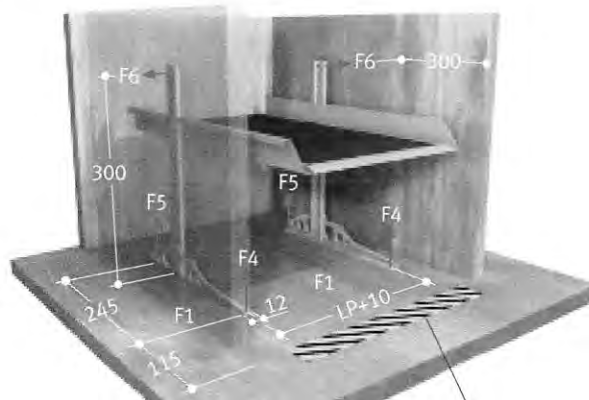
### Load plan

Option 1: short steel pillar base

Option 2: long steel pillar base



10 cm wide marking compliant to ISO 3864



10 cm wide marking compliant to ISO 3864

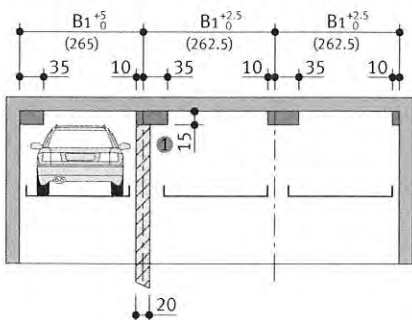
platform load	F1	F2	F3	F4	F5	F6
2,000 kg	30	1.1	7.4	0.5	7.7	±1
2,500 kg	35	1.3	8.9	0.6	9.3	±1

Forces in kN

**!** The steel pillar base can be selected optionally (short or long). Please make sure to note the corresponding forces that apply!  
Units are dowelled to the floor. Drilling depth: approx. 15 cm.  
Floor and walls are to be made of concrete (quality minimum C20/25)!

### Installation data

Free space for longitudinal and vertical ducts (e.g. ventilation)



B<sub>1</sub>, B<sub>2</sub> = (see table on page 2)

Free space for vertical pipelines, ventilation branch canals

Free space for horizontal ducting

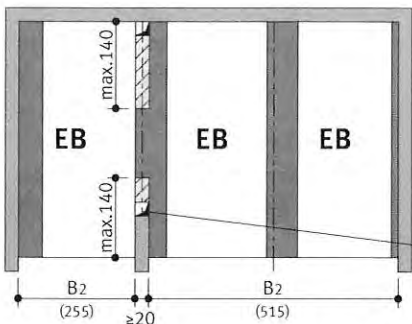
Approach level

**!** Size 15 cm is reduced to 5 cm for type 2061-160

Free space only applicable if vehicle is parked forwards = FRONT FIRST and driver's door on the left side.

( ) = Dimensions in brackets illustrate an example for usable platform width 230 cm.

Example for ventilation branch canal and/or vertical pipelines.



Page 1  
Section  
Dimensions  
Car data

Page 2  
Width  
Dimensions

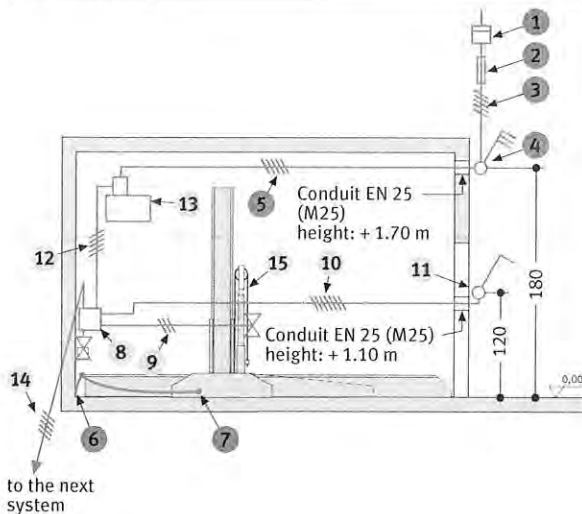
Page 3  
Approach  
Load plan  
Installation

Page 4  
Electrical  
installation  
Technical  
data

Page 5  
To be per-  
formed by the  
customer  
Description

## Electrical installation

### Installation diagram



### Electrical data (to be performed by the customer)

No.	Quantity	Description	Position	Frequency
1	1	Electricity meter	in the supply line	
2	1	Main fuse: 3 x fuse 16 A (slow) or circuit breaker 3 x 16 A (trigger characteristic K or C)	in the supply line	1 per unit
3	1	Supply line 5 x 2.5 mm <sup>2</sup> (3 PH + N + PE) with marked wire and protective conductor	to main switch	1 per unit
4	1	Lockable main switch	defined at the plan evaluation	1 per unit
5	1	Supply line 5 x 2.5 mm <sup>2</sup> (3 PH + N + PE) with marked wire and protective conductor	from main switch to unit	1 per unit
6	every 10 m	Foundation earth connector	corner pit floor	
7	1	Equipotential bonding in accordance with DIN EN 60204 from foundation earth connector to the system		1 per system

### Electrical data (included in delivery of Klaus Multiparking)

No.	Description
8	Terminal box
9	Control line 3 x 0.75 mm <sup>2</sup> (PH + N + PE)
10	Control line 7 x 1.5 mm <sup>2</sup> with marked wire and protective conductor
11	Operating device
12	Control line 5 x 1.5 mm <sup>2</sup> with marked wire and protective conductor
13	Hydraulic unit 3.0 kW, three-phase current, 400 V / 50 Hz
14	Control line 5 x 1.5 mm <sup>2</sup> with marked wire and protective conductor
15	Chain control

## Technical data

### Range of application

Generally, this parking system is not suited for short-time parkers (temporary parkers). Please do not hesitate to contact your local KLAUS agency for further assistance.

### Units

Low-noise power units mounted to rubber-bonded-to metal mountings are installed. Nevertheless we recommend that parking system's garage be built separately from the dwelling.

### Available documents

- wall recess plans
- maintenance offer/contract
- declaration of conformity
- test sheet on airborne and slid-borne sound

### Corrosion protection

See separate sheet regarding corrosion protection.

### Railings

If there are traffic routes next to or behind the installations, railings compliant to DIN EN ISO 13857 must be installed by the customer. Railings must also be in place during construction.

### Environmental conditions

Environmental conditions for the area of multiparking systems: Temperature range -10 to +40 °C. Relative humidity 50 % at a maximum outside temperature of +40 °C. If lifting or lowering times are specified, they refer to an environmental temperature of +10 °C and with the system set up directly next to the hydraulic unit. At lower temperatures or with longer hydraulic lines, these times increase.

### Sound insulation

According to DIN 4109 (Sound insulation in buildings), para. 4, annotation 4, Klaus Multiparkers are part of the building services (garage systems).

#### Normal sound insulation:

DIN 4109, para. 4, Sound insulation against noises from building services.

Table 4 in para. 4.1 contains the permissible sound level values emitted from building services for personal living and working areas. According to line 2 the maximum sound level in personal living and working areas must not exceed 30 dB (A).

*Noises created by users are not subject to the requirements (see table 4, DIN 4109).*

The following measures are to be taken to comply with this value:

- Sound protection package according to offer/order (Klaus Multiparking GmbH)
- Minimum sound insulation of building  $R'_w = 57$  dB (to be provided by customer)

#### Increased sound insulation (special agreement):

DIN 4109, Amendment 2, Information on planning and execution, proposals for increased sound insulation.

Agreement: Maximum sound level in personal living and working areas 25 dB (A). *Noises created by users are not subject to the requirements (see table 4, DIN 4109).*

The following measures are to be taken to comply with this value:

- Sound protection package according to offer/order (Klaus Multiparking GmbH)
- Minimum sound insulation of building  $R'_w = 62$  dB (to be provided by customer)

Note: User noises are noises created by individual users in our Multiparking systems. These can be noises from accessing the platforms, slamming of vehicle doors, motor and brake noises.

Page 1  
Section  
Dimensions  
Car data

Page 2  
Width  
dimensions

Page 3  
Approach  
Load plan  
Installation

Page 4  
Electrical  
installation  
Technical  
data

Page 5  
To be performed by the customer  
Description

## To be performed by the customer

### Safety fences

Any constraints that may be necessary according to DIN EN ISO 13857 in order to provide protection, for pathways directly in front, next to or behind the unit. This is also valid during construction.

### Numbering of parking spaces

Consecutive numbering of parking spaces.

### Building services

Lighting, ventilation, fire extinguishing and fire alarm systems.

### Marking

According to DIN EN 14 010, a warning that identifies this danger area must be placed in the entrance area that conforms to ISO 3864. This must be done according to EN 92/58/EWG for systems without a pit 10 cm from the edge of the platform.

### Wall cuttings

Any necessary wall cuttings according to page 1.

### Electrical supply to the main switch / Foundation earth connector

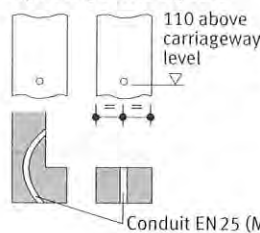
Suitable electrical supply to the main switch and the control wire line must be provided by the customer during installation. The functionality can be monitored on site by our fitters together with the electrician. If this cannot be done during installation for some reason for which the customer is responsible, the customer must commission an electrician at their own expense and risk.

In accordance with DIN EN 60204 (Safety of Machinery. Electrical Equipment), grounding of the steel structure is necessary, provided by the customer (distance between grounding max. 10 m).

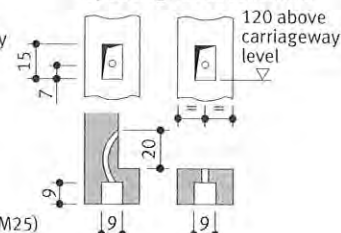
### Operating device

Cable conduits and recesses for operating device (for double wing doors: please contact the local agency of Klaus Multiparking).

#### Operating device exposed



#### Operating device concealed



If the following are not included in the quotation, they will also have to be provided / paid for by the customer:

- Mounting of contactor and terminal box to the wall valve, complete wiring of all elements in accordance with the circuit diagram
- Costs for final technical approval by an authorized body
- Main switch
- Control line from main switch to hydraulic unit

## Description

### General description

Multiparking system providing dependent parking spaces for 2 cars one on top of the other each. The lower vehicle parks directly on the floor plate. The vehicle parked on the bottom must be driven out before lowering the platform.

The height of the platform can be adjusted flexibly (even subsequently).

Adjustment of maximum load of 2,500 kg can be made subsequently.

Dimensions are in accordance with the underlying dimensions of parking pit, height and width

The parking bays are accessed horizontally (installation deviation  $\pm 1\%$ ).

Vehicles are positioned on the upper parking space using wheel stops on the right side (adjust according to operating instructions).

Operation via operating device with hold-to-run-device using master keys.

The operating elements are usually mounted either in front of the column or on the outside of the door frame

Operating instructions are attached to each operator's stand.

For garages with doors at the front of the parking system the special dimensional requirements have to be taken into account.

### Multiparking system consisting of:

- 2 steel pillars with bases that are mounted on the floor (short or long steel pillar bases can be selected optionally).
- 2 sliding platforms (mounted to the steel pillars with sliding bearings)
- 1 platform
- 1 mechanic synchronization control system (to ensure synchronous operation of the hydraulic cylinders while lowering and lifting the platform)
- 1 hydraulic cylinder
- 1 automatic hydraulic safety valve (prevents accidental lowering of the platform while accessing the platform)
- Dowels, screws, connecting elements, bolts, etc.
- The platforms and parking spaces are end-to-end accessible for parking!

### Platforms consisting of:

- Platform base sections
- Adjustable wheel stops
- Canted access plates
- Side members
- Cross members
- Screws, nuts, washers, distance tubes, etc.

### Hydraulic system consisting of:

- Hydraulic cylinder
- Solenoid valve
- Safety valve
- Hydraulic conduits
- Screwed joints
- High-pressure hoses
- Installation material

### Electric system consisting of:

- Operating device (Emergency Stop, lock, 1 master key per parking space)
- Terminal box at wall valve
- Electrical locking device
- Chain control

### Hydraulic unit consisting of:

- Hydraulic power unit (low-noise, installed onto a console with a rubber-bonded-to-metal mounting)
- Hydraulic oil reservoir
- Oil filling
- Internal geared wheel pump
- Pump holder
- Clutch
- 3-phase-AC-motor (3.0 kW, 230/400 V, 50 Hz)
- Contactor (with thermal overcurrent relay and control fuse)
- Test manometer
- Pressure relief valve
- Hydraulic hoses (which reduce noise transmission onto the hydraulic pipe)

## We reserve the right to change this specification without further notice

The Klaus company reserves the right in the course of technical progress to use newer or other technologies, systems, processes, procedures or standards in the fulfillment of their obligations other than those originally offered provided the customer derives no disadvantage from their so doing.





**CITY OF BURLINGAME  
VARIANCE APPLICATION**

*Landscaping*

The Planning Commission is required by law to make findings as defined by the City's Ordinance (Code Section 25.54.020 a-d). Your answers to the following questions can assist the Planning Commission in making the decision as to whether the findings can be made for your request. Please type or write neatly in ink. Refer to the back of this form for assistance with these questions.

**a. Describe the exceptional or extraordinary circumstances or conditions applicable to your property which do not apply to other properties in this area.**

The project site's narrowness and required guest parking (located at rear yard) limits available space for temporary loading/service vehicle space.

**b. Explain why the variance request is necessary for the preservation and enjoyment of a substantial property right and what unreasonable property loss or unnecessary hardship might result from the denial of the application.**

Locating loading/service vehicle space at other location on site would either reduce residents' ability to maneuver vehicles due to narrowness of site or limit the landscape area at rear yard.

**c. Explain why the proposed use at the proposed location will not be detrimental or injurious to property or improvements in the vicinity or to public health, safety, general welfare or convenience.**

Loading/service vehicle space would only be used temporarily during day. Language restricting any other uses (guest parking, long-term parking, etc.) at stated hours may be introduced into permit drawings to ensure space is ONLY used for deliveries, moving, etc.

**d. How will the proposed project be compatible with the aesthetics, mass, bulk and character of the existing and potential uses on adjoining properties in the general vicinity?**

Loading/service vehicle space built with porous/permeable pavers would allow landscaping to be similar to adjoining properties by allowing plants to grow in temporary space. Variance would also reduce "hardscaped" and non-porous areas to improve stormwater treatment and aesthetics of project.





## ENVIRONMENTAL INFORMATION FORM

(to be completed by applicant when Negative Declaration or Environmental Impact Report is required)

### GENERAL INFORMATION

Project Address: 1431 El Camino Real Assessor's Parcel Number: 026-013-110

Applicant Name: Levy Design Partners Property Owner Name: GGH Investment LLC  
Address: 90 South Park Address: 110 Robler Ave  
City/State/Zip: San Francisco / CA / 94107 City/State/Zip: Hillsborough / CA / 94010  
Phone: Brian Yang: 415-777-0561 Phone: Grace Li: 510-857-4567

Permit applications required for this project (special permit, variance, subdivision map, parcel map, condominium permit, building permit, etc.): Two variances submitted (service vehicle in landscaped front yard & vehicle lifts), boundary / topo survey, subdivision map, condo & building permit.

Related permits, applications and approvals required for this project by City, Regional, State and Federal Agencies: Caltrans Encroachment Permit, Bay Area Air Quality Management District Demolition Permit

### SITE INFORMATION

Site size: +/- 0.177 total Acres and +/- 7,722 total Square Feet Existing Zoning: R-3  
Existing use(s) of property: Four Apartment Units  
Total Number of Existing Parking Spaces<sup>1</sup>: 10 (5 covered) Number of Compact Spaces<sup>1</sup>: n/a  
Number of Existing Structures and Total Square Footage of Each: 4,102 sf

Will any structures be demolished for this project?  Yes  No  
Size and use of structures to be demolished: 4 unit residential apartment building with detached 5-car garage.

Number and size of existing trees on site<sup>2</sup>: None

Will any of the existing trees be removed?  Yes  No  
If Yes, list number, size and type of trees to be removed: n/a

Are there any natural or man-made water channels which run through or adjacent to the site?  
 Yes  No If Yes, where? n/a

<sup>1</sup> City of Burlingame minimum standard parking space size is 9'x20'. The minimum size for compact parking spaces is 8'x17'. Refer to City of Burlingame Zoning Ordinance C.S. 25.70 for parking requirements for particular uses.

<sup>2</sup> Refer to the City of Burlingame's Urban Reforestation and Tree Protection Ordinance (C.S. 11.06) for tree removal permit and tree planting requirements.

Describe in general the existing surrounding land uses to the:

North Multi-family residential

South Multi-family residential

East Multi-family residential

West Multi-family residential

**PROPOSED PROJECT**

Project Description: New construction of (6) 3-story townhouse units. Each unit to be 2-bedrooms over private 2-car garage.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Residential Projects:**

Number of Dwelling Units: six

Size of Unit(s): 1,083 sf - 1,190 sf (average unit size of 1,114 sf)

Household size (number of persons per unit) expected: 2.2 persons / unit

**Commercial/Industrial Projects:**

Type and square footage of each use: n/a

Estimated number of employees per shift: n/a

Will the project involve the use, disposal or emission of potentially hazardous materials (including petroleum products)? n/a Yes n/a No

If Yes, please describe: n/a

**Institutional Projects (public facilities, hospitals, schools):**

Major function of facility: n/a

Estimated number of employees per shift: n/a

Estimated Occupancy: n/a

**For all Projects:**

**Flood Hazard:** Is this site within a special flood hazard area? \_\_\_\_\_ Yes  No

**Land Use:** If the project involves a conditional use permit, variance or rezoning application, please explain why the applications are required<sup>3</sup>: Variance for vehicle lifts needed to provide 2 car spaces/unit. Variance for service vehicle space in landscaped front yard needed to get all required services into site's tight constraints (common open space, (2) guest parking spaces, trash enclosure, etc.).

<sup>3</sup> Please fill out and submit the appropriate application form (variance special permit, etc.)

Building gross square footage: Existing: 4,102 sf Proposed: 9,325 sf  
Number of floors of construction: Existing: two Proposed: three

**Traffic/Circulation:** Standard and compact off-street parking spaces provided:

Existing: Standard 5 Proposed: Standard 12  
Compact \_\_\_\_\_ Compact \_\_\_\_\_  
Total 5 Total 12

**Grading:** Amount of dirt/fill material being moved (check one):

0-500 cubic yards \_\_\_\_\_ 5,000-20,000 cubic yards  
 500-5,000 cubic yards \_\_\_\_\_ Over 20,000 cubic yards(indicate amount) \_\_\_\_\_

Note: If fill is being placed over existing bay fill, provide engineering reports which show the effect of the new fill on the underlying bay mud.

**Storm water runoff:** Indicate area of site to be covered with impervious surfaces (parking lot paving, etc.): +/- 6,568 sf of impervious (building roof, driveway, pathways, trash enclosure)

Is the area with impervious surfaces less than 200 feet away from a wetland, stream, lagoon or bay?  
 Yes  No

**Noise:** Describe noise sources and timing of activity generated by your project during construction: Vehicles, equipment, and general construction activity. All construction activity to be limited to working hours of BMC 13.04.100.

Noise sources generated during operation of facility: General loading / unloading of vehicles, movement of light construction equipment and vehicles.

**Vibration:** Will the proposal cause vibration that may affect adjacent properties? Describe any potential sources of vibration: Project should not create any more vibration than typical construction.

**Exterior Lighting:** Please describe any proposed exterior lighting of the facility<sup>4</sup>: Wall sconces at unit entries and possibly some soft lighting at front yard landscaping, mail area, and rear yard trash enclosure.

**Water:** Expected amount of water usage:

Domestic 792 gal/day Peak use 52 gal/min  
Commercial n/a gal/day Peak use n/a gal/min  
Expected fire flow demand TBD by fire protection consultant gal/min

As per the C.3 regulations set forth by the California Regional Water Quality Control Board, please respond to the following questions:

1. Would the proposed project result in an increase in pollutant discharges to receiving waters?  
No

<sup>4</sup> Refer to City of Burlingame Exterior Illumination Ordinance (No. 1477) regarding requirements which limit exterior illumination in both residential and commercial zones.

2. Would the proposed project result in significant alteration of receiving water quality during or following construction? Water usage should be similar to current levels or a small increase due to additional 2 units over existing 4 units.

3. Would the proposed project result in increased impervious surfaces and associated increased runoff? No - current building and paving covers more area with impervious surfaces than proposed project.

4. Would the proposed project create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates volumes? No - Proposed project will provide more pervious surfaces and landscaping to improve environmental impact compared to existing site.

5. Would the proposed project result in increased erosion in its watershed? No

6. Is the project tributary to an already impaired water body, as listed on the Clean Water Action Section 303(d) list? If so will it result in an increase in any pollutant for which the water body is already impaired? No

7. Would the proposed project have a potential significant environmental impact on surface water quality, to marine, fresh, or wetland waters? No

8. Would the proposed project have a potentially significant adverse impact on ground water quality? No

9. Will the proposed project cause or contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses? No - Proposed project will provide more pervious surfaces and landscaping to improve environmental impact compared to existing site.

10. Will the project impact aquatic, wetland, or riparian habitat? No

**Sewer:** Expected daily sewer discharge 753 GPD

Source of wastewater discharge on site (i.e. restrooms, restaurants, laboratory, material processing, etc.)

**General:**

Are the following items applicable to the project or its effects? Provide attachment to explain nature of all items checked 'yes'.

	Yes	No
Change in existing features of any bays, tidelands, beaches, or hills, or substantial alteration of ground contours.	_____	X _____
Change in scenic views or vistas from existing residential areas or public lands or roads.	_____	X _____
Change in pattern, scale or character of general area of project.	_____	X _____
Significant amounts of solid waste or litter.	_____	X _____
Change in dust, ash, smoke fumes or odors in vicinity.	_____	X _____
Change in bay, lagoon, stream, channel or groundwater quality or quantity, or alteration of existing drainage patterns.	_____	X _____
Substantial change in existing noise or vibration levels in the vicinity (during construction and/or during operation).	_____	X _____
Site on filled land or on slope of 10 % or more.	_____	X _____
Use or disposal of potentially hazardous materials, such as toxic substances, flammable materials or explosives.	_____	X _____
Substantial change in demand for municipal services (police, fire water, sewage)	_____	X _____
Substantial increase in fossil fuel consumption (oil, natural gas, etc.).	_____	X _____
Relationship to a larger project or series of projects.	_____	X _____

**CERTIFICATION**

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date 03/14/2017

Signature 





## Project Comments – Planning Application

Project Address: 1431 El Camino Real, zoned R-3, APN: 026-013-110  
Description: Request for Environmental Scoping (?), Condominium Permit, and Design Review for 6 new townhome units.

From: Rick Caro III  
Building Division

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Please address the following comments at this time; provide a written response and revised plans with your resubmittal:

- 1) RESIDENTIAL: Rooms that could be used for sleeping purposes must have at least one window or door that complies with the egress requirements. Rooms that could be used for sleeping purposes must have at least one window or door that complies with the egress requirements. ***On the elevation drawings specify the location and the net clear opening height and width of all required egress windows.*** 2013 California Building Code (CBC) 1029.2 and 2013 California Residential Code (CRC) §R310. The response did not include what the actual dimension of the egress windows are in order to determine that the minimum 5.7 square feet would be met. Note: That if you use the minimum dimension width of 20 inches for the egress window, than you would need a minimum of a 42” net opening height.
- 17) Specify on the plan that all powder rooms shall comply with Section 1134A.2; Option 2, Items 8 through 12. The response to question #17 stating that unit #7 will comply with the requirements for the accessible route to the primary entry with one powder room on the primary level does not state how the powder room will be designed to comply with 1134A.2; Option 2, Items 8 through 12.
- 18) Specify on the plans that all dwelling unit interior doors will comply with CBC 1132A5.2. The response that Unit #7 will comply with the requirements for the accessible route to the primary unit entry, does not address the strike edge maneuvering space at the door.

The following comments do not need to be addressed now, but you should be aware of them as they will need to be addressed at time of building permit submittal.

- 19) Anyone who is doing business in the City must have a current City of Burlingame business license.

**NOTE: A condition of this project approval is that the Demolition Permit will not be issued and, and no work can begin (including the removal of any building components), until a Building Permit has been issued for the project. The property owner is responsible for assuring that no work is authorized or performed.**

- 20) When you submit your plans to the Building Division for plan review provide a completed Supplemental Demolition Permit Application. **NOTE: The Demolition Permit will not be issued until a Building Permit is issued for the project.**
- 21) Include with your Building Division plan check submittal a complete underground fire sprinkler plan. Contact the Burlingame Water Division at 650-558-7660 for details regarding the water system or Central County Fire for sprinkler details.
- 22) Sewer connection fees must be paid prior to issuing the building permit.
- 23) A pre-construction meeting must be conducted prior to issuing the permit. After you are notified by the Building Division that your plans have been approved call 650-558-7270 to schedule the pre-construction meeting.

**Reviewed By:** Rick Caro III  
(650) 558-7270

**Date:** February 27, 2017



## ***Project Comments – Planning Application***

Project Address: **1431 El Camino Real, zoned R-3, APN: 026-013-110**  
Description: **Request for Environmental Scoping (?), Condominium Permit, and Design Review for 6 new townhome units.**

From: Rick Caro III  
Building Division

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**Please address the following comments at this time; provide a written response and revised plans with your resubmittal:**

- 1) On the plans specify that this project will comply with the 2013 California Building Code, 2013 California Residential Code (where applicable), 2013 California Mechanical Code, 2013 California Electrical Code, and 2013 California Plumbing Code, including all amendments as adopted in Ordinance 1889. Note: If the Planning Commission has not approved the project prior to 5:00 p.m. on December 31, 2016 then this project must comply with the 2016 California Building Codes.
- 2) Specify on the plans that this project will comply with the 2013 California Energy Efficiency Standards.
- 3) Place the following information on the first page of the plans:

**“Construction Hours”**

**Weekdays: 8:00 a.m. – 7:00 p.m.**

**Saturdays: 9:00 a.m. – 6:00 p.m.**

**Sundays and Holidays: No work is allowed**

**(See City of Burlingame Municipal Code, Section 13.04.100 for details.)**

***Construction hours in the City Public right-of-way are limited to weekdays and non-City Holidays between 8:00 a.m. and 5:00 p.m.***

**Note: Construction hours for work in the public right of way must now be included on the plans.**

- 4) On the first page of the plans specify the following: “Any hidden conditions that require work to be performed beyond the scope of the building permit issued for these plans may require further City approvals including review by the Planning Commission.” The building owner, project designer, and/or contractor must submit a Revision to the City for any work not graphically illustrated on the Job Copy of the plans prior to performing the work.



- 5) **Due to the extensive nature of this construction project the Certificate of Occupancy will be rescinded once construction begins. A new Certificate of Occupancy will be issued after the project has been final. No occupancy of the building is to occur until a new Certificate of Occupancy has been issued.**
- 6) On the plans show that all openings in exterior walls, both protected and unprotected, will comply with 2013 CBC, Table 705.8. Provide a table or chart that specifies 1) the openings allowed and; 2) the size and percentage of the openings proposed.
- 7) RESIDENTIAL: Rooms that could be used for sleeping purposes must have at least one window or door that complies with the egress requirements. Rooms that could be used for sleeping purposes must have at least one window or door that complies with the egress requirements. ***On the elevation drawings specify the location and the net clear opening height and width of all required egress windows.*** 2013 California Building Code (CBC) 1029.2 and 2013 California Residential Code (CRC) §R310.
- 8) Indicate on the plans that a Grading Permit, if required, will be obtained from the Department of Public Works.
- 9) Provide handrails at all stairs where there are four or more risers. 2013 CBC §1009.
- 10) Provide lighting at all exterior landings.
- 11) Prior to applying for a Building Permit the applicant must either confirm that the address is \_\_\_\_\_ or obtain a change of address from the Engineering Department. Note: The correct address must be referenced on all pages of the plans.
- 12) On the first page of the plans state the Access Regulations that you are using to gain full access compliance. There are five access regulations that may apply to a multi-family residential project in California:
  - a. The Architectural Barriers Act of 1969 (ABA)
  - b. Section 504 of the Rehabilitation Act of 1973
  - c. The Fair Housing Act (FHA)
  - d. The Americans with Disabilities Act (ADA)
  - e. The California Building Code (CBC), Chapters 11A and 11B.
- 13) On the first page of the plans clearly state whether ANY public money, of any kind, **will or will not** be used to construct this project.
- 14) On the first page of the plans clearly state if an application for ANY tax credits have or will be submitted for tax rebates. NOTE: See the 2015 California Code of Regulations, Title IV, §10325 (f)7 (K). In part: “All tax credit recipient projects shall adhere to the provisions of California Building Code 11(B) regarding accessibility to privately owned housing made available for public use.”
- 15) On the first page of the plans clearly state that all paths of travel and common use spaces will be accessible and all living units will be adaptable.
- 16) Provide details which show that the water closet in each unit complies with CBC1134A.7 #1.

- 17) Specify on the plan that all powder rooms shall comply with Section 1134A.2; Option 2, Items 8 through 12.
- 18) Specify on the plans that all dwelling unit interior doors will comply with CBC 1132A5.2.

**The following comments do not need to be addressed now, but you should be aware of them as they will need to be addressed at time of building permit submittal.**

- 19) Anyone who is doing business in the City must have a current City of Burlingame business license.

**NOTE: A condition of this project approval is that the Demolition Permit will not be issued and, and no work can begin (including the removal of any building components), until a Building Permit has been issued for the project. The property owner is responsible for assuring that no work is authorized or performed.**

- 20) When you submit your plans to the Building Division for plan review provide a completed Supplemental Demolition Permit Application. **NOTE: The Demolition Permit will not be issued until a Building Permit is issued for the project.**
- 21) Include with your Building Division plan check submittal a complete underground fire sprinkler plan. Contact the Burlingame Water Division at 650-558-7660 for details regarding the water system or Central County Fire for sprinkler details.
- 22) Sewer connection fees must be paid prior to issuing the building permit.
- 23) A pre-construction meeting must be conducted prior to issuing the permit. After you are notified by the Building Division that your plans have been approved call 650-558-7270 to schedule the pre-construction meeting.

**Reviewed By:** Rick Caro III  
(650) 558-7270

**Date:** October 3, 2016



**Project Comments**

Project Address: 1431 El Camino Real, zoned R-3, APN: 026-013-110  
Description: Request for Environmental Scoping (?), Condominium Permit, and Design Review for 6 new townhome units.

From: Bob Disco  
Parks Division

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**Please address the following comments at this time; provide a written response and revised plans with your resubmittal:**

1. Include existing Accolade elm trees in planter strip on landscape plans.

**The following comments do not need to be addressed now, but you should be aware of them as they will need to be addressed at time of building permit submittal.**

2. Irrigation plan required for Building Permit. Include irrigation to existing street trees.

Reviewed By: BD  
650.558.7333

Date: 10/5/16



## ***Project Comments – Planning Application***

Project Address: 1431 El Camino Real, zoned R-3, APN: 026-013-110  
Description: Request for Environmental Scoping (?), Condominium Permit, and Design Review for 6 new townhome units.

From: Martin Quan  
Public Works Engineering

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**Please address the following comments at this time; provide a written response and revised plans with your resubmittal:**

- ~~1. A remove/replace utilities encroachment permit is required to (1) replace all curb, gutter, driveway and sidewalk fronting site, (2) plug all existing sanitary sewer lateral connections and install a new 4" lateral, (3) all water line connections to city water mains for services or fire line are to be installed per city standard procedures and specification, (4) any other underground utility works within city's right of way. Please show on plans.~~
2. No comments at this time.

The following comments do not need to be addressed now, but you should be aware of them as they will need to be addressed at time of building permit submittal.

2. Insert the 'Best Management Practices', updated June 2014, construction sheet into the plans set. A copy can be found at <http://www.flowstobay.org/sites/default/files/Countywide%20Program%20BMP%20Plan%20Sheet-June%202014%20Update.pdf#overlay-context=brochures> or <http://www.flowstobay.org/brochures> then click "construction bmp plan sheet"
3. Based on the scope of work, this is a "Type II" project that requires a Stormwater Construction Pollution Prevention Permit. This permit is required prior to issuance of a Building Permit. An initial field inspection is required prior to the start of any construction (on private property or in the public right-of-way).

**Reviewed By:** Martin Quan  
650-558-7245

**Date:** 2/24/17



## ***Project Comments – Planning Application***

Project Address: 1431 El Camino Real, zoned R-3, APN: 026-013-110  
Description: Request for Environmental Scoping (?), Condominium Permit, and Design Review for 6 new townhome units.

From: Martin Quan  
Public Works Engineering

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**Please address the following comments at this time; provide a written response and revised plans with your resubmittal:**

1. A remove/replace utilities encroachment permit is required to (1) replace all curb, gutter, driveway and sidewalk fronting site, (2) plug all existing sanitary sewer lateral connections and install a new 4" lateral, (3) all water line connections to city water mains for services or fire line are to be installed per city standard procedures and specification, (4) any other underground utility works within city's right-of-way. Please show on plans.

The following comments do not need to be addressed now, but you should be aware of them as they will need to be addressed at time of building permit submittal.

2. Insert the 'Best Management Practices', updated June 2014, construction sheet into the plans set. A copy can be found at <http://www.flowstobay.org/sites/default/files/Countywide%20Program%20BMP%20Plan%20Sheet-June%202014%20Update.pdf#overlay-context=brochures> or <http://www.flowstobay.org/brochures> then click "construction bmp plan sheet"

3. Based on the scope of work, this is a "Type II" project that requires a Stormwater Construction Pollution Prevention Permit. This permit is required prior to issuance of a Building Permit. An initial field inspection is required prior to the start of any construction (on private property or in the public right-of-way).

Reviewed By: Martin Quan  
650-558-7245

Date: 10/7/16



## ***Project Comments – Planning Application***

Project Address: 1431 El Camino Real, zoned R-3, APN: 026-013-110  
Description: Request for Environmental Scoping (?), Condominium Permit, and Design Review for 6 new townhome units.

From: Christine Reed  
Fire Dept.

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**Please address the following comments at this time; provide a written response and revised plans with your resubmittal:**

**The following comments do not need to be addressed now, but you should be aware of them as they will need to be addressed at time of building permit submittal:**

1. The building shall be equipped with an approved NFPA 13R sprinkler system throughout. Sprinkler drawings shall be submitted and approved by the Central County Fire Department prior to installation. The system shall be electronically monitored by an approved central receiving station, under a separate fire alarm permit.
2. The fire sprinkler system's fire department connection shall be located within 5 feet of the sidewalk and not within city right-of-way.
3. The applicant shall ensure proper drainage in accordance with the City of Burlingame Engineering Standards is available for the fire sprinkler main drain and inspector test on the building plumbing drawings. These items may drain directly to landscape or in the sewer with an air gap.
4. The fire protection underground shall be submitted and approved by the Burlingame Building Department prior to installation. The fire sprinkler system and fire standpipe system will not be approved by the Central County Fire Department until the fire protection underground has been submitted and approved by the Burlingame Building Department.
5. Electronic vehicular gate shall have a Knox key switch for emergency Fire Dept. access. The front of the building shall have a Knox key box for emergency Fire Dept. access through pedestrian gates and into other common areas of the building (if any).

Reviewed By: Christine Reed  
650-558-7617

Date: 10-12-16





## Project Comments – Planning Application

Project Address: 1431 El Camino Real, zoned R-3, APN: 026-013-110  
Description: Request for Environmental Scoping (?), Condominium Permit, and Design Review for 6 new townhome units.

From: Carolyn Critz  
Stormwater

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Please address the following comments at this time; provide a written response and revised plans with your resubmittal:

Project proponent completed, signed and submitted the Small Projects Checklist, which shows the project is a Small Project.

The following comments do not need to be addressed now, but you should be aware of them as they will need to be addressed at time of building permit submittal.

1. Any construction project in the City, regardless of size, shall comply with the city's stormwater NPDES permit to prevent construction activity stormwater pollution. Project proponents shall ensure that all contractors implement appropriate and effective Best Management Practices (BMPs) during all phases of construction, including demolition. **When submitting plans for a building permit**, please include a list of construction BMPs as project notes, preferably, on a separate full size (2'x 3' or larger), plan sheet. A downloadable electronic file is available at: <http://www.flowstobay.org/Construction>
2. Label all **pervious** and **impervious** surfaces and site design measures for stormwater.

For further assistance regarding stormwater, please contact Carolyn Critz, Environmental Compliance Manager, at (650) 342 3727, ext. 118, or [carolyn.critz@veolia.com](mailto:carolyn.critz@veolia.com)

Reviewed By: Carolyn Critz  
(650) 342 3727, ext. 118

Date: November 14, 2016

## ENVIRONMENTAL CHECKLIST FROM APPENDIX G OF THE CEQA GUIDELINES

### **AESTHETICS.** Would the project:

- Have a substantial adverse effect on a scenic vista?
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- Substantially degrade the existing visual character or quality of the site and its surroundings?
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

**AGRICULTURAL RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

**AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- Conflict with or obstruct implementation of the applicable air quality plan?
- Violate any air quality standard or contribute to an existing or projected air quality violation?
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- Expose sensitive receptors to substantial pollutant concentrations?
- Create objectionable odors affecting a substantial number of people?

**BIOLOGICAL RESOURCES.** Would the project:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- Have a substantial or adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Interfere substantially with the movement of any native or 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?
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

**CULTURAL RESOURCES.** Would the project:

- Cause a substantial adverse change in the significance of an historical resource as defined in '15064.5?
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?
- Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?
- Disturb any human remains, including those interred outside of formal cemeteries?



**GEOLOGY AND SOILS.** Would the project:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - a) Rupture of a known earthquake fault, as 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.
  - b) Strong seismic ground shaking?
  - c) Seismic-related ground failure, including liquefaction?
  - d) Landslides?
- Result in substantial soil erosion or loss of topsoil?
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2001), creating substantial risks to life or property?
- 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?

**GREENHOUSE GAS EMISSIONS**

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

**HAZARDS AND HAZARDOUS MATERIALS.** Would the project:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- 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?
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

**HYDROLOGY AND WATER QUALITY.** Would the project:

- Violate any water quality standards or waste discharge requirements?
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

*Environmental Checklist from Appendix G of the CEQA Guidelines*

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
- 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?
- Otherwise substantially degrade water quality?
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- Inundation by seiche, tsunami, or mudflow?

**LAND USE AND PLANNING.** Would the project:

- Physically divide an established community?
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- Conflict with any applicable habitat conservation plan or natural community conservation plan?

**MINERAL RESOURCES.** Would the project:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- 2b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

**NOISE.** Would the project result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

**POPULATION AND HOUSING.** Would the project:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

**PUBLIC SERVICES.** Would the project:

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

**RECREATION.**

- Would the project 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?
- 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?

**TRANSPORTATION/TRAFFIC.** Would the project:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
- Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- Result in inadequate emergency access?
- Result in inadequate parking capacity?
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

**UTILITIES AND SERVICE SYSTEMS.** Would the project:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- Comply with federal, state, and local statutes and regulations related to solid waste?

**MANDATORY FINDINGS OF SIGNIFICANCE.**

- Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

*Environmental Checklist from Appendix G of the CEQA Guidelines*

- 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)?
- Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

# **APPENDIX D**

## *Klaus Multiparking Noise Specification*





This chart shows absolute sound measurements of a standard Klaus system taken 15 inches from the machine as compared to other common levels. Sound levels 20 feet from the machine are significantly lower. The average system operation duration is 30 seconds.

