

Appendix A: Summary of Significant Impacts
and Proposed Plan Goals and Policies that
Reduce the Impact

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Table 1: Summary of Significant Impacts and Proposed Plan Goals and Policies that Reduce the Impact

| Impact | Proposed Goals and Policies that Reduce the Impact | Significance Level |
|--|--|------------------------------|
| 3.1 Air Quality | | |
| <p>3.1-1 Implementation of the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan.</p> | <p>Land Use Chapter</p> <p>P-LU-1: Establish a new Main Street through the center of the Planning Area that accommodates neighborhood-serving businesses and places for social gathering, and that helps create a sense of place for the Isabel Neighborhood.</p> <p>P-LU-2: Require buildings on Main Street between Constitution Drive and Portola Avenue to provide active ground floor uses facing Main Street that are publicly accessible and that generate walk-in clientele.</p> <p>P-LU-3: Establish a neighborhood-serving retail center anchored by a grocery store. This center shall:</p> <ul style="list-style-type: none"> - Be visible and accessible from the Valley Link station and Main Street; and - Incorporate a major public space such as a plaza or park. <p>P-LU-9: The location of the Ground Floor Retail/Flex Space Overlay on the BART property north of I-580 is diagrammatic only on Figure 2-1. As the Plan is implemented, the Overlay shall apply to all building frontages along the Isabel Path between the north end of the Valley Link pedestrian bridge and Isabel Avenue.</p> <p>P-LU-36: Pursue grant opportunities funds for transit-oriented development such as those using cap and trade.</p> <p>P-LU-43: Help connect businesses to the Valley Link station through existing and emerging transportation technologies.</p> <p>Transportation Chapter</p> <p>P-TRA-1: Create a walkable street grid within a half-mile radius of the BART Valley Link station (Neighborhood core area).</p> <p>P-TRA-3: Connect existing uses, new development, the Main Street, Valley Link station, bus stops, parks, natural areas, Las Positas College, and other key destinations with sidewalks, pedestrian and bicycle trails, and bicycle facilities.</p> <p>P-TRA-4: Create a continuous trail loop within the Isabel Neighborhood and links to the regional trail network outside of the Planning Area.</p> <ul style="list-style-type: none"> - Partner with LARPD and East Bay Regional Parks District and Alameda County to identify funding opportunities. - Advocate for a pedestrian and bicycle trail as the top priority for the bicycle connection along the future North Canyons Parkway/Dublin Boulevard extension, followed by a buffered bike lane as a second priority (as opposed to a traditional Class II facility). | <p>Less than significant</p> |

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| | <p>P-TRA-6: Provide pedestrian bridges and undercrossings to enhance the connectivity of the trail network and provide direct access to the Valley Link station.</p> <ul style="list-style-type: none"> - Orient pedestrian bridges to be as short, direct, and visually unobstructed as possible. <p>P-TRA-7: Provide multiple safe bicycle and pedestrian crossings of I-580 within the Isabel neighborhood.</p> <ul style="list-style-type: none"> - Prioritize the construction of the I-580 crossing along Collier Canyon Creek. - Ensure that the Valley Link station pedestrian bridges are available for non-Valley Link patron use when the station is open. <p>P-TRA-10: Provide bike parking areas at trailheads and major destinations and bicycle-signals at major intersections.</p> <p>P-TRA-11: Incorporate traffic calming measures to slow vehicle speeds and increase the visibility of pedestrian crossings.</p> <p>P-TRA-13: Require development to meet the on-site bicycle parking requirements listed in Table 3-3. Development applications shall show bicycle parking on site plans, including spaces to be provided within garages of individual dwelling units. Bicycle stalls shall meet the following requirements:</p> <ul style="list-style-type: none"> - Stalls shall be capable of supporting a bicycle in an upright or hanging position and enable a user to lock his bicycle to such a device. - The areas containing stalls shall be surfaced with hardscape or paving. - When located within a parking area, stalls shall be protected by curbs, fences, planter areas, bumpers, or similar barriers for the mutual protection of bikes, automobiles and pedestrians, unless deemed by the City to be unnecessary. - Where required, “secured, covered” bicycle parking may include garages, lockers, storage rooms, or fenced areas with restricted access. - Publicly accessible bicycle parking may include uncovered racks. <p>P-TRA-14: Encourage Valley Link station infrastructure to be integrated into the Neighborhood’s circulation and land use networks.</p> <p>P-TRA-15: Prioritize pedestrian safety when designing roadways serving the Valley Link station.</p> <p>P-TRA-16: Support direct, comfortable, shaded, safe, visible, and well-lit walking paths between the Valley Link platform and surrounding development.</p> | |

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| | <p>P-TRA-17: Support the research, piloting, and deployment of emerging technologies and new services such as real-time parking availability signage, real-time bus arrival updates, and rideshare matching.</p> <p>P-TRA-19: Employ a range of Transportation Demand Management (TDM) strategies to help make alternative modes of transportation as convenient, affordable, and safe as solo driving. Strategies include sponsored transit passes, parking cash-out programs, sponsored rideshare programs, bicycle commuter tax reimbursement, and bikeshare programs.</p> <p>P-TRA-20: Design the street network to minimize cut-through vehicle traffic in residential areas.</p> <p>P-TRA-21: Establish partnerships with transit operators, developers, technology providers, corporate shuttles, Transportation Network Companies, bike share operators, and other entities.</p> <p>P-TRA-22: With the exception of Business Park users outside of the Core, require property owners, residents, and tenants to form a Transportation Management Association (TMA) for the Isabel Neighborhood. Required actions shall be determined by the TMA and may include but are not limited to the the following:</p> <ul style="list-style-type: none"> - Monitor and manage the vehicular and bicycle parking supply for all retail uses north of I-580, rather than on a project or site basis. - Work with LAVTA and Valley Link to alter or add bus routes and/or provide free shuttle service between the Valley Link station and major destinations such as Las Positas College. - Establish neighborhood-wide car-sharing and/or bike sharing programs. - Implement programs for streetscape maintenance and beautification projects along Main Street, Pedestrian Streets, and Bike Streets. - Implement informational campaigns using brochures, boards/kiosks, or other communication outlets. - Provide technical support to businesses and homeowner associations in the implementation of TDM measures. - Implement a wayfinding signage program for motorists, bicyclists, and pedestrians prior to construction of Phase 1. <p>P-TRA-23: Require Office and Business Park projects exceeding 15,000 square feet within a half-mile of the Valley Link station to implement the following site design measures:</p> | |

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| | <ul style="list-style-type: none"> - Integration of passenger loading zones near the main building entrance on large sites; - Access to electrical vehicle charging stations for 10 percent of residential parking spaces and two percent of commercial or industrial parking spaces; - On-site showers and lockers for employees; and - Preferential parking for carpools, vanpools, and low emission vehicles. <p>P-TRA-24: Following station opening, require businesses within a half-mile of the BART Valley Link station to participate in the TMA and implement at least two of the following TDM programs (to be implemented through the initial Site Plan Design Review process for new development or through the Zoning Clearance process after construction):</p> <ul style="list-style-type: none"> - Parking cash-out for employees that do not drive to work. - Transit passes (such as the Clipper Card) for employees. - Car-sharing or bike-sharing program. - Carpool and vanpool ride-matching services. - Guaranteed ride home for transit users and car/vanpoolers. - Flexible work schedules, shortened work weeks, or options to telecommute. <p>Parks, Public Facilities, and Infrastructure Chapter</p> <p>P-PF-30: Require all new development to participate in all City, County, and State diversion programs and construction regulations in effect at the time of issuance of building permits.</p> <p>P-PF-31: Work with residents, businesses, LARPD, and the City's franchise hauler to exceed the City's 75 percent waste diversion goal in the Isabel Neighborhood.</p> <ul style="list-style-type: none"> - Design new development to make recycling, composting, and organic material collection as convenient as possible for residents, employees, and visitors. - Reduce the amount of solid waste that must be processed through implementation of recycling programs, composting, source reduction (such as packaging), purchasing policies, and manufacturing processes. - Continue to implement educational and outreach programs on available diversion programs and best practices. - Encourage businesses to participate in the Bay Area's Green Business Program. - Support the expansion of organics capacity in Alameda County and statewide. <p>P-PF-36: Require new development to install water efficient appliances and fixtures such as low-flow faucets and toilets.</p> | |

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| | <p>P-PF-37: Require new development to comply with State and City's mandatory water efficient landscape ordinance (WELO).</p> <p>P-PF-38: Require new development within the Municipal Water service area to connect to the recycled water system and to use recycled water for landscape irrigation, if economically feasible.</p> <p>P-PF-39: Allow the use of rainwater harvesting systems, consistent with regional permit requirements.</p> <p>P-PF-40: Restaurants and other uses that discharge grease into the wastewater treatment system shall be required to reduce impacts through individual or collective pretreatment facilities.</p> <p>P-PF-41: Design new streetscape and landscaped areas in the public right-of-way for stormwater management and the efficient use of water through:</p> <ul style="list-style-type: none"> - The installation of low-maintenance, drought-resistant plant palettes; - Use of large retention basins; - Use of low-flow irrigation systems; and/or - Use of bioswales and rain gardens in planting areas, curb extensions, and other green infrastructure. <p>P-PF-42: Require new development to incorporate low impact landscape design, such as natural drainage systems and groundwater recharge features, consistent with stormwater permit requirements.</p> <p>Environmental Resources Chapter</p> <p>P-ENV-11: Require new residential projects and other new sensitive receptors such as schools, child daycares, nursing and retirement homes located within 500 feet of I-580 to install indoor air quality equipment, such as high-efficiency particulate HEPA filters or equivalent mechanisms to minimize health risks for future residents.</p> <p>P-ENV-12: Require proponents of projects within areas surrounding existing hazardous sites, roadways, or TAC sources to assess health risks at the location in question and to incorporate feasible design-related risk mitigation measures.</p> <p>P-ENV-13: Require new large commercial projects to prepare a loading plan aimed to minimize truck idling and reduce diesel particulate emissions related to truck loading.</p> <p>P-ENV-14: Require construction projects to implement the following measures recommended by the BAAQMD, as applicable:</p> <ul style="list-style-type: none"> - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day; | |

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| | <ul style="list-style-type: none"> - All haul trucks transporting soil, sand, or other loose material off-site shall be covered; - 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; - All vehicle speeds on unpaved roads shall be limited to 15 mph; - 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; - 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). Clear signage shall be provided for construction workers at all access points; - All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator; and - A publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints shall be posted. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. <p>P-ENV-15: Require that applicants proposing development of projects within the Planning Area require contractors, as a condition of contract, to reduce construction-related exhaust emissions by ensuring that all off-road equipment greater than 50 horsepower (hp) shall operate on an EPA-approved Tier 4 or newer engine. Exemptions can be made for specialized equipment where Tier 4 engines are not commercially available within 200 miles of the project construction site. The construction contractor must identify these pieces of equipment, document their unavailability from at least two construction equipment rental firms, and ensure that they operate on no less than an EPA-approved Tier 3 engine.</p> <p>P-ENV-16: Require that applicants proposing development of projects within the Planning Area require contractors, as a condition of contract, to reduce construction-related fugitive ROG emissions by ensuring that low-VOC coatings that have a VOC content of 10 grams/liter (g/L) or less be used during construction. All project applicants</p> | |

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| | <p>shall submit evidence of the use of low-VOC coatings to BAAQMD prior to the start of construction.</p> <p>Urban Design Chapter</p> <p>DS-7: Traffic-calming measures, such as zebra striping for crosswalks, speed tables, and bulb-outs shall be employed along the bus loop north of I-580.</p> <p>DS-8: A pedestrian- and bicycle-only pathway shall be provided between the north end of the Valley Link pedestrian bridge and the corner of Gateway Avenue and Main Street, crossing Isabel Avenue and passing through the Retail Center block (see Isabel Neighborhood Plan figures 5-4, 5-5, and 5-9 for a conceptual route of the “Isabel Path” and the applicable dimensions).</p> <p>DS-9: The Isabel Path shall be designed to be as direct, flat, and visually unobstructed as possible to maximize accessibility and reduce the walking distance to and from the Valley Link Station.</p> <p>DS-10: The City shall coordinate with Valley Link and the property owner/developer of the Retail Center block to determine the appropriate method for crossing Isabel Avenue along the Isabel Path. Considerations may include: grading, pedestrian safety, directness, utility relocation.</p> <p>DS-12: The following pedestrian amenities shall be provided along the Isabel Path:</p> <ul style="list-style-type: none"> - Seating such as benches and terraced steps; - Public art; - Lighting; - Trash/recycling receptacles; and - Additional/specialty landscaping. <p>DS-27: Buildings shall be oriented such that frontages and entrances are visible and accessible from the public right-of-way, on-site common areas, pedestrian pathways, parks, and/or plazas.</p> <p>DS-28: Site plans shall establish well-defined, accessible, direct, and well-lit pedestrian links between buildings, sidewalks, parking areas, trails, and any on-site or nearby public spaces such as bus stops and the Valley Link station.</p> <p>DS-30: Large-scale developments shall be broken up by pedestrian paths that connect to the street grid.</p> <p>DS-54: Windows shall be operable to the extent possible, to allow natural ventilation and potentially eliminate the need for mechanical ventilation.</p> | |

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| | DS-77: A variety of site furnishings shall be considered and incorporated into site plans to promote a sense of comfortable outdoor living space for the pedestrian realm. Examples of such features include but are not limited to seating, freestanding planters, ornamental trash/recycling containers, cigarette ash receptacles, drinking fountains including pet basins, fountains or other water features, bollards, kiosks for information or artwork, sculptures, bicycle racks, and/or newspaper racks. | |
| 3.1-2 Implementation of the proposed Project would violate an air quality standard and contribute substantially to an existing or projected air quality violation during construction. | Policies P-ENV-11, P-ENV-12, P-ENV-13, P-ENV-14, P-ENV-15, and P-ENV-16, as listed under Impact 3.3-1. | Less than significant with mitigation |
| 3.1-3 Implementation of the proposed Project would violate an air quality standard and contribute substantially to an existing or projected air quality violation during operation. | Refer to policies, design standards, and design guidelines identified under Impact 3.1-1. | Significant and unavoidable |
| 3.1-4 Implementation of the proposed Project would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors). | Refer to policies, design standards, and design guidelines identified under Impact 3.3-1. | Significant and unavoidable |
| 3.1-5 Implementation of the proposed Project would expose sensitive receptors to substantial pollutant concentrations from new sources of toxic air containments. | <u>Environmental Resources Chapter</u> P-ENV-11: Require new residential projects and other new sensitive receptors such as schools, daycares, nursing and retirement homes located within 500 feet of I-580 to install indoor air quality equipment, such as HEPA filters or equivalent mechanisms to minimize health risks for future residents. | Significant and unavoidable |

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| | <p>P-ENV-12: Require project proponents within identified high risk Overlay Zones surrounding existing hazardous sites, roadways, or TAC sources to assess health risks at the location in question and to incorporate feasible design-related risk mitigation measures, such as high-efficiency particulate air filters (HEPA filters) or equivalent indoor air quality equipment mechanisms, as appropriate.</p> <p>P-ENV-13: Require new large commercial projects to prepare a loading plan aimed to minimize truck idling and reduce diesel particulate emissions related to truck loading.</p> | |
| <p>3.1-6 Implementation of the proposed Project would not expose sensitive receptors to substantial carbon monoxide pollutant concentrations from increased traffic.</p> | <p>Policies P-TRA-1, P-TRA-3, P-TRA-4, P-TRA-6, P-TRA-7, P-TRA-10, P-TRA-13, P-TRA-19, P-TRA-20, P-TRA-21, P-TRA-22, P-TRA-23, and P-TRA-24, as listed under Impact 3.1-1.</p> | <p>Less than significant</p> |
| <p>3.1-7 Implementation of the proposed Project would not create objectionable odors affecting a substantial number of people.</p> | <p>Urban Design Chapter</p> <p>DS-39: Loading and service entrances shall not intrude on the public view or interfere with pedestrian and vehicular flows and shall be located to minimize noise and odor impacts to nearby uses and to integrate with the building design.</p> | <p>Less than significant</p> |
| <p>3.2 Traffic and Transportation</p> | | |
| <p>3.2-1 Implementation of the proposed Project would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.</p> | <p>No proposed plan goals or policies would reduce this impact.</p> | <p>Significant and unavoidable</p> |

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| 3.2-2 Implementation of the proposed Project would conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. | No proposed plan goals or policies would reduce this impact. | Significant and unavoidable |
| 3.2-3 Implementation of the proposed Project would not 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. | No policies are required to reduce this impact below a level of significance. | Less than significant |
| 3.2-4 Implementation of the proposed Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). | No policies are required to reduce this impact below a level of significance. | Less than significant |
| 3.2-5 Implementation of the proposed Project would not result in inadequate emergency access. | No policies are required to reduce this impact below a level of significance. | Less than significant |
| 3.3 Energy, Greenhouse Gases, and Climate Change | | |
| 3.3-1 Implementation of the proposed Project would not lead to wasteful, inefficient, or unnecessary consumption of energy. | <u>Land Use Chapter</u> P-LU-3: Establish a neighborhood-serving retail center anchored by a grocery store. This center shall: <ul style="list-style-type: none"> - Be visible and accessible from the Valley Link station and Main Street; - Not preclude a potential future shared surface parking facility; and - Incorporate a major public space such as a plaza or park. | Less than significant |

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| | <p>P-LU-9: The location of the Ground Floor Retail/Flex Space Overlay on the BART property north of I-580 is diagrammatic only on Figure 2-1. As the Plan is implemented, the Overlay shall apply to all building frontages along the Isabel Path between the north end of the Valley Link pedestrian bridge and Isabel Avenue.</p> <p>P-LU-43: Help connect businesses to the Valley Link station through existing and emerging transportation technologies.</p> <p><u>Traffic and Transportation Chapter</u></p> <p>P-TRA-1: Create a walkable street grid within a half-mile radius of the Valley Link station (Neighborhood core area).</p> <p>P-TRA-3: Connect existing uses, new development, the Main Street, Valley Link station, bus stops, parks, natural areas, Las Positas College, and other key destinations with sidewalks, pedestrian and bicycle trails, and bicycle facilities.</p> <p>P-TRA-4: Create a continuous trail loop within the Isabel Neighborhood and links to the regional trail network outside of the Planning Area.</p> <ul style="list-style-type: none"> - Partner with LARPD, East Bay Regional Parks District, and Alameda County to identify funding opportunities. - Advocate for a pedestrian and bicycle trail as the top priority for the bicycle connection along the future North Canyons Parkway/Dublin Boulevard extension, followed by a buffered bike lane as a second priority (as opposed to a traditional Class II facility). <p>P-TRA-6: Provide pedestrian bridges and undercrossings to enhance the connectivity of the trail network and provide direct access to the Valley Link station. Orient pedestrian bridges to be as short, direct, and publicly visible as possible.</p> <p>P-TRA-7: Provide multiple safe bicycle and pedestrian crossings of I-580 within the Isabel neighborhood.</p> <ul style="list-style-type: none"> - Prioritize the construction of the I-580 crossing along Collier Canyon Creek. - Encourage Valley Link station pedestrian bridges to be available for non-Valley Link patron use when the station is open. <p>P-TRA-9: Implement on-street improvements such as new crosswalks and bike lanes to enhance the safety and convenience of walking and biking in the outer portions of the Planning Area and to provide interim connections along the proposed trail loop before major off-street improvements are in place.</p> <p>P-TRA-10: Provide bike parking areas at trailheads and major destinations and bicycle-signals at major intersections.</p> | |

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| | <p>P-PF-23 Incorporate school access into the Neighborhood’s Transportation Demand Management program (described in Chapter 3). Strategies to consider include school busing, carpooling programs, Walk/Bike to School Days, a Walking School Bus program, and bicycle trains.</p> <p><u>Urban Design Chapter</u></p> <p>DS-8: A pedestrian- and bicycle-only pathway shall be provided between the north end of the Valley Link pedestrian bridge and the corner of Gateway Avenue and Main Street, crossing Isabel Avenue and passing through the Retail Center block. (See Isabel Neighborhood Plan figures 5-4, 5-5, and 5-9 for a conceptual route of the “Isabel Path” and the applicable dimensions.)</p> <p>DS-9: The Isabel Path shall be designed to be as direct, flat, and visually unobstructed as possible to maximize accessibility and reduce the walking distance to and from the Valley Link Station.</p> <p>DS-10: The City shall coordinate with Valley Link and the property owner/developer of the Retail Center block to determine the appropriate method for crossing Isabel Avenue along the Isabel Path. Considerations may include: grading, pedestrian safety, directness, utility relocation.</p> <p>DS-12: The following pedestrian amenities shall be provided along the Isabel Path:</p> <ul style="list-style-type: none"> - Seating such as benches and terraced steps; - Public art; - Lighting; - Drinking fountains; - Trash/recycling receptacles; and - Additional/specialty landscaping. <p>DS-28: Site plans shall establish well-defined, accessible, direct, and well-lit pedestrian links between buildings, sidewalks, parking areas, trails, and any on-site or nearby public spaces such as bus stops and the Valley Link station.</p> <p>DS-30: Large-scale developments shall be broken up by pedestrian paths that connect to the street grid.</p> <p>DS-54: Windows shall be operable to the extent possible, to allow natural ventilation and potentially eliminate the need for mechanical ventilation.</p> <p><u>Environmental Resources and Conservation Chapter</u></p> <p>P-ENV-13: Require new large commercial projects to prepare a loading plan aimed to minimize truck idling and reduce diesel particulate emissions related to truck loading.</p> | |

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| | <p>P-ENV-14: Require construction projects to implement the following measures recommended by the BAAQMD, as applicable:</p> <ul style="list-style-type: none"> - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day; - All haul trucks transporting soil, sand, or other loose material off-site shall be covered; - 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; - All vehicle speeds on unpaved roads shall be limited to 15 mph; - 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; - 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). Clear signage shall be provided for construction workers at all access points; - All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator; and - A publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. | |
| <p>3.3-2 Implementation of the proposed Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.</p> | <p>Refer to policies, design standards, and design guidelines identified under Impact 3.3-1 in addition to the following: <u>Land Use Chapter</u> P-LU-1: Establish a new Main Street through the center of the Planning Area that accommodates neighborhood-serving businesses and places for social gathering, and that helps create a sense of place for the Isabel Neighborhood. P-LU-2: Require buildings on Main Street between Constitution Drive and Portola Avenue to provide active ground floor uses facing Main Street that are publicly accessible and that generate walk-in clientele.</p> | <p>Less than significant with mitigation</p> |

Table 1: Summary of Significant Impacts and Proposed Plan Goals and Policies that Reduce the Impact

| Impact | Proposed Goals and Policies that Reduce the Impact | Significance Level |
|--------|--|--------------------|
| | <p>P-LU-36: Pursue grant opportunities funds for transit-oriented development such as those using cap and trade.</p> <p><u>Traffic and Transportation Chapter</u></p> <p>P-TRA-8: Provide four-legged crosswalks at new signalized or stop-controlled intersections.</p> <p>P-TRA-11: Incorporate traffic calming measures to slow vehicle speeds and increase the visibility of pedestrian crossings, particularly along Pedestrian Streets, Bicycle Streets, and Main Street.</p> <p>P-TRA-15: Prioritize pedestrian safety when designing roadways serving the Valley Link station.</p> <p><u>Parks, Public Facilities, and Infrastructure Chapter</u></p> <p>P-PF-30: Require all new development to participate in all City, County, and State diversion programs and construction regulations in effect at the time of issuance of building permits.</p> <p>P-PF-31: Work with residents, businesses, LARPD, and Livermore Sanitation (or current franchise hauler) to exceed the City's 75 percent waste diversion goal in the Isabel Neighborhood.</p> <ul style="list-style-type: none"> - Design new development to make recycling, composting, and organic material collection as convenient as possible for residents, employees, and visitors. - Reduce the amount of solid waste that must be processed through implementation of recycling programs, composting, source reduction (such as packaging), purchasing policies, and manufacturing processes. - Continue to implement educational and outreach programs on available diversion programs and best practices. - Encourage businesses to participate in the Bay Area's Green Business Program. - Support the expansion of organics capacity in Alameda County. <p>P-PF-36: Require new development to install water efficient appliances and fixtures such as low-flow faucets and toilets.</p> <p>P-PF-37: Require new development to comply with State and City's mandatory water efficient landscape ordinance (WELO).</p> <p>P-PF-38: Require new development within the Municipal Water service area to connect to the recycled water system and to use recycled water for landscape irrigation, where economically feasible.</p> | |

Table 1: Summary of Significant Impacts and Proposed Plan Goals and Policies that Reduce the Impact

| Impact | Proposed Goals and Policies that Reduce the Impact | Significance Level |
|--------|--|--------------------|
| | <p>P-PF-39: Allow the use of rainwater harvesting systems, consistent with regional permit requirements.</p> <p>P-PF-40: Restaurants and other uses that discharge grease into the wastewater treatment system shall be required to reduce impacts through individual or collective pretreatment facilities.</p> <p>P-PF-41: Design new streetscape and landscaped areas in the public right-of-way for stormwater management and the efficient use of water through:</p> <ul style="list-style-type: none"> - The installation of low-maintenance, drought-resistant plant palettes; - Use of large retention basins; - Use of low-flow irrigation systems; and/or - Use of bioswales and rain gardens in planting areas, curb extensions, and other green infrastructure. <p>P-PF-42: Require new development to incorporate low impact landscape design, such as natural drainage systems and groundwater recharge features, consistent with stormwater permit requirements.</p> <p><u>Urban Design Chapter</u></p> <p>DS-8: Traffic-calming measures, such as zebra striping for crosswalks, speed tables, and bulb-outs shall be employed along the bus loop north of I-580.</p> <p>DS-26: Buildings shall be oriented such that frontages and entrances are visible and accessible from the public right-of-way, on-site common areas, pedestrian pathways, parks, and/or plazas.</p> <p>DS-81: A variety of site furnishings shall be considered and incorporated into site plans to promote a sense of comfortable outdoor living space for the pedestrian realm. Examples of such features include but are not limited to seating, freestanding planters, ornamental trash/recycling containers, cigarette ash receptacles, drinking fountains including pet basins, fountains or other water features, bollards, kiosks for information or artwork, sculptures, bicycle racks, and/or newspaper racks.</p> <p><u>Environmental Resources and Conservation Chapter</u></p> <p>P-ENV-15: Ensure that all applicants proposing new development projects within the Planning Area require their contractors, as a condition of contract, to reduce construction-related GHG emissions through implementation of the Bay Area Air Quality Management District's recommended best practices, including but not limited to the following measures (based on BAAQMD's 2017 CEQA Guidelines):</p> | |

| Table 1: Summary of Significant Impacts and Proposed Plan Goals and Policies that Reduce the Impact | | |
|--|---|--|
| <i>Impact</i> | <i>Proposed Goals and Policies that Reduce the Impact</i> | <i>Significance Level</i> |
| | <ul style="list-style-type: none"> - Ensuring alternative fueled (e.g. biodiesel, electric) construction vehicles/equipment make up at least 15 percent of the fleet; - Ensuring at least 10 percent of building materials are local building materials (sourced from within 100 miles of the Planning Area); and - Recycling or reusing at least 50 percent of construction waste or demolition materials. | |
| 3.3-3 Implementation of the proposed Plan would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. | Refer to policies, design standards, and design guidelines identified under Impact 3.4-2. | Less than significant with mitigation |
| 3.4 Noise | | |
| 3.4-1 Implementation of the proposed Project could expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. | <p><i>Construction Noise</i> No policies are required to reduce this impact below a level of significance.</p> <p><i>Operation Traffic Noise</i> No proposed plan goals or policies would reduce this impact.</p> <p><i>Traffic Noise Compatibility for Future On-site Sensitive Land Uses</i> Land Use Chapter P-LU-19: Require that project applicants for future development in areas where noise is predicted to exceed compatibility standards prepare a detailed acoustical analysis of the noise environment and project characteristics. The analysis should determine whether noise insulation or protection features are required to achieve consistency with the applicable exterior and interior noise compatibility standards. The City shall review and approve the acoustical analyses for proposed projects prior to the issuance of building permits or as part of the planning entitlement process. Project applicants shall then be required to implement measures to ensure exterior and interior noise compatibility with the applicable standards, where feasible.</p> <p>Environmental Resources Chapter P-ENV-2: All residential building spaces must be improved or constructed in such a manner that noise levels do not exceed a maximum decibel rating of 45 dBA with windows closed. If windows must be closed 100% of the time to achieve this standard, a fresh air ventilation system must be utilized.</p> | Construction, less than significant; Operation, significant and unavoidable |

Table 1: Summary of Significant Impacts and Proposed Plan Goals and Policies that Reduce the Impact

| Impact | Proposed Goals and Policies that Reduce the Impact | Significance Level |
|---|--|------------------------------------|
| | <p>P-ENV-3: Require residential and other noise sensitive land uses within the 60 dBA or higher contours for freeway or major street noise to complete a noise analysis to verify that the interior noise standard can be met.</p> <p>P-ENV-4: Although not anticipated, any noise sensitive land uses within the 60 dBA contour for the airport shall incorporate adequate noise attenuation into the design and site planning of the project in order to achieve an interior noise level of not more than 45 dBA CNEL.</p> <p>P-ENV-5: Recreational facilities within new public parks and common open space areas on private development sites should be located and designed such that ambient noise levels do not exceed 70 dBA CNEL. This guideline does not apply to multi-use trails or private outdoor spaces within developments (refer to Chapter 2 for open space definitions).</p> <p><i>Train Noise from Valley Link</i> No policies are required to reduce this impact below a level of significance.</p> <p><i>Operational Noise from Noise-generating Stationary Equipment</i> Environmental Resources Chapter</p> <p>P-ENV-7: The following limits shall apply to noise-generating land uses, as measured from the property line: In residential areas of the Isabel Neighborhood, exterior noise levels may not exceed 65 dBA from 7:00a.m. to 12:00a.m or 60 dBA from 12:00a.m. to 7:00a.m. Along Main Street and in the office, commercial, or business park areas of the Isabel Neighborhood, exterior noise levels may not exceed 75 dBA from 7:00a.m. to 12:00a.m or 65 dBA from 12:00a.m. to 7:00a.m.</p> <p><i>Special Event Operational Noise</i> No policies are required to reduce this impact below a level of significance.</p> | |
| <p>3.4-2 Implementation of the proposed Project could expose persons to or generate excessive groundborne vibration or ground-borne noise levels.</p> | <p><i>Construction Vibration</i> Environmental Resources Chapter</p> <p>P-ENV-6: Reduce vibration impacts associated with construction activities by requiring construction contractors to implement measures to help reduce vibration levels at nearby sensitive receptors. Measures to reduce vibration levels include, but are not limited to, the following:</p> <ul style="list-style-type: none"> - Operating heavy equipment as far as practical from residential uses; | <p>Significant and unavoidable</p> |

Table 1: Summary of Significant Impacts and Proposed Plan Goals and Policies that Reduce the Impact

| Impact | Proposed Goals and Policies that Reduce the Impact | Significance Level |
|--|--|------------------------------------|
| | <ul style="list-style-type: none"> - Using smaller bulldozers (operating weight less than 20,000 pounds) when grading must occur within approximately 50 feet of residential uses or other vibration sensitive uses; and - Using quiet pile driving technology (such as predrilling piles, using sonic or vibratory pile drivers, or using more than one pile driver to shorten the total duration of pile driving). <p><i>Stationary Source Vibration</i> No policies are required to reduce this impact below a level of significance.</p> <p><i>Traffic Vibration</i> No policies are required to reduce this impact below a level of significance.</p> <p><i>Train Vibration</i> Land Use Chapter P-LU-20: Prohibit Category 1 facilities (according to the FTA guidelines, including research facilities with vibration-sensitive equipment) that use vibration-sensitive equipment that could be affected by Valley Link train vibration in areas located within 600 feet of the Valley Link tracks (Noting that 600 feet is the FTA screening distance for Category 1 land uses). These types of facilities shall be allowed within the Plan area in locations that are more than 600 feet from the Valley Link tracks.</p> | |
| <p>3.4-3 Implementation of the proposed Project could result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.</p> | <p><i>Traffic Noise</i> No proposed plan goals or policies would reduce this impact.</p> <p><i>Stationary Equipment Noise</i> Policy P-ENV-7 as listed under Impact 3.4-1 above.</p> | <p>Significant and unavoidable</p> |
| <p>3.4-4 Implementation of the proposed Project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project</p> | <p>No policies are required to reduce this impact below a level of significance.</p> | <p>Less than significant</p> |
| <p>3.4-5 The proposed Project would be located within an airport land use plan area, or, where such</p> | <p>No policies are required to reduce this impact below a level of significance.</p> | <p>Less than significant</p> |

Table 1: Summary of Significant Impacts and Proposed Plan Goals and Policies that Reduce the Impact

| <i>Impact</i> | <i>Proposed Goals and Policies that Reduce the Impact</i> | <i>Significance Level</i> |
|--|--|---------------------------|
| <p>a plan has not been adopted, within 2 miles of a public airport or public use airport, but would not expose people residing or working in the project area to excessive noise levels.</p> | | |
| <p>3.4-6 The proposed Project would not be located in the vicinity of a private airstrip or expose people residing or working in the project area to excessive noise levels.</p> | <p>No policies are required to reduce this impact below a level of significance.</p> | <p>No impact</p> |

Appendix B: Notice of Preparation and Responses

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NOTICE OF PREPARATION

Supplemental Environmental Impact Report Isabel Neighborhood Specific Plan Amendment City of Livermore

Date November 20, 2019
To Responsible Agencies, Interested Parties, and Organizations
Subject Notice of Preparation of a Supplemental Draft Environmental Impact Report for the Isabel Neighborhood Specific Plan Amendment

In 2018, the Isabel Neighborhood Specific Plan (INSP) was prepared to guide future development of the area surrounding the proposed San Francisco Bay Area Rapid Transit (BART) station in the Interstate 580 (I-580) median at Isabel Avenue. On May 14, 2018, the Livermore City Council adopted the INSP. The City Council also certified the EIR (SCH #2016042039) for the INSP. The resolution accompanying the adoption (Resolution #2018-067) stated, “The INSP is contingent upon the decision by the BART Board of Directors to extend conventional (full) BART service to Isabel Avenue (as opposed to another transit mode) ...” At its May 24, 2018 meeting, the BART Board voted not to advance BART to Livermore. Thus, while the INSP EIR remains certified and the INSP remains adopted, the INSP has not gone into effect.

The City of Livermore is now considering allowing INSP to proceed with a Valley Link Station. The Valley Link rail project is a fixed-rail service from the existing Dublin/Pleasanton BART Station to the approved Altamont Corridor Express (ACE) North Lathrop Station, with an ultimate Phase II extension to Stockton. Similar to the BART to Livermore Extension project, Valley Link proposes a rail station at Isabel Avenue. The Valley Link project is being led by the Tri-Valley-San Joaquin Valley Regional Rail Authority (Authority), established pursuant to AB 758 by the State legislature.

The City intends to retain all of the proposed base land use base designations, allowable densities/intensities, and urban design and other features of the INSP. The only proposed amendments to the INSP are removal of a Parking Overlay designation in a small area north of the station where parking structures as a result of BART parking overflow are an allowed use, and incorporating station design changes being made by the Authority. Because the INSP Amendment retains the land uses of the INSP, many of impacts of the INSP will be the same or similar to those previously evaluated and do not require further study. However, the City of Livermore has decided to prepare a Supplemental Environmental Impact Report (SEIR) to ascertain if impacts for certain focused topics may be different than previously evaluated because of the different proposed rail system.

The Planning Area for the INSP surrounds the proposed Isabel Valley Link station platform within the I-580 median, and is unchanged from the previously adopted INSP. Most of the Planning Area is north of the freeway. The entire Planning Area is within the City’s adopted Urban Growth Boundary (UGB).

Notice of Preparation
Isabel Neighborhood Specific Plan Amendment Supplemental EIR

In compliance with the California Environmental Quality Act (CEQA), the City of Livermore will be the lead agency and will prepare the SEIR for the INSP Amendment. Attached are the project description, location maps, and preliminary identification of the potential environmental issues to be explored. Topics proposed to be addressed in the SEIR are:

- Air Quality
- Energy, Greenhouse Gases, and Climate Change
- Noise
- Traffic and Transportation

Other topics will not be addressed in the SEIR. An Initial Study that provides the basis for the topics to be evaluated is attached following the Notice of Preparation (NOP).

Please note that this is an NOP for an amendment to the INSP. The Valley Link rail system is undergoing its own planning and environmental review processes separate from the INSP Amendment. Information on that project can be found at <https://www.valleylinkrail.com>.

Responses and Comments: The City requests your careful review and consideration of this notice, and it invites any and all input and comments from interested agencies, persons, and organizations regarding the preparation of the SEIR on the topics outlined above. Comments and responses to this notice must be in writing and submitted to the Lead Agency Contact through the close of business on December 20, 2019. Please indicate a contact person for your agency or organization.

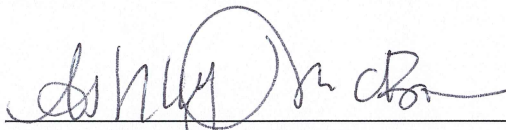
Public Review Period: November 20, 2019 to December 20, 2019

Lead Agency Contact:

Ashley McBride, Associate Planner
City of Livermore, Planning Division
1052 South Livermore Avenue
Livermore, CA 94550

Comments may also be faxed to Ms. McBride at 925-960-4459 or e-mailed to asmcbride@cityoflivermore.net.

If you have questions regarding this NOP, please contact Ashley McBride, Associate Planner, at (925) 960-4479.



Ashley McBride, Associate Planner
City of Livermore

11/20/19

Date

I Project Contact Information

| | |
|---|--|
| Project Title | Isabel Neighborhood Specific Plan Amendment |
| Lead Agency Name | City of Livermore |
| Contact Person | Ashley McBride, Associate Planner |
| Address | City of Livermore, Planning Division 1052 South Livermore Avenue Livermore, CA 94550 |
| Phone | (925) 960-4479 |
| Email | asmcbride@cityoflivermore.net |
| Project Sponsor Name and Address (same as Lead Agency) | City of Livermore 1052 South Livermore Avenue Livermore, CA 94550 |

2 Project Location

Regional Context

The City of Livermore is located in eastern Alameda County along the north and south sides of Interstate 580 (I-580), as shown in **Figure 1**. The City limits encompass approximately 25 square miles within the Livermore Valley; to the north, south, and east of the city are rolling hills, and to the west are the cities of Pleasanton and Dublin. The Livermore Valley, the San Ramon Valley to the north and the Amador Valley to the west together comprise the Tri-Valley, a major population and employment area within the nine-county Bay Area region.

Planning Area

The Planning Area for the Isabel Neighborhood Specific Plan (INSP) Amendment, shown in **Figure 2** is located in northwest Livermore about 2.5 miles from the Downtown, and is bisected by I-580, in an area developed primarily with industrial and commercial uses, as well as residential uses, Las Positas College, and several large undeveloped sites.

The Planning Area is bordered by Alameda County open space to the north, east, and west. Established detached single-family residential neighborhoods abut the Planning Area to the southeast, while the Livermore Municipal Airport and the Las Positas Golf Course abut the Planning Area to the southwest.

The north, northeast, and northwest edges of the Planning Area boundary are generally congruent with the Livermore City Limits and the North Livermore Urban Growth Boundary (UGB). About 25 acres in the southeast portion of the Planning Area are within the UGB but outside of the City limits.

The proposed Valley Link Isabel Station is located within the median of I-580 on the east side of the Isabel Avenue interchange. North Canyons Parkway-Portola Avenue is a major east-west street running through the northern part of the Planning Area, and Isabel Avenue (Route 84) is a major street/expressway running north-south through the Planning Area.

The Planning Area encompasses about 1,138 acres, or about 1.8 square miles. Streets and other rights of way total about 219 acres, resulting in approximately 919 acres of net developable area. About 257 acres, or 28 percent of the developable land, is currently vacant or underutilized, with about 150 acres of this within one-half mile of the proposed rail station. In addition to vacant/undeveloped land, another approximately 98 acres are considered opportune for reuse or intensification.

3 Project Description

Background

The INSP is a Specific Plan for the area surrounding the formerly-proposed San Francisco Bay Area Rapid Transit (BART) Station in Livermore. In 2018, the City of Livermore adopted the INSP and certified a Final Environmental Impact Report (EIR) (SCH #2016042039) on the project. The INSP includes land use designations to replace those defined in the General Plan. The INSP identified new residential areas both north and south of I-580, as well as a range of employment-generating uses, neighborhood-serving commercial, and parks and trails near the proposed Isabel BART station. The INSP EIR analyzed the potential environmental impacts associated with the adoption of the INSP, which was intended to guide future development of the area surrounding the future transportation hub in the I-580 median of Isabel Avenue. The 2018 INSP EIR analyzed the potential environmental effects associated with these changes; this EIR can be found at http://www.cityoflivermore.net/citygov/cdd/bart_to_livermore/inp_deir.htm.

The INSP's implementation (enabling permitted land uses, transportation features, open space, and other changes) was conditioned by the Livermore City Council on the extension of full Bay Area Rapid Transit (BART) service into the Isabel Neighborhood. In May 2018, the BART Board voted not to extend BART to Livermore. Thus, the INSP has not gone into effect.

Since BART's decision to not extend the system to Livermore, efforts have been underway to approve, fund, and build the Valley Link rail system, which will connect San Joaquin Valley to the Bay Area. The Valley Link rail project is a fixed-rail service from the existing Dublin/Pleasanton BART Station to the approved Altamont Corridor Express (ACE) North Lathrop Station, with a Phase II extension to Stockton. This effort is being led by the Tri-Valley-San Joaquin Valley Regional Rail Authority (Authority), established by AB 758, which was signed by the Governor in

October 2017. More information on the Valley Link rail project is available at <https://www.valleylinkrail.com>.

Upon implementation of the Valley Link rail system as currently proposed, the Valley Link Isabel Station will be part of the Valley Link transportation network extending from Stockton to the Dublin/Pleasanton BART station, with a direct connection to the ACE train. The Authority approved a project feasibility report for the Valley Link rail project and is currently working on the draft EIR for the project.

Project Description

The Project is enablement of implementation of the INSP with Valley Link Station rather than the BART to Livermore extension, as was previously conditioned by the City Council. In addition, the following changes to the previously-adopted INSP are proposed in the Amendment:

- Removal of the Parking Overlay applied to the commercial/mixed-use area north of the rail station. This Parking Overlay was envisioned in the INSP to suggest the location for an overflow BART parking structure shared with commercial uses should that have become necessary given that the previously proposed BART station was an end-of-the line station attracting a large number of drive-to patrons. In contrast, the Valley Link Isabel Station would be an intermediate station with different ridership estimates than BART. Valley Link would have a connection and terminus at Dublin/Pleasanton BART station.
- Replacement of the BART station with the Valley Link station, with slight shifts in locations of connections (pedestrian bridges over I-580) proposed to integrate the station with the Isabel Neighborhood. The design and environmental evaluation of the Valley Link system, including the Isabel Station and associated parking, is being led by the Authority. As envisioned by that team, the Valley Link station parking will be in the same location (immediately to the south of the station) as previously proposed by the BART station design team.

No other changes to the adopted INSP are proposed.

Project Goals

The overarching goal of the INSP is to create a vibrant, safe neighborhood that takes full advantage of the regional rail investment and supports the City's goals, including to provide a mix of housing, businesses, and community uses within walking distance of a regional rail system. In addition to a mix of land uses arranged to foster a transit-oriented neighborhood, the INSP Amendment will continue to support the development of transportation linkages to improve access and connectivity in the Planning Area. Together, the Isabel Valley Link station and development under the INSP Amendment will support regional and citywide goals related to livable neighborhoods, housing options, job opportunities, transit ridership, and open space protection.

The amended INSP, like the currently-adopted INSP, includes the following components:

- Land use designations;

- Minimum and maximum development capacities;
- Design standards and guidelines;
- Circulation and access improvements (i.e., streets, sidewalks and trails);
- Other improvements to public infrastructure (utilities, parks, etc.); and
- An implementation plan and financing strategy.

4 Supplemental Environmental Impact Report

The Supplemental EIR (SEIR) will fulfill CEQA requirements for environmental review of the INSP Amendment. Because the INSP Amendment retains the land uses, street layout, new open spaces and other features of the INSP, many of the impacts of the INSP will be the same or similar to those previously evaluated and do not require further study. However, some of the impacts—such as those relating to transportation—may differ because of the changed rail system. The City of Livermore intends to prepare a SEIR on the INSP Amendment focused on those topics for which additional environmental review is warranted.

The assessment of environmental impacts will utilize the most current guidelines for CEQA and for each issue area, including greenhouse gas emissions/global climate change. Community members can provide input at two different phases in the SEIR process: in response to this Notice of Preparation and to the Draft Supplemental EIR itself when that document is released.

5 Potential Environmental Impacts to be Considered

The City prepared an Initial Study to understand how changes in the INSP Amendment may impact the environment. This Initial Study is attached following this NOP, and shows that no new or more severe than already evaluated impacts would occur as a result of project changes for Land Use, Population, and Housing; Aesthetics; Biological Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Utilities and Service Systems; Public Services and Recreation; Geology and Soils; Cultural and Tribal Resources; and Agricultural Resources. Environmental factors below would potentially be affected by the proposed INSP Amendment, given the changed rail transportation system, and will be analyzed in the Supplemental EIR:

- Air Quality
- Energy, Greenhouse Gases and Climate Change
- Noise
- Traffic and Transportation

6 Scoping Meeting

A scoping meeting will be conducted on Tuesday, December 17, 2019 to collect oral comments from agencies and members of the public regarding the scope and content of the EIR in accordance with CEQA Section 21083.9.

EIR Scoping Meeting on the Isabel Neighborhood Specific Plan Amendment

Tuesday, December 17, 2019 | 7:00 p.m.

City Council Chambers

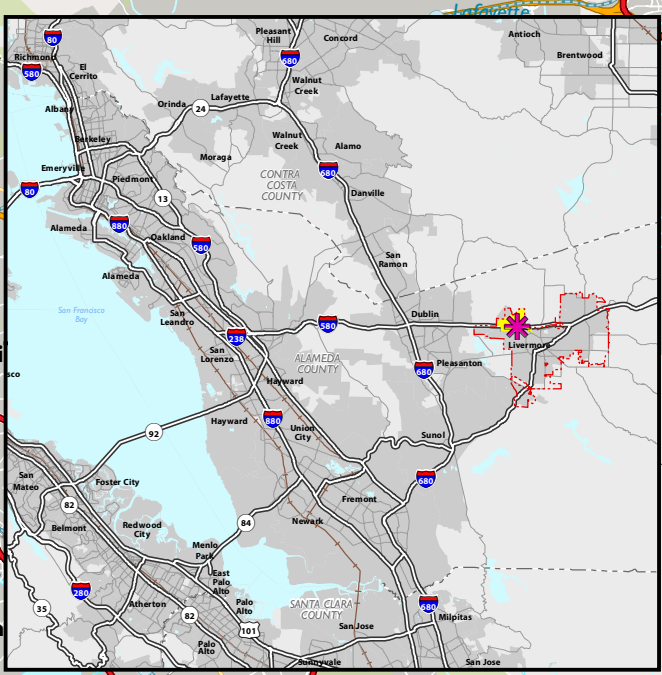
3575 Pacific Avenue














Livermore, CA 94550

For project information, please visit

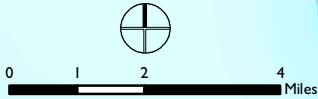
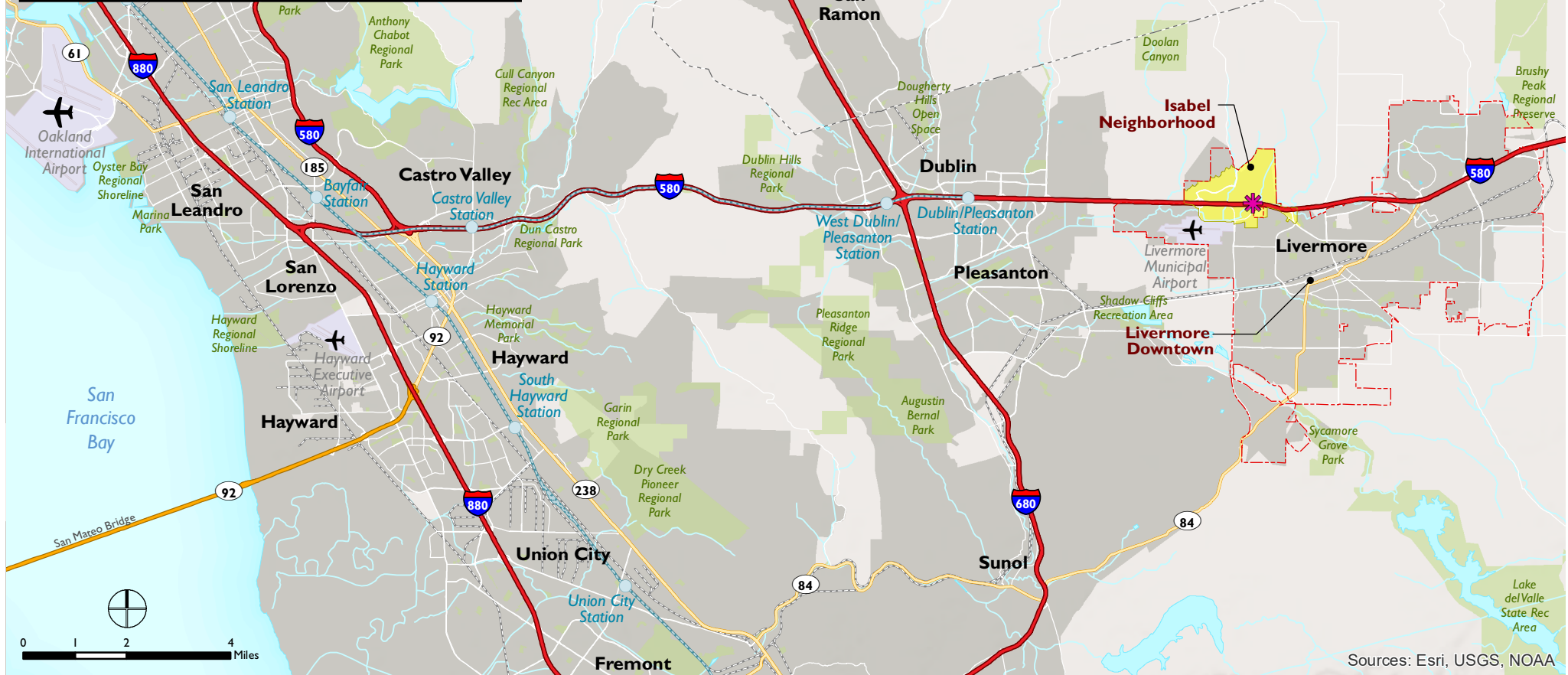
http://www.cityoflivermore.net/citygov/cdd/bart_to_livermore/inp_deir.htm

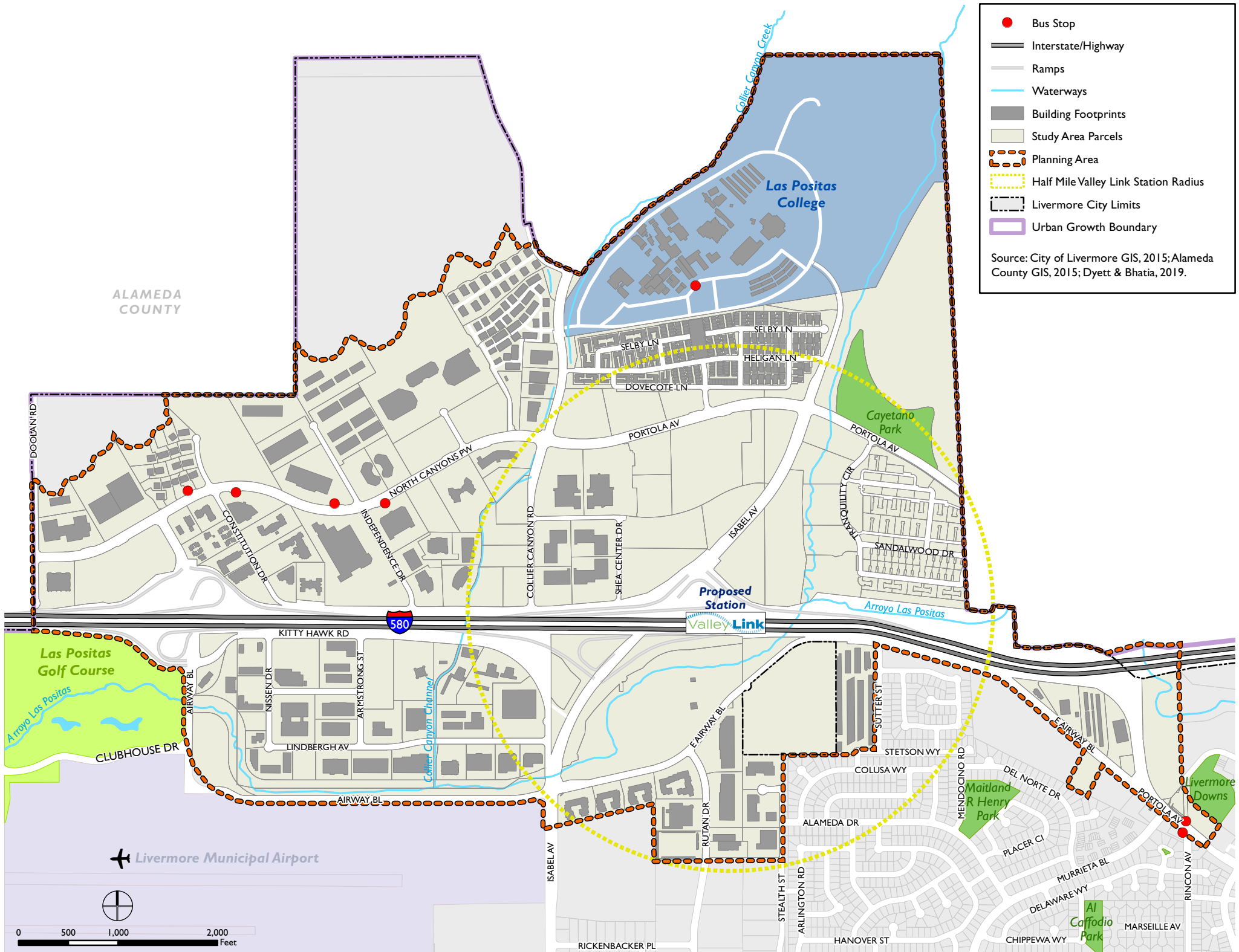
Please contact Ashley McBride, Associate Planner at (925) 960-4479 or asmcbride@cityoflivermore.net with any questions regarding the scoping meeting.



-  Proposed Isabel Avenue Valley Link Station
-  Existing BART Stations
-  Bay Area Rapid Transit (BART)
-  Interstates
-  Major Highways
-  Major Roads
-  Railroads
-  Waterways
-  Planning Area
-  Livermore City Limits
-  Parks/Regional Open Space
-  Urban Areas
-  Counties

Source: City of Livermore GIS, 2014; ESRI, 2014; Alameda County GIS, 2015; Dyett & Bhatia, 2019.





- Bus Stop
- Interstate/Highway
- Ramps
- Waterways
- Building Footprints
- Study Area Parcels
- Planning Area
- Half Mile Valley Link Station Radius
- Livermore City Limits
- Urban Growth Boundary

Source: City of Livermore GIS, 2015; Alameda County GIS, 2015; Dyett & Bhatia, 2019.

Las Positas Golf Course

Livermore Municipal Airport

0 500 1,000 2,000 Feet

Isabel Neighborhood Specific Plan Amendment Initial Study

November 2019

Prepared for the City of



Prepared by

DYETT & BHATIA
Urban and Regional Planners

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INTRODUCTION AND BACKGROUND

In 2018, the Isabel Neighborhood Specific Plan (INSP) was prepared to guide future development of the area surrounding the San Francisco Bay Area Rapid Transit (BART) station in the Interstate 580 (I-580) median at Isabel Avenue. The INSP included land use designations and zoning to replace those defined in the General Plan and Development Code, respectively. The INSP defined the Isabel Neighborhood, or Planning Area, and identified new residential areas both north and south of I-580, a range of employment-generating uses near the proposed Isabel Avenue BART station, neighborhood parks, and associated bicycle and trail improvements. A Program-level Environmental Impact Report (EIR) analyzed the potential environmental impacts associated with the adoption of the INSP.

The Livermore City Council adopted the INSP and certified the Final EIR on May 14, 2018. However, implementation of the INSP was conditioned on the extension of conventional, or full, BART service to the Isabel Neighborhood. On May 24, 2018, the BART Board of Directors voted not to advance full BART to Livermore. The BART Board also voted to not advance the alternatives analyzed in the BART to Livermore Extension EIR. Thus, the INSP did not go into effect. However, the 2018 INSP Program EIR remains certified.

Efforts are now underway to connect San Joaquin Valley to the Tri-Valley with the Valley Link rail project, which includes a rail station at Isabel Avenue at the same location as previously proposed for the BART to Livermore extension. The City of Livermore is currently preparing updates to reflect the change in transit systems, referred to as the INSP Amendment. The INSP Amendment retains the land use designations, densities/intensities, proposed streets/street system, and other features of the previously adopted INSP.

This Initial Study (IS) has been prepared by the City of Livermore in accordance with the California Environmental Quality Act (CEQA) to determine environmental topics that require additional environmental review given the changes in rail technology surrounding the Isabel Neighborhood. Because the INSP Amendment retains the land uses of the original INSP, many of impacts of the original INSP will be the same or similar to those previously evaluated and do not require further study. However, some of the impacts—such as those relating to transportation—may differ because of the change in rail technology. The City of Livermore intends to prepare a Supplemental Environmental Impact Report (SEIR) for the INSP Amendment focused on those topics for which additional environmental review is warranted. The Valley Link rail system is undergoing its own environmental review separate from the INSP Amendment.

Pursuant to Section 15367 of the CEQA Guidelines, the City of Livermore is the Lead Agency for purposes of environmental review under the California Environmental Quality Act (CEQA). “Lead agency” is defined by Section 21067 of CEQA as “the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment.”

Lead Agency Contact:

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This section explains the background and purpose of the IS and establishes its context and scope. This IS is organized into the following sections:

- A. Project Background and Prior CEQA Analyses – Describes the history of the INSP;
- B. Project Description – Describes the project location, existing conditions, and project characteristics for the INSP;
- C. Environmental Analysis – Compares the environmental analysis conducted in the 2018 EIR to the environmental impacts anticipated in the INSP and determines whether additional environmental analysis is required in the SEIR. This section includes the Mandatory Findings of Significance.
- D. References
- E. List of Preparers

A. PROJECT BACKGROUND AND PRIOR CEQA ANALYSES

In 2018, the Isabel Neighborhood Specific Plan (INSP) was prepared to guide future development of the area surrounding the San Francisco Bay Area Rapid Transit (BART) station in the Interstate 580 (I-580) median at Isabel Avenue. The INSP included land use designations and zoning to replace those defined in the General Plan and Development Code, respectively. The INSP defined the Isabel Neighborhood, or Planning Area, and identified new residential areas both north and south of I-580, a range of employment-generating uses near the proposed Isabel Avenue BART station, neighborhood parks, and associated bicycle and trail improvements. A Program-level Environmental Impact Report (EIR) analyzed the potential environmental impacts associated with the adoption of the INSP.

Additionally, BART conducted a project-level EIR titled BART to Livermore Extension Project (SCH #2012082104). This report evaluated the construction of the BART rail extension, including the BART station at Isabel Avenue, associated parking, storage and maintenance facilities, and the operation of new BART and bus service. The BART to Livermore Extension project also included conceptual plans for alternatives to the proposed project: a No Project Alternative, a Diesel Municipal Unit (DMU) or Electric Multiple Unit (EMU) Alternative, an Express Bus/Bus Rapid Transit (BRT) Alternative, and an Enhanced Bus Alternative. The Draft EIR was released for public review on July 31, 2017, and the Final Environmental Impact Report was released on May 11, 2018.

On May 14, 2018 the City Council approved the INSP contingent on the BART Board of Directors approval of an extension of conventional, or full, BART to Isabel Avenue. The City Council also certified the 2018 EIR (SCH #2016042039) for the project. At its May 24, 2018 Board meeting, the BART Board voted to certify the BART to Livermore Extension Project Final EIR, but to not advance the Proposed Conventional BART Extension to Livermore. The Board also voted to not advance the DMU/EMU Alternative, Express Bus/BRT Alternative, or the Enhanced Bus Alternative. Thus, the INSP did not go into effect. However, the 2018 INSP EIR remains certified.

The 2018 INSP EIR addressed the following environmental impact topics:

- Land Use, Population, and Housing
- Traffic and Transportation
- Air Quality
- Energy, Greenhouse Gases, and Climate Change
- Aesthetics
- Noise
- Biological Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Utilities and Service Systems
- Public Services and Recreation
- Geology and Soils
- Cultural and Tribal Resources
- Agricultural Resources

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Since the BART Board's decision to not extend the system to Livermore, efforts have been underway on the Valley Link rail system, which will connect San Joaquin Valley to the Tri-Valley. This effort is being led by the Tri-Valley San Joaquin Valley Regional Rail Authority (Authority), established by Assembly Bill (AB) 758, which was signed by Governor Jerry Brown in October 2017. Valley Link is proposed as a fixed-rail service from the existing Dublin/Pleasanton BART Station to the approved Altamont Corridor Express (ACE) North Lathrop Station. The Valley Link rail system is undergoing its own environmental review separate from the INSP Amendment. More information on the Valley Link rail project is available at <https://www.valleylinkrail.com>.

The City of Livermore is currently amending the INSP to replace the BART station at Isabel Avenue with a Valley Link station at Isabel Avenue.

B. PROJECT DESCRIPTION

Project Location

The City of Livermore is located in eastern Alameda County along the north and south sides of I-580. The City limits encompass approximately 25 square miles within the Livermore Valley; to the north, south, and east of Livermore are rolling hills, and to the west are the cities of Pleasanton and Dublin. The Livermore Valley, the San Ramon Valley to the north, and the Amador Valley to the west together comprise the Tri-Valley, a major population and employment area within the nine-county Bay Area region.

The Planning Area covers approximately 1,138 acres, or about 7.1 percent of the City. It is located in northwest Livermore about 2.5 miles from the Downtown. The northern edges of the Planning Area boundary are generally congruent with the Livermore City Limits and the Livermore Urban Growth Boundary (UGB). Areas that are outside of the City Limits include a 21-acre unincorporated County island in the southeast corner of the Planning Area. This area is within the UGB but outside of the City Limits.

The Planning Area is bisected by I-580. North Canyons Parkway-Portola Avenue, a major east-west street, runs through the northern part of the Planning Area. Isabel Avenue (State Route 84) runs north-south through the Planning Area as a state highway south of the I-580 interchange and a major city street north of the I-580 interchange. The proposed Isabel Valley Link station is located within the I-580 median on the east side of the Isabel Avenue interchange.

While the INSP Amendment addresses the entire 1,138 acres of the Planning Area, a majority of the proposed changes, analysis, and recommendations focus on the area within the one-half mile radius of the proposed Isabel Valley Link station location.

Existing Conditions

The Planning Area encompasses about 1,138 acres. Streets and other rights of way total about 219 acres, resulting in approximately 919 acres of net developable area. About 257 acres, or 28 percent of the developable land, is current vacant or underutilized, with about 150 acres of this within one-half mile of the proposed rail station. In addition to vacant/undeveloped land, another approximately 98 acres are opportune for reuse or intensification.

Project Characteristics

The City of Livermore is now considering allowing INSP to be implemented contingent on the Valley Link rail system. In addition, the following changes to the previously-adopted INSP are proposed in the Amendment:

- Removal of the Parking Overlay applied to the commercial/mixed-use area north of the rail station. This Parking Overlay was envisioned in the INSP to suggest a location for an overflow BART parking structure shared with commercial uses should that have become necessary given that the previously proposed BART station was an end-

of-the line station attracting a large number of drive-to patrons. In contrast, the Valley Link Isabel station would be an intermediate station with different ridership estimates than BART. Valley Link would have a connection and terminus at Dublin/Pleasanton BART station.

- Acknowledgement of replacement of the BART station with the Valley Link station, with slight shifts in locations of connections (pedestrian bridges over I-580) proposed to integrate the station with the Isabel Neighborhood. The design and environmental evaluation of the Valley Link system, including the Isabel station and associated parking, is being led by the Authority. As envisioned by that team, the Valley Link station parking will be in the same location (immediately to the south of the station) as previously proposed by the BART station design team.

No other changes to the adopted INSP are proposed.

C. ENVIRONMENTAL ANALYSIS

Introduction and Summary of Findings

This Initial Study is intended to serve as the environmental documentation for the City of Livermore’s proposed INSP Amendment.

An evaluation of the proposed project is provided in the checklists and impact assessments below to document the determination that no new or more severe significant impacts would occur as a result of project changes for the following topics: Land Use, Population, and Housing; Aesthetics; Biological Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Utilities and Service Systems; Public Services and Recreation; Geology and Soils; Cultural and Tribal Resources; and Agricultural Resources. Impacts for the following topics may be different than those previously evaluated given the changed rail transportation system, and will be evaluated in the Supplemental EIR:

- Air Quality
- Energy, Greenhouse Gases, and Climate Change
- Noise
- Traffic and Transportation

Impacts from the proposed INSP Amendment are evaluated based on the impact criteria in the 2018 Final EIR.

Evaluation of Environmental Impacts

1. Land Use, Population, and Housing

| Land Use, Population, and Housing | Where Impact Was Analyzed in 2018 INSP Final EIR (FEIR) | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| Would the project: | | | | | |
| a. Physically divide an established community; | 2018 FEIR, Impact 3.1-1 | No | No | No | N/A |
| b. Conflict with an applicable land use plan, policy, or regulation of an agency with | 2018 FEIR, Impact 3.1-2 | No | No | No | N/A |

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| Land Use, Population, and Housing Would the project: | Where Impact Was Analyzed in 2018 INSP Final EIR (FEIR) | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal project, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; | | | | | |
| c. 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); or | 2018 FEIR, Impact 3.1-3 | No | No | No | N/A |
| d. Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere. | 2018 FEIR, Impact 3.1-4 | No | No | No | N/A |

Division of Existing Community and Compatibility with Existing Land Use Plans (Criteria 1a, 1b)

The 2018 EIR determined that the adoption and implementation of the INSP would have a less-than-significant impact on the continuity of established communities. As described in the 2018 EIR, the INSP's goals and policies, along with its land use diagram and development standards for each land use designation, were designed to promote compatibility with existing uses. The INSP also includes a fine-grained street grid, transportation improvements, and policies for multi-modal accessibility, all of which would enhance connectivity within the Planning Area and improve linkages with surrounding areas. The INSP does not allow for development of new neighborhoods distant or divided from established communities. By creating a high-intensity neighborhood with a variety of land uses near a Valley Link rail station, the project would help implement existing General Plan goals to promote multi-modal transportation and create high-intensity mixed-use development near transit. Additionally, the INSP's emphasis on mixed-use, compact development and pedestrian- and bicycle-friendly streets within the Isabel Priority Development Area (PDA) and the opportunities to attract new jobs, retail, and housing are compatible with the goals of Plan Bay Area and SB 375.

Proposed improvements to existing roadways and infrastructure would not introduce new physical divisions. The proposed new streets would help provide multi-modal connectivity between and within new residential communities, rather than divide existing communities.

The INSP Amendment would continue replace the existing General Plan and zoning standards in the Planning Area. In addition, the General Plan and Development Code would still be amended to accommodate development resulting from implementing the INSP, thereby fulfilling General Plan goals. The INSP Amendment would not conflict with other applicable agencies' plans, policies, or regulations.

Like the INSP, the INSP Amendment is predicated upon the installation of transit service in the median of I-580. The Valley Link rail system itself would not introduce a new physical division, as it is in the median of a freeway. Furthermore, the Valley Link rail project includes a pedestrian bridge across I-580 that would provide a safe pedestrian crossing of the freeway and strengthen the connection between the two sides of the freeway. The INSP Amendment eliminates the parking overlay that was previously intended to accommodate the parking demand associated with the installation of the BART station. Elimination of this parking overlay is not anticipated to be associated with any new detrimental impacts on community continuity or compatibility with applicable land use plans. The INSP Amendment contains no other land use changes, and thus will not lead to any differences in environmental impact compared to that identified in the 2018 EIR.

Population Growth and Displacement (Criteria 1c, d)

The 2018 EIR determined that the adoption and implementation of the INSP would have a less-than-significant impact on local population growth and associated displacement.

Analysis in the 2018 EIR demonstrates that implementation of the INSP would result in approximately 4,095 new housing units. This level of development would result in approximately 9,800 new residents, which would represent an 11 percent increase in the city's population over the 2016 estimate of 89,115 residents. The addition of approximately

9,800 new residents would represent a substantial share of planned growth in the city. However, the direct inducement of population growth through new housing and businesses is not a significant impact because this level of development is within the overall General Plan capacity and would be paced as part of the City’s growth management program and the INSP’s phasing program.

As the majority of new development resulting from the INSP would be concentrated on vacant sites in and around the proposed Isabel Valley Link station or would consist of the re-use of existing non-residential development, the 2018 EIR concludes that the INSP would not result in the direct displacement of any housing or residents.

None of the changes included in the INSP Amendment are anticipated to result in a difference in the final population size of the Isabel Neighborhood at buildout, compared to what was analyzed in the 2018 EIR. Likewise, the INSP Amendment does not contain any changes regarding the location of future housing units. Therefore, implementation of the changes contained within the INSP Amendment is not anticipated to result in a significant difference in environmental impact, compared to that identified in the 2018 EIR.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, as well as the revisions contained within the INSP Amendment, implementation of the INSP Amendment would not substantially increase the severity of impacts identified, nor would it result in new significant impacts related to land use, population, or housing that were not identified in the 2018 EIR. The 2018 EIR did not identify any mitigation measures related to land use, population, and housing, and none would be required for the INSP Amendment. Since the original approval of the INSP, no new information has emerged, nor have environmental conditions changed, such that new environmental impacts would be expected to emerge or previously identified impacts would become more severe.

2. Traffic and Transportation

| Traffic and Transportation Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| a. Conflict with applicable plan, ordinance or policy establishing measures of | 2018 FEIR, Impact 3.2-1 | To be evaluated in Supplemental EIR | | | |

| Traffic and Transportation Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit; | | | | | |
| b. Conflict with an applicable congestion management program, including, but not limited to level of service standards established by the county congestion management agency for designated roads or highways; | 2018 FEIR, Impact 3.2-2 | To be evaluated in Supplemental EIR | | | |
| c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in | 2018 FEIR, Impact 3.2-3 | No | No | No | N/A |

| Traffic and Transportation Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| location that results in substantial safety risks; | | | | | |
| d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); | 2018 FEIR, Impact 3.2-4 | No | No | No | N/A |
| e. Result in adequate emergency access; or | 2018 FEIR, Impact 3.2-5 | No | No | No | N/A |
| f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. | 2018 FEIR, Impact 3.2-6 | No | No | No | N/A |

Circulation and Traffic Congestion (Criteria 2a, 2b)

The 2018 EIR considered possible impacts of the INSP on circulation and congestion under a variety of development scenarios and timescales. Traffic impacts on freeway segments—including freeway general purpose lane segments and freeway express lane segments—and arterial segments were considered. The 2018 EIR ultimately concluded that impacts would be significant and unavoidable.

Under both the 2025 Near Term Plus Project condition and 2040 Cumulative Plus Project condition, the 2018 EIR demonstrated that intersection operations would degrade considerably compared to the corresponding No Project Condition, with unacceptable operations occurring at the intersection of North Livermore Avenue & Portola Avenue (#3) during the weekday AM and PM peak hours. The 2018 EIR states that, while adding additional left turn lanes to the impacted intersection may alleviate some of the congestion-related impacts associated with the INSP, road widening is not a valid mitigation measure because of roadway right-of-way constraints on North Livermore Avenue and Portola Avenue.

Under the 2025 Near Term Plus Project condition, the 2018 EIR determined that no significant traffic impacts would occur on general purpose freeway segments. Under the 2040 Cumulative Plus Project condition, the 2018 EIR determined that significant traffic impacts would occur on three general purpose freeway segments: North Livermore Avenue to Isabel Avenue, Springtown Boulevard/ First Street to North Livermore Avenue, and Vasco Road to Springtown Boulevard/ First Street.

On Freeway Express Lane Segments, the 2018 EIR determined that under the 2025 Near Term Plus Project Condition, no significant circulation impacts were expected to occur. This was also found to be true under the 2040 Cumulative Plus Project condition, assuming that the HOV policy is changed such that only vehicles transported three or more people are permitted to use the HOV lane.

Arterial segment forecasts were extracted from the modified version of Alameda CTC's Countywide Travel Demand Model to generate future-year peak-hour volumes. These volumes are used to calculate volume-to-capacity ratios and determine impacts. The analysis relied on the Highway Capacity Manual 2010 (HCM) arterial capacity methodology for determining level of service. Under the 2025 Near Term Condition, the 2018 EIR determined that no arterial segments would experience significant circulation or congestion impacts. Under the 2040 Cumulative Plus Project condition, two arterial segments were predicted to experience significant traffic or circulation impacts: Airway Boulevard, west of Isabel Avenue; and Isabel Avenue south of Stanley Boulevard.

Additionally, the 2018 EIR concluded that no feasible mitigation measures exist to alleviate traffic impacts on freeway and arterial segments, as the analysis either already assumes that typical mitigation measures such as adding or modifying ramp metering, adding express lanes, and road widening will occur over the lifetime of the project, or assumes that physical constraints and concern regarding environmental impacts prevent the construction of capacity enhancements.

Modifications introduced in the INSP Amendment constitute a significant enough departure from the INSP that previously unidentified impacts to circulation and traffic congestion may result, or the significance of previously identified impacts may increase. Further analysis pertaining to traffic congestion and circulation impacts in the SEIR is thus required.

Result in a Change in Air Traffic Patterns (Criterion 2c)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on air traffic patterns would be less than significant. The Livermore Municipal Airport (LVK) is located just southwest of the Planning Area. As such, the INSP would increase the number of residents exposed to overflight noise and may increase noise complaints. Given the potential that some pilots may avoid flying over new residential development, the 2018 EIR concludes that implementation of the INSP could indirectly change typical flight patterns. However, the take-offs and landing approaches would not change, and the INSP does not propose any elements that would directly affect the established flight patterns for LVK. In addition, the INSP is generally consistent with the Airport Land Use Compatibility Plan and federal aviation regulations on height and safety.

None of the changes contained in the INSP Amendment would change the relationship between new development and the Livermore Municipal Airport, compared to that analyzed in the 2018 EIR. Therefore, implementation of the INSP Amendment is not anticipated to result in any significantly different environmental impact, compared to that identified in the 2018 EIR.

Hazards and Emergency Access (Criteria 2d, 2e)

The 2018 EIR determined that the effect of the adoption and implementation of the INSP on exposure to hazardous design features would be less than significant. New roadways and traffic signals would be designed to City Design standards, including those that account for emergency access, and therefore should not substantially increase hazards or result in adequate emergency access.

None of the changes contained in the INSP Amendment are associated with changes in emergency access, or hazard exposure. Therefore, implementation of the INSP Amendment is not anticipated to be associated with any change in environmental impact, compared to that identified in the 2018 EIR.

Conflict with Adopted Policies, Plans, or Programs Regarding Public Transit, Bicycle, or Pedestrian Facilities, or Otherwise Decrease the Performance or Safety of Such Facilities (Criterion 2f)

The 2018 EIR determined that the adoption and implementation of the INSP would have no impact on the performance or safety of public transit, bicycle, or pedestrian facilities. The INSP emphasizes multimodal circulation, accommodating vehicular through traffic but at a slow pace that substantially improves safety for pedestrians and cyclists compared to traditional higher-speed roadway systems. Primary pedestrian street crossings on major streets would occur at signals, which include specific provisions to minimize conflicts between vehicular traffic and non-motorized transportation users.

The INSP Amendment contains no changes that would impact the performance or safety of public transit, bicycle, or pedestrian facilities, compared to what was analyzed in the 2018 EIR. Therefore, implementation of the INSP Amendment is not anticipated to be associated with any change in environmental impact, compared to that identified in the 2018 EIR.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, as well as the revisions contained within the INSP Amendment, implementation of the INSP Amendment may substantially increase the impacts identified, or result in new significant impacts, pertaining to circulation and traffic congestion. Therefore, the SEIR will include further analysis pertaining to traffic congestion and circulation impacts. Implementation of the INSP Amendment would not substantially increase the severity of impacts identified, nor would it result in new significant impacts related to transportation safety, or air traffic compatibility that were not identified in the 2018 EIR; since the approval of the INSP, no new information has emerged, nor have environmental conditions changed such that, new environmental impacts pertaining to these impact categories would be expected to emerge or previously identified impacts would become more severe.

3. Air Quality

| Air Quality Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| a. Conflict with or obstruct implementation of the applicable air quality plan; | 2018 FEIR, Impact 3.3-1 | To be evaluated in the Supplemental EIR | | | |
| b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction; | 2018 FEIR, Impact 3.3-2 | To be evaluated in the Supplemental EIR | | | |
| c. Violate an air quality standard and contribute significantly to an existing or projected air quality violation during operation; | 2018 FEIR, Impact 3.3-3 | To be evaluated in the Supplemental EIR | | | |
| d. Result in a cumulatively considerable net increase for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors); | 2018 FEIR, Impact 3.3-4 | To be evaluated in the Supplemental EIR | | | |

| Air Quality Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| e. Expose sensitive receptors to substantial pollutant concentrations from new sources of toxic air contaminants; | 2018 FEIR, Impact 3.3-5 | To be evaluated in the Supplemental EIR | | | |
| f. Expose sensitive receptors to substantial carbon monoxide concentrations from increased traffic; or | 2018 FEIR, Impact 3.3-6 | To be evaluated in the Supplemental EIR | | | |
| g. Create objectionable odors affecting a substantial number of people. | 2018 FEIR, Impact 3.3-7 | No | No | No | N/A |

Conflict with or Obstruct Implementation of the Applicable Air Quality Plan (Criterion 3a)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on the applicable air quality plan would be less than significant.

The INSP was written to support regional goals of integrating transit and land use policies to create opportunities for transit-oriented development around the proposed BART station and other transit nodes throughout Livermore; alleviate traffic congestion on I-580; improve air quality; and reduce GHGs and other emissions associated with automobile use. Through implementation of specific policies in line with these objectives and goals, the INSP would reduce emissions and support regional attainment of the California Ambient Air Quality Standards and National Ambient Air Quality Standards.

According to the 2018 EIR, implementation of the INSP would result in lower per capita emissions in the Planning Area in 2040 than forecasted for the Planning Area under the 2017

Clean Air Plan without the INSP, as the 2017 Clean Air Plan would not have assumed the sustainability policies and transit-oriented development patterns that would be implemented under the INSP. Reductions in per capita emissions would help the region attain the ambient air quality standards. Additionally, the INSP includes policies and design standards that incorporate the primary purpose of each control measure from the 2017 Clean Air Plan, and would not cause the disruption, delay, or otherwise hinder implementation of any applicable control measure from the 2017 Clean Air Plan.

Modifications introduced in the INSP Amendment constitute a significant enough departure from the INSP that previously unidentified impacts pertaining air quality plan compatibility may result, or the significance of previously identified impacts may increase. Further analysis pertaining to air quality plan compatibility in the SEIR is thus required.

Air Quality Standards During Construction (Criterion 3b)

The 2018 EIR determined that the impact associated with the adoption and implementation of the INSP would be less than significant with mitigation.

As stated in the 2018 EIR, construction associated with new land use developments under the INSP would result in the temporary generation of ozone precursors (reactive organic gases [ROG] and oxides of nitrogen[NO_x]), Carbon Monoxide (CO), and particulate matter emissions (PM₁₀ and PM_{2.5}) that could result in short-term impacts on ambient air quality in the Planning Area. The 2018 EIR determined that construction occurring under the INSP could result in criteria pollutant emissions in excess of the Bay Area Air Quality Management District's (BAAQMD's) project-level and criteria pollutant thresholds. As such, construction emissions generated in the Planning Area by implementation of the INSP would result in a potentially significant impact on air quality.

As such, Mitigation Measures MM-AQ-1 and MM-AQ-2, which, as described in the 2018 EIR, require off-road equipment to utilize renewable diesel and for all on-road diesel trucks used for construction activities to have 2010 model year or newer engines, respectively, are recommended to reduce NO_x and other criteria pollutant levels associated with construction activities occurring under the Plan. Pursuant to Mitigation Measure MM-AQ-3, the City would be required to track all land use development construction activities occurring in the Planning Area, assess and determine the estimated total emissions for all construction activities that would be concurrently ongoing, and determine the mitigation fees for each development project's applicant to pay on a pro rata basis to BAAQMD to offset their pollutant emissions as necessary such that BAAQMD's daily pollutant thresholds would not be exceeded.

Projects developed under the INSP Amendment would be required to adhere to the mitigation measures described above. However, modifications introduced in the INSP Amendment constitute a significant enough departure from the INSP that previously unidentified impacts pertaining construction-related air quality may result, or the significance of previously identified impacts may increase. Further analysis pertaining to construction-related air quality impacts in the SEIR is thus required.

Air Quality Violations, Net Increases in Criteria Pollutants, Toxic Air Contaminants (Criteria 3c-e)

The 2018 EIR determined that the impact associated with the adoption and implementation of the INSP on existing or projected air quality violations, cumulative criteria air pollutants, and toxic air contaminants would be significant and unavoidable.

The 2018 EIR determined that, under the INSP, mobile sources would be a primary contributor to ROG, NO_x, CO, PM₁₀, and PM_{2.5} emissions, with all operational PM₁₀ and PM_{2.5} emissions exceeding BAAQMD's project-level thresholds. Significant sources of PM₁₀ and PM_{2.5} include vehicle travel; as total Vehicle Miles Travelled (VMT) would increase under the INSP, emissions from on-road travel by vehicles would increase as well. Because the INSP's mobile-source emissions are generated from passenger vehicles that are not regulated at the City level, there are no feasible mitigation measures available that can be implemented by the City to reduce these PM₁₀ and PM_{2.5} emissions.

While the INSP would reduce the severity of growth-oriented criteria pollutants by locating uses in proximity to transit (i.e., the future Isabel Valley Link station), fostering bicycle and pedestrian infrastructure, and supporting sustainable land use patterns, including mixed-use design and increased density, individual projects may still generate emissions in excess of BAAQMD's project-level thresholds. Accordingly, the 2018 EIR conservatively identifies operational criteria pollutant emissions associated with development under the INSP as significant.

As the INSP includes the installation of a major transit station to be located in the I-580 median at Isabel Avenue, and is expected to result in an increase in vehicle traffic, the INSP would bring future land uses and associated sensitive receptors in proximity to roadways that are major sources of Toxic Air Contaminants (TAC) emissions while simultaneously generating new vehicle-related TAC emissions. As several roadways within the Planning Area currently exceed the BAAQMD's project-level cancer risk threshold, the future traffic levels from the INSP would further increase these risks and exacerbate cumulative health risks. Consequently, both new and existing sensitive receptors in the Planning Area would be exposed to increased TAC exposure from roadways as a result of the INSP. Development under the INSP may also result in the installation or operation of new stationary sources of TACs.

As stated in the 2018 EIR, construction activities of future development projects under the INSP would also generate Diesel Particulate Matter (DPM) that could expose adjacent receptors to significant health risks. As there may be instances where project-specific conditions preclude the reduction of health risks below adopted thresholds, the 2018 EIR classifies these risks as significant and unavoidable.

The INSP includes policies that would reduce the exposure of new sensitive receptors to existing sources of TAC emissions and reduce the potential for new TAC emissions to exacerbate existing exposure in the Planning Area for existing and potential new receptors. For example, Plan Policies P-ENV-9 and P-ENV-10 outline requirements for projects within certain distances of existing stationary and roadway sources to install indoor air quality

equipment, such as enhanced air filters or equivalent mechanisms, to minimize health risks to future residents. Policy P-ENV-11 would require new large commercial developments to prepare loading plans aimed to minimize truck idling and reduce diesel particulate emissions related to truck loading on nearby sensitive receptors. All new stationary sources would be subject to the permit authority of the BAAQMD. The BAAQMD will not issue a permit for a new permitted source that results in an operational cancer risk in excess of 10.0 cases per million or a hazard index of in excess of 1.0. Consequently, regulatory mechanisms exist that would ensure that cancer and health hazard impacts from stationary sources developed under the INSP would be less than significant but may not be sufficient to address PM2.5 impacts if the source results in significant PM2.5 concentrations.

Implementation of the changes contained within the INSP Amendment is not anticipated to result in any significant changes in the location of emissions-generating land uses, or their position relative to sensitive receptors. The INSP Amendment does not change any policies contained within the INSP for reducing emissions or protecting air quality. However, modifications introduced in the INSP Amendment constitute a significant enough departure from the INSP that previously unidentified impacts pertaining to construction-related emissions may result, or the significance of previously identified impacts may increase. Further analysis pertaining to construction-related air pollutant emissions in the SEIR is thus required.

Expose Sensitive Receptors to Substantial Carbon Monoxide Pollutant Concentrations from Increased Traffic (Criterion 3f)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on the exposure of sensitive receptors to carbon monoxide would be less than significant.

As discussed in the 2018 EIR, traffic data provided by the project engineers were used to evaluate CO concentrations at the intersections of Isabel Avenue/Airway Boulevard, Livermore Avenue/Portola Avenue, and Isabel Avenue/Jack London Boulevard. These intersections were selected because they have the highest traffic volumes and vehicle delay, and therefore the greatest potential to result in elevated CO concentrations. It was determined that traffic volumes under the INSP would not result in CO concentrations in excess of the State or federal 1- or 8-hour CO standards.

Modifications introduced in the INSP Amendment constitute a significant enough departure from the INSP that previously unidentified impacts pertaining to carbon monoxide pollutant concentrations may result, or the significance of previously identified impacts may increase. Further analysis pertaining to projected increases in traffic and associated carbon monoxide pollution in the SEIR is thus required.

Create Objectionable Odors Affecting a Substantial Number of People (Criterion 3g)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on the creation of objectionable odors would be less than significant.

As discussed in the 2018 EIR, several potential odor-generating land use types are allowed under the City's existing industrial and manufacturing zoning designations and would continue to be allowed with approval of the INSP. In addition, the amount of industrial and business park land uses has been reduced overall under the INSP as compared to the pre-existing General Plan, and the INSP does not include any policies that would expressly encourage industrial or manufacturing uses.

Based on the INSP's Land Use Diagram, auto-related, industrial, and manufacturing uses would generally be located in areas outside of the half-mile radius from the proposed BART station, and most of the proposed residential uses would be located within a half-mile radius of the station. As such, the land use categories defined under the INSP and their designated locations within the Planning Area under the INSP would serve to minimize impacts associated with odor nuisance.

The INSP Amendment does not contain any changes that would situate odor-causing land uses any closer to residential or other sensitive land uses than they would have been located under the INSP. Thus, changes implemented in the INSP Amendment are not anticipated to have any changes on odor impact, compared to that identified in the 2018 EIR.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, as well as the revisions contained within the INSP Amendment, implementation of the INSP Amendment would not substantially increase the severity of odor impacts identified, nor would it result in new significant impacts related to odor that were not identified in the 2018 EIR. Since the approval of the INSP, no new information has emerged, nor have environmental conditions changed such that, new odor impacts would be expected to emerge or previously identified impacts would become more severe.

However, the changes contained within the INSP Amendment are of sufficient scale and scope that they may introduce previously unidentified impacts pertaining to air quality, criteria air pollutants, toxic air contaminants, carbon monoxide pollution, and compatibility with applicable air quality plans, or may increase the severity of impacts previously identified. Further analysis within the SEIR is thus required.

4. Energy, Greenhouse Gases, and Climate Change

| Energy, Greenhouse Gases, and Climate Change Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| a. Lead to wasteful, inefficient, or unnecessary consumption of energy; | 2018 FEIR, Impact 3.4-1 | To be evaluated in the Supplemental EIR | | | |
| b. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or | 2018 FEIR, Impact 3.4-2 | To be evaluated in the Supplemental EIR | | | |
| c. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. | 2018 FEIR, Impact 3.4-3 | To be evaluated in the Supplemental EIR | | | |

Wasteful, Inefficient, or Unnecessary Consumption of Energy (Criterion 4a)

The 2018 EIR determined that adoption and implementation of the INSP would have a less-than-significant impact on waste, inefficient, or unnecessary consumption of energy.

The 2018 EIR determined that none of the proposed land uses are expected to require an extraordinary amount of energy consumption during construction, as may occur with large, industrial facilities, like new power plants or dams, because no such land uses are proposed or permitted by the INSP. Additionally, because construction emissions are considered to be relatively short-term emissions that would cease once construction of a project is complete, they would represent a relatively short demand on local and regional fuel supplies that would be easily accommodated. The INSP policies designed to reduce air quality impacts during

construction would also achieve reductions in construction-related energy use. Therefore, construction activities associated with the INSP would not result in a wasteful, inefficient, and unnecessary usage of direct or indirect energy.

Although net new energy consumption would occur under the proposed INSP, a decrease in the per capita energy consumption would occur under the INSP when compared against existing (2013) conditions. Overall, by decreasing demand for energy- and fuel-related energy resources on a per capita basis, operation of future land uses associated with the INSP would not result in a wasteful, inefficient, and unnecessary usage of direct or indirect energy.

None of the changes contained in the INSP Amendment would change INSP policies regarding the reduction of air quality impacts and energy use associated with construction. However, modifications introduced in the INSP Amendment constitute a significant enough departure from the INSP that previously unidentified impacts pertaining to energy intensity of land use, construction duration, and level of emissions released due to construction may result, or the significance of previously identified impacts may increase. Further analysis pertaining to construction-related air pollutant emissions in the SEIR is thus required.

GHG Emissions (Criteria 4b, 4c)

The 2018 EIR determined that impact of the adoption and implementation of the INSP on the generation of greenhouse gas (GHG) emissions which would have a significant impact on the environment would be less than significant with mitigation.

The 2018 EIR discusses potential releases of GHG emissions in terms of the construction and operational phases of the INSP. As discussed in the 2018 EIR, policies contained within the INSP for implementing construction Best Management Practices (BMPs) would reduce potential GHG emissions; Mitigation Measure MM-AQ-1 would require the use of renewable diesel as construction fleet fuel. These measures were determined to be sufficient to reduce the risk of construction-related GHG emissions to be less than significant.

During operation, sources of direct emissions would include mobile vehicle trips, natural gas combustion, and landscaping activities. Indirect emissions would be generated by electricity consumption, waste and wastewater generation, and water use. The 2018 EIR analyzed GHGs predicted to be emitted in 2025 and 2040 under buildout, and determined that, although the new development that would be introduced by the INSP into the Planning Area would result in net increases in GHG emissions, the INSP's net emissions per service population in both 2025 and 2040 would be lower than the per service population emissions associated with existing (2013) conditions. This is attributed to the transit-oriented development and mixed-use design in the Planning Area resulting from full buildout of the proposed INSP. Thus, implementation of the INSP would aid current efforts to curtail GHG emissions statewide to meet future milestone reduction targets.

Additionally, the INSP would not conflict with the City of Livermore Climate Action Plan (CAP), current AB 32 Scoping Plan, 2017 Scoping Plan, Senate Bill (SB) 375 and Plan Bay Area, or SB 32. While the INSP's operational emissions in 2040 could potentially conflict with the GHG emissions reduction trajectory for 2050 articulated under EO S-3-05, implementation of Mitigation Measure MM-GHG-1, which includes a variety of GHG reduction strategies, would reduce the INSP's GHG emissions in 2040 to a level that would be below its applicable efficiency metric and render these emissions to be consistent with the GHG emissions reduction trajectory for 2050. Thus, with mitigation, implementation of the INSP would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

As the INSP Amendment continues to support mixed-use design and transit-oriented development, GHG emissions per service population associated with full buildout of the INSP Amendment will likely still be lower than those associated with existing conditions. Any development occurring under the INSP Amendment will be required to comply with the mitigation measures described above. However, modifications introduced in the INSP Amendment constitute a significant enough departure from the INSP that previously unidentified impacts pertaining to GHG emissions may occur, or the severity of impacts previously identified may increase. Further analysis pertaining to GHG emissions in the SEIR is thus required.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, as well as the revisions contained within the INSP Amendment, implementation of the INSP Amendment may substantially increase the severity of impacts identified or result in new significant impacts related to greenhouse gas emissions or energy consumption that were not identified in the 2018 EIR. Analysis of GHG impacts pertaining to the INSP Amendment are thus required in the SEIR.

5. Aesthetics

| Aesthetics Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| a. Have a substantial adverse effect on some scenic vistas; | 2018 FEIR, Impact 3.5-1 | No | No | No | N/A |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; | 2018 FEIR, Impact 3.5-2 | No | No | No | N/A |
| c. Substantially degrade the existing visual character or quality of the site and its surroundings; or | 2018 FEIR, Impact 3.5-3 | No | No | No | N/A |
| d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. | 2018 FEIR, Impact 3.5-4 | No | No | No | N/A |

Initial Study
Isabel Neighborhood Specific Plan Amendment

Substantial Adverse Effect on Some Scenic Vistas (Criterion 5a)

The 2018 EIR determined that the adoption and implementation of the INSP would have a significant and unavoidable impact on scenic vistas.

Many of the INSP's policies and standards provide long-term protections of some scenic vistas from the scenic routes and corridors. The INSP establishes new building height limits in select areas to specifically preserve portions of key views of hillsides and ridgelines from I-580. The INSP also establishes new view corridors along Main Street and Montage Drive as well as upper-story building step-backs along Main Street, recognizing that hillside views from within the Planning Area, not just from I-580, are key visual resources. However, the proposed height and intensity of development within the Planning Area would affect some of the existing views of hillsides and ridgelines beyond the city limits to a significant level. The views from I-580 that would be most impacted are oblique views to the north as one approaches the Planning Area from the east and west.

Changes contained within the INSP Amendment are not anticipated to be associated with any changes in development height or intensity, protection of, or accessibility of scenic views. Thus, the INSP Amendment is not anticipated to be associated with any difference in impact on scenic vistas compared to that identified in the 2018 EIR.

Scenic Resources, Visual Character of the Site (Criteria 5b, c)

The 2018 EIR determined that the adoption and implementation of the INSP would have a less-than-significant impact on scenic resources and the visual character and quality of the site.

As discussed in the 2018 EIR, the Planning Area's scenic resources consist primarily of the hillsides and ridgelines to the north and south of the City. As these resources lie outside of the Planning Area, they will not be impacted by implementation of the Plan. Other scenic resources within the Planning Area include existing vegetation and trees along the creeks – specifically, along the Arroyo Las Positas south of I-580 and Collier Canyon Creek north of I-580. However, implementation of the proposed Plan would maintain these areas as open space and therefore would not have a significant impact on this vegetation.

The 2018 EIR determined that some of the existing trees located along the freeway may be removed as part of the INSP, although private development and public improvements associated with the INSP would result in a net increase in trees visible from the freeway. Proposed policies call for tree plantings along creek corridors, streets, and adjacent to buildings, while balancing the desire to preserve views of the hills – the primary scenic resource.

Given the INSP's aim to enhance the visual character of the largely vacant Isabel Neighborhood with well-designed urban development, the potential of the plan to degrade the visual character of the Planning Area is considered less than significant.

The INSP Amendment does not change the footprint of the Planning Area, and thus most scenic resources will continue to exist outside of the Planning Area. Likewise, the INSP Amendment does not contain any changes to open space designations, and thus will not change the protected status of those scenic resources that do fall within the Planning Area. The INSP Amendment does not change policies promoting tree planting. Thus, the INSP Amendment is not expected to have any difference in impact on natural resources than that identified in the 2018 EIR.

Light or Glare (Criterion 5d)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on glare would be less than significant.

As stated in the 2018 EIR, the Livermore General Plan contains policies for controlling outdoor artificial light (see Objectives LU-6.1 and CC-1.3) and Chapter 15.18 of the Livermore Municipal Code contains lighting regulations for commercial and residential areas. Compliance with these policies would reduce potentially significant long-term light and glare impacts. The INSP's design standards would further help to ensure that lighting for new development is held to high design standards for light pollution and glare reduction.

The INSP Amendment contains no change in policy or design standards pertaining to the management or prevention of light and glare. Thus, the INSP Amendment is anticipated to have no difference in impact on light and glare than that identified in the 2018 EIR.

Conclusion

Aesthetic impacts associated with the adoption and implementation of the INSP have been addressed in the 2018 EIR.

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, as well as revisions contained within the INSP Amendment, implementation of the INSP Amendment would not substantially increase the severity of significant impacts identified in the 2018 EIR, nor would it result in new significant impacts related to aesthetics, vistas, scenic resources, or glare that were not identified in the 2018 EIR. The 2018 EIR did not identify any feasible mitigation measures that would be sufficient to eliminate environmental impacts related to aesthetic conditions and resources. Development occurring under the INSP Amendment would be required to comply with City-issued aesthetic and development requirements. Since the approval of the INSP, no new information has emerged, nor have environmental conditions changed such that, new environmental impacts would be expected to emerge or previously identified impacts would become more severe.

6. Noise and Vibration

| <p>Noise and Vibration Would the project:</p> | <p>Where Impact Was Analyzed in 2018 INSP FEIR</p> | <p>Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?</p> | <p>Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?</p> | <p>Any Substantially Important New Information Requiring New Analysis or Verification?</p> | <p>Do Plan FEIR Mitigation Measures Address/Resolve Impacts?</p> |
|---|--|--|---|--|--|
| <p>a. Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies;</p> | <p>2018 FEIR, Impact 3.6-1</p> | <p>To be evaluated in the Supplemental EIR</p> | | | |
| <p>b. Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels;</p> | <p>2018 FEIR, Impact 3.6-2</p> | <p>No</p> | <p>No</p> | <p>No</p> | <p>N/A</p> |
| <p>c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;</p> | <p>2018 FEIR, Impact 3.6-3</p> | <p>To be evaluated in the Supplemental EIR</p> | | | |
| <p>d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;</p> | <p>2018 FEIR, Impact 3.6-4</p> | <p>No</p> | <p>No</p> | <p>No</p> | <p>N/A</p> |

| Noise and Vibration Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| e. Would be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, but would not expose people residing or working in the project area to excessive noise levels; or | 2018 FEIR, Impact 3.6-5 | No | No | No | N/A |
| f. Be located in the vicinity of a private airstrip or expose people residing or working in the project area to excessive noise levels. | 2018 FEIR, Impact 3.6-6 | No | No | No | N/A |

Expose Persons to or Generate Noise Levels in Excess of Standards Established in a Local General Plan or Noise Ordinance or Applicable Standards of Other Agencies (Criterion 6a)

The 2018 EIR discussed potential noise exposure associated with the adoption and implementation of the INSP in terms of construction noise, operational traffic noise, train noise from BART, operational noise from noise-generating stationary equipment, and noise associated with special events. Effects of construction noise were determined to be less than significant; effects from operational noise were determined to be significant and unavoidable.

As stated in the 2018 EIR, construction activities associated with future projects would be temporary and related construction noise impacts would be short-term. Each individual construction activity would have the potential to generate noise levels that could be in excess of applicable local thresholds, or that could cause a disturbance to nearby noise-sensitive receptors. The severity of construction-related noise varies with a number of situational factors, many of which cannot be known in advance. Hence, the 2018 EIR assumes that individual projects would be implemented in compliance with City standards and that construction that complies with the time-of-day restrictions would result in less than significant noise impacts.

The 2018 EIR determined that noise levels along three roadway segments would increase by 3 dB or more in areas where with-project noise levels would exceed 60 dBA Ldn, or the applicable land use compatibility guideline: Portola Avenue West of Sandalwood Drive, East Airway Boulevard east of Sutter Street and west of Via Mateo, and East Airway Boulevard east of Via Mateo and West/North of Portola Avenue. Potentially significant noise impacts on sensitive land uses could occur at these three locations. In order to mitigate these effects, the 2018 EIR recommends mitigation measure MM- NOI-1, which requires implementing traffic noise reduction measures at existing sensitive receptors. The 2018 EIR acknowledges, however, that it may not be feasible to implement this measure in all cases. Additionally, the 2018 EIR determined that, under buildout, by 2040 25 roadway segments within the Planning Area would generate traffic whose associated noise would exceed land use compatibility standards. Policies contained within the INSP would alleviate some of these effects by requiring the preparation of a noise or acoustical analysis, when applicable, and requiring noise attenuating design features.

The 2018 EIR determined that noise from operation of BART trains in the City of Livermore (including BART train operations, the Isabel Station, the Isabel Station bus transfer facility, the Isabel Station parking facility, the storage and maintenance facility, and wayside system facilities) would be below the established FTA standards at all analyzed noise sensitive receptors. Noise impacts to sensitive receptors associated with the operation of BART trains were determined to be less than significant.

The 2018 EIR acknowledges that stationary sources of noise, such as car washes, recycling yards, industrial manufacturing facilities, and HVAC equipment could be constructed under the INSP, and that it is not possible at this time to determine the extent to which sensitive land uses would be exposed to these noise sources. However, the 2018 EIR determines that, with the implementation of policies contained in the INSP to limit noise levels, noise impacts from stationary sources would be less than significant.

As the types of events that would occur in the Planning Area's parks and plazas are currently unknown, it is difficult to estimate potential noise generation. However, as any special event in the City would need to obtain a permit and demonstrate that they would comply with the local applicable noise standards, the 2018 EIR determines that noise impacts related to special events occurring in the Planning Area would be less than significant.

No changes contained within the INSP Amendment are anticipated to result in significantly different relationship between roadway noise and sensitive land uses, compared to what was

analyzed in the 2018 EIR. The INSP Amendment does not contain any changes pertaining to noise management policies. However, modifications introduced in the INSP Amendment constitute a significant enough departure from the INSP that previously unidentified impacts pertaining to construction noise, activities associated with plan buildout, or roadway noise may result, or the significance of previously identified impacts may increase. Further analysis pertaining to these potential noise impacts in the SEIR is thus required.

Vibration or Ground-Borne Noise (Criterion 6b)

The 2018 EIR examines potential vibration impacts from construction, stationary sources, traffic, and trains.

Impacts associated with construction vibration were determined to be significant and unavoidable. As construction equipment operating within 25 feet of sensitive land uses could generate distinctly perceptible vibration, non-pile driving construction activities occurring within 25 feet of sensitive uses could result in significant vibration impacts. In addition, pile driving occurring within approximately 175 feet or 300 feet of sensitive uses for vibratory/sonic pile drivers and impact pile drivers, respectively, could also result in significant vibration impacts. As the specific future projects to be developed under the INSP are not known at this time, and as the level of construction activity that would occur at various locations for future projects is also not known, it is possible the future construction activities could result in significant vibration impacts. As described in the 2018 EIR, proposed policies requiring vibration attenuation measures may help alleviate these impacts. However, even with these measures, it may not be feasible in all cases to mitigate construction vibration from individual projects to a less-than-significant level. While future developments may be able to achieve the necessary reduction through a combination of various different mitigation strategies, it is not possible to determine with a reasonable degree of certainty that it would be feasible for all future development in the Planning Area to do so.

Impacts associated with stationary source vibration were determined to be less than significant, as potential vibration sources would be required to be analyzed on a project level.

As the 2018 EIR assumes that roads within the Planning Area will remain well-maintained, vibration associated with operational traffic was determined to be less than significant.

Vibration analysis associated with the operation of BART was conducted in the BART to Livermore Extension Project Draft EIR (San Francisco Bay Area Rapid Transit District, 2017). Vibration from the proposed BART extension project was evaluated in the 2018 EIR using the general vibration assessment approach described in the FTA guidance, which focuses on public disturbance from vibration. The FTA guidance considers vibration from light rail vehicles and rapid transit vehicles (such as BART) to be similar. Given that the BART tracks are in the middle of I-580, there would be no structures adjacent to the tracks, and vibration impacts related to structural damage were determined not occur in the BART to Livermore Extension EIR. As such, there would be no impacts related to damage from train vibration within the Planning Area. As stated in the 2018 EIR, no Category 2 or Category 3 land uses

would be located within the FTA screening distances from the BART tracks. Combined with policies contained within the INSP to ensure that no facilities that include the use of vibration-sensitive equipment would be located within this 600-foot screening distance of the BART tracks, the vibration impacts from BART operations to INSP development would be less than significant.

Modifications introduced in the INSP Amendment do not constitute a significant enough departure from the INSP that previously unidentified impacts pertaining to the use of vibration-generating equipment and roadway vibration may result, or the significance of previously identified impacts may increase. Further analysis pertaining to potential vibration impacts in the SEIR is not required.

Ambient Noise Levels (Criterion 6c)

The 2018 EIR considers increases in ambient noise levels attributable to traffic and stationary equipment.

As discussed under Criterion 6a, the 2018 EIR determined that adoption and implementation of the INSP on traffic noise would be significant and unavoidable. Similarly, the 2018 EIR determined that existing General Plan policies and policies contained within the INSP would be sufficient to ensure that ambient noise levels associated with the operation of stationary equipment would be less than significant. Further analysis is required in the SEIR to determine if changes in the nature or severity of these impacts may result from changes implemented in the INSP Amendment.

Temporary or Periodic Increase in Ambient Noise Levels (Criterion 6d)

The 2018 EIR discussed potential temporary or periodic noise increases associated with the adoption and implementation of the INSP in terms of construction noise and special event noise. Impacts from both were considered to be less than significant, due to restrictions on these noise-generating activities as discussed under Criterion 6a. These restrictions will not change with the implementation of changes contained in the INSP Amendment. Modifications introduced in the INSP Amendment do not constitute a significant enough departure from the INSP that previously unidentified impacts pertaining temporary or periodic increase in ambient noise levels may result, or the significance of previously identified impacts may increase. Further analysis pertaining to potential temporary and periodic ambient noise increase impacts in the SEIR is not required.

Compatibility with Airport Noise (Criteria 6e, 6f)

As all proposed land uses associated with the INSP would be located in areas where they would be compatible with noise generated from the activities of the Livermore Airport, impacts related to the exposure of people residing or working in the Planning Area to excessive noise levels from aircraft at a public airport would be less than significant.

As described in the 2018 EIR, the closest private airstrip to the Planning Area is the Meadowlark Field Airport. This small private airport has only six aircraft based at the field

and is located over six miles southeast of the Planning Area. At this distance, and based on the size of this private airstrip, no noise effects would occur in the Planning Area as a result of aircraft operating at this airstrip.

The INSP Amendment does not contain any land use changes that would alter land use compatibility with the Livermore Airport or the Meadowlark Field Airport. Thus, significance conclusions pertaining to the INSP Amendment’s compatibility with airport noise are not anticipated to significantly change from those identified in the 2018 EIR.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, as well as the revisions contained within the INSP Amendment, implementation of the INSP Amendment would not substantially increase the severity of impacts identified, nor would it result in new significant impacts to compatibility with airport noise that were not identified in the 2018 EIR. However, modifications introduced in the INSP Amendment constitute a significant enough departure from the INSP that previously unidentified impacts pertaining to other sources of noise and vibration may result, or the significance of previously identified impacts may increase. Further analysis pertaining to potential noise and vibration impacts in the SEIR is thus required.

7. Biological Resources

| Biological Resources | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|--|--|---|--|--|
| Would the project: | | | | | |
| a. Have a substantial adverse effect, either directly or through habitat modifications, on special-status species; | 2018 FEIR, Impact 3.7-1 | No | No | No | Yes |
| b. Would not adversely affect riparian habitat and/or other sensitive natural communities in the Planning Area; | 2018 FEIR, Impact 3.7-2 | No | No | No | Yes |

| Biological Resources | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| Would the project: | | | | | |
| c. Would not adversely affect federally protected wetlands and other waters regulated under Section 404 of the Clean Water Act; | 2018 FEIR, Impact 3.7-3 | No | No | No | Yes |
| d. Would not interfere with the movement of wildlife species; | 2018 FEIR, Impact 3.7-4 | No | No | No | N/A |
| e. Would not conflict with the provisions of an adopted conservation plan; or | 2018 FEIR, Impact 3.7-5 | No | No | No | N/A |
| f. Would not have the potential to conflict with local policies or ordinances protecting biological resources. | 2018 FEIR, Impact 3.7-6 | No | No | No | Yes |

Special Status Species, Riparian Habitats, and Wetlands (Criterion 7a-c)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on special status species and riparian habitats would be less than significant with mitigation.

According to the 2018 EIR, construction and operational phases of future development within the Planning Area could affect special-status species, sensitive riparian habitats, and wetland features through activities such as: vegetation/site clearing, soil movement, construction waste storage, excavation and placement of fill, soil compaction, water runoff from the construction site, increased vehicle traffic, short-term construction-related noise, degradation of water quality, erosion, and siltation. Indirect effects on wildlife could also

occur as a result of increased light and noise levels, alteration of hydrology or aquatic thermal regime, introduction of invasive (nonnative) species, and introduction of invasive plants. The introduction of invasive plants during construction could also result in indirect impacts on special status plants.

New development within the Planning Area could affect up to 1 acre of riparian vegetation, both during construction and operations, in part due to an increased extent of impermeable surfaces, grading, and altered direction of overland flows. Wetlands could be similarly affected.

However, implementation of the INSP policies and mitigation measures below would avoid or minimize construction and operational impacts on wildlife, riparian habitats, and wetlands to a less-than-significant level. INSP policies to reduce the impact include measures to require that new development incorporate low impact landscape design, provide protective buffers for sensitive habits, avoid tree removal, inventory sensitive resources, and minimize the introduction and spread of invasive plant species.

Mitigation measure MM-BIO-1 requires that, in the case where impacts to special-status plant species are unavoidable, a salvage, relocation, or propagation and monitoring plan be prepared. Mitigation measures MM-BIO-2 through MM-BIO-9 require that nesting birds and special status species occurring within the Planning Area be avoided if possible. Mitigation Measure MM-BIO-10 requires that riparian habitats be avoided and protected during construction; MM-BIO-11 requires that loss of riparian habitat be compensated. MM-BIO-12 requires that wetlands be protected during construction. MM-BIO-13 requires that compensation be provided for construction-related impacts on wetlands.

The INSP Amendment does not contain any changes to development factors—such as construction activities, light and noise levels, or level of impervious surface—that are likely to have an impact on sensitive habitats. The INSP Amendment does not contain any changes to the policies intended to mitigate the impact on sensitive habitats. Thus, the INSP Amendment is not anticipated to result in an impact on sensitive habitats that significantly differs from that identified in the 2018 EIR.

Movement of Wildlife Species (Criterion 7d)

The 2018 EIR determined that the impact of the adaptation and implementation of the INSP on the movement of wildlife species would be less than significant.

Given the surrounding network of existing developed parcels and roads, existing human activity and visitation, and existing human and vehicle noise, the current Planning Area does not likely serve as a habitat corridor; thus, further development projects within the Planning Area are not anticipated to significantly block or interfere with wildlife species movement. These conditions would not change with implementation of the changes contained in the INSP Amendment.

Conservation Plan (Criterion 7e)

The 2018 EIR determined that, due to the fact that the Planning Area is not located within the jurisdiction of a conservation plan, the INSP would have no impact on any conservation plan implementation. These conditions would not change with implementation of the changes contained in the INSP Amendment.

Local Policies or Ordinances Pertaining to Biological Resources (Criterion 7f)

The 2018 EIR determined that the adoption and implementation of the INSP may result in the removal of trees, which would constitute a significant impact in the absence of a permit or appropriate compensation. The INSP includes policies to require that project proponents provide compensation for tree removal during construction, thus rendering the impact less than significant. The INSP Amendment contains no changes to this policy, and thus would not result in a different environmental impact than that identified in the 2018 EIR.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, implementation of the INSP Amendment would not substantially increase the severity of significant impacts identified in the 2018 EIR, nor would it result in new significant impacts related to biological resources that were not identified in the 2018 EIR. Any development occurring under the INSP Amendment would be required to comply with the 2018 EIR's biological resources protection mitigation measures, as well as any applicable City-issued development regulations. Since the approval of the INSP, no new information has emerged, nor have environmental conditions changed such that, new environmental impacts would be expected to emerge or previously identified impacts would become more severe.

8. Hazards and Hazardous Materials

| Hazards and Hazardous Materials | Where Impact Was Analyzed in Plan FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|--|---|--|---|---|
| Would the project: | | | | | |
| a. Create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials; | 2018 FEIR, Impact 3.8-1 | No | No | No | N/A |

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|--|--|---|--|---|---|
| b. Create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; | 2018 FEIR, Impact 3.8-2 | No | No | No | N/A |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or wastes within one-quarter mile of an existing or proposed school; | 2018 FEIR, Impact 3.8-3 | No | No | No | N/A |
| 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, create a significant hazard to the public or environment; | 2018 FEIR, Impact 3.8-4 | No | No | No | N/A |
| e. For a project located within an airport land use plan, or, where such a plan has not been adopted, within | 2018 FEIR, Impact 3.8-5 | No | No | No | N/A |

| Hazards and Hazardous Materials Would the project: | Where Impact Was Analyzed in Plan FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|--|---|--|---|---|
| two miles of a public airport or public uses airport, the project could result in a safety hazard for people residing or working in the project area; | | | | | |
| f. Not result in a safety hazard for people residing or working within the vicinity of a private airstrip; | 2018 FEIR, Impact 3.8-6 | No | No | No | N/A |
| g. Could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or | 2018 FEIR, Impact 3.8-7 | No | No | No | N/A |
| 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. | 2018 FEIR, Impact 3.8-8 | No | No | No | N/A |

Transport, Use, and Disposal of Hazardous Materials; Hazardous Material Upset (Criteria 8a, b)

The 2018 EIR determined that the adoption and implementation of the INSP would have a less-than-significant impact on the exposure of the public to hazardous materials.

While land uses permitted in the Planning Area under the INSP may require the use, transport, and disposal of hazardous materials, or may be associated with the accidental release of hazardous materials into the environment, existing federal and State regulations, as well as the City of Livermore's General Plan, require adherence to specific guidelines regarding hazardous material use, emergency response, and cleanup of contaminated sites. These regulations will not change with implementation of the changes contained in the INSP Amendment.

Hazardous Materials in Proximity to Schools (Criterion 8c)

The INSP proposes a school overlay in the northwestern portion of the Planning Area. However, according to the 2018 EIR, INSP policies regarding the emission of hazardous emissions or handling of hazardous materials and wastes would render the potential impact less-than-significant. These policies require that the exposure of new development to hazardous materials be minimized. The INSP Amendment contains no changes to these policies, and thus its impact on the presence of hazardous materials in proximity to schools is not anticipated to differ from that identified in the 2018 EIR.

Development at Hazardous Material Sites (Criterion 8d)

The 2018 EIR determined that the impact of adoption and implementation of the INSP on exposure to hazardous materials sites would be less than significant. As described in the 2018 EIR, there are three sites in the Planning Area that are included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. However, all three of these cases are closed, representing a low to moderate risk of encountering impact during potential future redevelopment. These sites would not be designated residential under the Plan, and the Plan contains policies requiring remediation and cleanup of contaminated sites.

The INSP Amendment does not contain any changes to those portions of the Planning Area classified as residential. Nor does it contain any changes to the policies requiring remediation and cleanup of contaminated sites. Implementation of the changes contained in the INSP Amendment would not change the pre-existing conditions of contaminated sites within the Planning Area, and would not change their likelihood of being used for residential purposes. Thus, the INSP Amendment does not contain any changes that would cause this environmental impact to differ significantly from that identified in the 2018 EIR.

Hazards Associated with Airports and Airstrips (Criteria 8e, f)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on the safety of people residing or working within the project area due to proximity to a public or public uses airport is less than significant.

The INSP retains the boundaries of the Airport Protection Area (APA) but proposes an overlay in the northeast corner of the APA to cover the area where the land use diagram shows new residential uses. In this overlay area, the City would only allow residential uses with conditions aimed at increasing resident awareness. However, the APA was proposed to address noise-related impacts, not safety-related impacts. Therefore, this amendment would not result in a significant environmental impact to safety.

The Airport Land Use Compatibility Plan (ALUCP), adopted by the City and Alameda County in 2012, is the primary document used by the Airport Land Use Commission and the City of Livermore to help promote compatibility between the Livermore Municipal Airport and its surroundings. Section 3.3.2.6 of the ALUCP identifies the APA and prohibits new residential uses and intensification of existing residential uses. However, the ALUCP includes the provision that the County would amend this policy should the City amend the APA policy in the General Plan. Specifically, the ALUCP states: “Should the City of Livermore, after adoption of this ALUCP, modify City of Livermore Resolution 192-91, which establishes the APA, or adopt a new Resolution, the ALUC shall acknowledge the modification of the APA for purposes of transit-oriented residential development around the future Isabel/I-580 BART station in subsequent land use reviews, and shall revise this policy at the earliest possible date as provided by state law.” Like the BART station at Isabel Avenue, the Valley Link Isabel station is proposed in the I-580 median at Isabel Avenue. In addition, the Valley Link station would similarly support transit-oriented development within the Isabel Neighborhood.

New development resulting from the INSP would be subject to ALUCP height limits and regulations on airspace protection, in addition to scenic view and land use compatibility factors. These regulations reduce and avoid potential effects associated with building height. Therefore, this amendment would not result in a significant environmental impact. The INSP’s Land Use Chapter stipulates that land uses are limited by the ALUCP and all developer applicants shall refer to the ALUCP to verify compatibility of proposed uses, including safety compatibility criteria and airspace protection criteria. Accordingly, the INSP is generally consistent with the ALUCP to prevent safety hazards for people residing and working in the Planning Area near the Livermore Municipal Airport.

There are no private airstrips within the Planning Area. Therefore, implementation of the land use changes and policies consistent with the INSP would have no impact related to the safety hazard for people residing or working in the vicinity of a private airstrip.

Implementation of the changes contained within the INSP Amendment would not change the location of residential development to take place in the Planning Area, nor would it change the development regulations associated with this development. Implementation of the changes within the INSP Amendment would not change pre-existing conditions regarding the location of private airstrips within the Planning Area. Therefore, there are no changes within the INSP Amendment whose implementation would result in an environmental impact significantly different from that identified in the 2018 EIR.

Emergency Response and Evacuation Plans (Criterion 8g)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on the implementation and emergency response and evacuation plans would be less than significant. Implementation of the INSP would result in new development and population growth, resulting in an increase in demand for emergency services, which could affect implementation of the Alameda County LHMP and the proposed Tri-Valley Hazard Mitigation Plan. However, the INSP includes policies to ensure that emergency response plans are maintained and updated, in addition to other policies that maintain and improve emergency preparedness in the city.

The changes contained within the INSP Amendment would not change the fact that INSP Amendment implementation is likely to result in an increase in demand for emergency services. However, the INSP Amendment would not change the policies designed to preserve adequate levels of emergency preparedness. Therefore, the INSP Amendment does not contain any changes whose implementation is likely to result in an environmental impact significantly different from that identified in the 2018 EIR.

Wildfires (Criterion 8h)

The 2018 EIR determined that the impact associated with the adoption and implementation of the INSP on the risk of exposure of people or structures to wildland fires would be less than significant.

None of the Planning Area constitutes a very high fire hazard, and development would be consistent with Livermore's Fire Code and Chapter 9, Fire Protection Systems, of the California Building Code, which requires improvements such as fire sprinkler systems and fire alarms. Furthermore, the INSP includes policies that address emergency access and fire-fighting facilities and services. These policies include working with the LPPFD to monitor the need for a new Fire Station and ensuring that LPPFD and the Police Department have sufficient staffing to serve all new development.

The changes contained in the INSP Amendment would not change the likelihood of exposure of the Planning Area to wildfires. The INSP Amendment contains no changes to the INSP's fire prevention policies. Thus, implementation of the policies contained in the INSP Amendment is unlikely to result in an environmental impact significantly different from that identified in the 2018 EIR.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the INSP EIR, implementation of the INSP Amendment would not substantially increase the severity of any impacts identified in the 2018 EIR, nor would it result in new significant impacts related to hazardous materials, airports and air strips, emergency response, or wildfire. The 2018 EIR does not identify any mitigation measures associated with hazard impacts, and none would be required for the INSP Amendment. Development occurring under the INSP Amendment would be required to comply with the City's regulations pertaining to hazard mitigation and emergency access. Since the approval of the INSP, no new information has emerged, nor have

environmental conditions changed such that, new environmental impacts would be expected to emerge or previously identified impacts would become more severe.

9. Hydrology and Water Quality

| Hydrology and Water Quality Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| a. Violate any water quality standards or waste discharge requirements; | 2018 FEIR Impact, 3.9-1 | No | No | No | N/A |
| 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; | 2018 FEIR Impact, 3.9-2 | No | No | No | N/A |
| 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; | 2018 FEIR, Impact 3.9-3 | No | No | No | N/A |

| Hydrology and Water Quality Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| d. Substantially alter the existing drainage pattern of the site or area, including through the alternation 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; | 2018 FEIR, Impact 3.9-4 | No | No | No | N/A |
| e. Create or contribute runoff water which would exceed the capacity of existing planned stormwater drainage systems or provide substantial additional sources of polluted runoff; | 2018 FEIR, Impact 3.9-5 | No | No | No | N/A |
| f. Substantially degrade water quality; | 2018 FEIR, Impact 3.9-6 | No | No | No | N/A |

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| Hydrology and Water Quality Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| 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 or structures within a 100-year flood hazard area which would impede or redirect flood flows; | 2018 FEIR, Impact 3.9-7 | No | No | No | Yes |
| h. 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; or | 2018 FEIR, Impact 3.9-8 | No | No | No | N/A |
| i. Result in inundation by seiche, tsunami, or mudflow. | 2018 FEIR, Impact 3.9-9 | No | No | No | N/A |

Water Quality Standards and Waste Discharge Requirements (Criterion 9a)

The 2018 EIR determined that the impact of the adaptation and implementation of the INSP on water quality and waste discharge standards and requirements would be less than significant.

The 2018 EIR considers the potential of development occurring under the INSP to violate water quality and waste discharge standards in terms of construction, construction dewatering, and operations. The 2018 EIR identifies a number of construction-related activities that could result in water quality impacts in the form of introduced sediments, turbidity, increases in sediment loads, and contamination by trash, petroleum products, concrete waste, nutrients, paints, and trace metals, among others. The delivery, handling, and storage of construction materials and wastes (e.g., concrete debris), as well as the use of heavy construction equipment, could also result in stormwater contamination, thereby affecting water quality.

Each future development proposal occurring under the INSP would be assessed individually to ensure compliance with applicable NPDES requirements. Future projects implemented under the INSP that would involve the disturbance of more than one acre of land would be subject to the SWRCB Construction General Permit, which requires development and implementation of a SWPPP containing best practice measures for reducing impacts to water quality. Additionally, all projects implemented under the INSP would be required to comply with City and Alameda County grading, erosion, and sediment control ordinances, in addition to policies that limit sedimentation of local and regional storm drain and flood control systems.

Construction dewatering could result in the release of pollutants from spills or other activities and may contaminate groundwater. Projects developed within the Planning Area would be required to comply with the RWQCB's dewatering requirements, where applicable. Compliance with WDRs and dewatering regulations would ensure that dewatering activities are monitored and treated as required and that no violations of any water quality standards or waste discharge requirements occur.

The intensification of land uses by implementation of the INSP may introduce new or additional pollutants, including sediments, trash, petroleum products, metals, and chemicals that could potentially discharge into surface waters either directly or during stormwater runoff events. This could create new or exacerbate existing water quality impairments.

Projects implemented under the INSP would be required to implement Source Control and Treatment Control BMPs to reduce the discharge of pollutants to the maximum extent practicable. Applicable BMPs would be implemented on a case-by-case basis in accordance with Alameda County NPDES permit. Furthermore, the INSP building guidelines include stormwater runoff reduction and capture measures such as interspersing landscaped areas within impervious areas, detention basins, and landscaped open space. As a result, implementation of these INSP guidelines would also prevent operational impacts related to water quality standards or waste discharge requirements. Therefore, operational water quality impacts would be less than significant.

There are no changes within the INSP Amendment that would change substantially change construction activities or land use intensification patterns associated with buildout; the potential impacts to water resources would not change from those identified in the 2018 EIR.

Groundwater (Criterion 9b)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on groundwater supplies and recharge rates would be less than significant.

According to the 2018 EIR, implementation of the INSP would generate an increase in the amount of impervious surfaces associated with the development of up to 4,095 new housing units and up to 2,104,000

square feet of office, commercial, and industrial uses. This increase in impervious surfaces within the Planning Area could potentially decrease infiltration. However, individual projects implemented under the INSP would be required to implement hydromodification BMPs to reduce the volume of runoff. To minimize any adverse effects on hydrology due to stormwater runoff, stormwater management measures would be included as part of the design of each future project implemented under the INSP. Future development in the Planning Area would also be required to conform to Plan design guidelines including stormwater runoff reduction and capture measures such as interspersing landscaped areas within impervious areas and including landscaped open space. With implementation of these requirements and adherence to INSP design guidelines, development under the INSP would not result in a change in impervious surface area such that the infiltration of surface water to groundwater would be affected.

Infill and redevelopment that would occur with implementation of the INSP would result in population growth, thereby increasing demand on water supplies. However, according to the 2018 EIR, the total water demand from the INSP would be accommodated by current water sources and there would not be a net deficit in aquifer volume or a lowering of the local groundwater table level such that the production rate of existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted.

The INSP Amendment contains no changes that would substantially alter the amount of impervious surface at buildout, nor the anticipated magnitude of population growth and associated increase in water demand. Alterations contained within the INSP Amendment would not change the INSP's water protection design guidelines. Thus, implementation of the changes contained within the INSP Amendment would not result in an impact to groundwater that significantly differs from that identified in the 2018 EIR.

Alteration of Existing Drainage Patterns, Erosion, Siltation, Runoff, and Water Quality (Criteria 9c-f)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on existing draining patterns with the potential to cause substantial erosion, siltation, or runoff changes would be less than significant.

While project construction would include excavation and the disturbance of the existing ground surface, thereby exposing bare soil and temporarily altering surface drainage patterns with the potential to cause erosion, siltation, and runoff, construction activities would be required to implement BMPs required by the Construction General Permit and MS4 Permit regulations. Compliance with these regulations would ensure substantial erosion,

siltation, or erosion does not occur. With adherence to regulatory requirements and implementation of the policies and associated design guidelines contained in the INSP, future development within the Planning Area would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.

By implementing long-term changes to streetscapes and pedestrian walkways, increasing parking spaces, and otherwise introducing new impervious surfaces, implementation of the INSP would minimally alter local drainage patterns. Adherence to local stormwater guidelines would ensure that projects would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Stormwater management measures would be included as part of the design of each future project implemented under the INSP, including completion of drainage studies. The INSP would not result in the generation of substantial sources of polluted runoff or substantially degrade water quality because development within the Planning Area would be required to comply with NPDES requirements, Phase I MS4 Permit, Provision C.3.c, for post-construction stormwater management including LID.

The changes contained within the INSP Amendment would not substantially construction activities taking place within the Planning Area, and thus would not substantially change the associated potential water quality impacts. Similarly, the INSP Amendment does not contain any changes to the proposed streetscape and pedestrian walkway alternations associated with buildout. The INSP Amendment does not contain any changes to the INSP's water protection policies. Thus, implementation of the INSP Amendment is not anticipated to result in any substantial change in water quality impacts compared to those identified in the 2018 EIR.

Flooding (Criteria 9g-i)

The 2018 EIR determined that the adoption and implementation of the INSP would generally have no impact of the likelihood of exposure to flooding, inundation, or dam failure; however, new projects initiated within the 100-year flood zone are required to be designed so as to reduce flood risk, and a floodplain analysis will be required in the event that a structure or grading for surface parking would alter the floodplain. Implementation of the changes contained in the INSP Amendment would not alter these conditions, and the associated environmental impact would thus not differ from that identified in the 2018 EIR.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, implementation of the INSP Amendment would not substantially increase the severity of any impacts identified in the 2018 EIR, nor would it result in new significant impacts related to the quality and management of hydrological features and resources that were not identified in the 2018 EIR. The 2018 EIR did not identify any mitigation measures pertaining to hydrological features, and none would be required for development occurring under the INSP Amendment. Development occurring under the INSP Amendment would be required to

comply with City regulations designed to preserve water quality and accessibility and prevent hazards and land degradation associated with flooding and related events. Since the approval of the INSP, no new information has emerged, nor have environmental conditions changed such that, new environmental impacts would be expected to emerge or previously identified impacts would become more severe.

10. Utilities and Service Systems

| Utilities and Service Systems Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; | 2018 FEIR, Impact 3.10-1 | No | No | No | N/A |
| 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; | 2018 FEIR, Impact 3.10-2 | No | No | No | N/A |
| c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which would cause significant | 2018 FEIR, Impact 3.10-3 | No | No | No | N/A |

| Utilities and Service Systems Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| environmental effects; | | | | | |
| d. Result in insufficient water supplies available to serve the project from existing entitlements and resources, or require expanded entitlements; | 2018 FEIR, Impact 3.10-4 | No | No | No | N/A |
| e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; | 2018 FEIR, Impact 3.10-5 | No | No | No | N/A |
| f. Result in solid waste disposal needs that exceed the permitted landfill capacity serving the Planning Area; or | 2018 FEIR, Impact 3.10-6 | No | No | No | N/A |
| g. Comply with federal, State, and local statues and | 2018 FEIR, Impact 3.10-7 | No | No | No | N/A |

| Utilities and Service Systems | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| Would the project: regulations related to solid waste. | | | | | |

Water Utilities (Criteria 10a-e)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on water utilities would be less than significant. Implementation of the INSP would not cause the WRP to exceed wastewater treatment requirements. The 2017 Potable Water System Evaluation determined that there are no infrastructure requirements needed to meet the additional demands of new development under the INSP. The Water Supply Assessment prepared for the INSP and reviewed by Zone 7 and Cal Water indicated that the projected demands are within the existing entitlements and resources planned for future water supply (West Yost Associates, 2017a).

City of Livermore Standard Conditions and Zone 7 regulations require all development projects to meet hydromodification requirements that limit storm runoff from new construction to the pre-project flow levels. This results in a net-zero increase in storm water drainage flowing to and through the existing drainage infrastructure.

None of the changes contained within the INSP Amendment are anticipated to result in a substantial difference in demand for water utilities. Implementation of the INSP Amendment is thus not anticipated to result in substantially different water utility impacts compared to those identified in the 2018 EIR.

Solid Waste (Criteria 10f, g)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on solid waste utilities would be less than significant.

Given the City’s ability to meet its disposal targets, as well as the remaining capacity in area landfills, the collection, transfer, recycling, and disposal needs of the projected population increase under the INSP would not result in adverse impacts on landfill facilities. Development of future land uses, as designated in the INSP, would be required to comply with federal, State, and local statutes and regulations related to solid waste.

None of the changes contained in the INSP Amendment are anticipated to result in substantial differences in demand for solid waste services, compared to those evaluated in the 2018 EIR. Associated environmental impacts are not anticipated to substantially differ from those identified in the 2018 EIR.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, implementation of the INSP Amendment would not substantially increase the severity of any impacts identified in the 2018 EIR, nor would it result in new significant impacts related to utilities that were not identified in the 2018 EIR. The 2018 EIR did not identify any mitigation measures pertaining to utilities, and none would be required for development occurring under the INSP Amendment. Development occurring under the INSP Amendment would be required to comply with City regulations designed to ensure the continued functioning of water and solid waste utilities. Since the approval of the INSP, no new information has emerged, nor have environmental conditions changed such that, new environmental impacts would be expected to emerge or previously identified impacts would become more severe.

11. Public Services and Recreation

| Public Services and Recreation Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; | 2018 FEIR, Impact 3.11-1 | No | No | No | N/A |
| b. Result in substantial adverse physical or other environmental impacts associated with the provision of new or physically | 2018 FEIR, Impact 3.11-2 | No | No | No | N/A |

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| Public Services and Recreation Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| altered park facilities, or need for new or physically altered park facilities, construction of which could cause significant environmental impacts; or | | | | | |
| c. Have the potential to 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: fire protection, police protection, or schools. | 2018 FEIR, Impact 3.11-3 | No | No | No | N/A |

Parks and Recreation (Criteria 11a, b)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on the quality of park facilities and any associated environmental impacts would be less than significant.

The level of new residential development would support about 9,800 new residents within the Isabel Neighborhood. This would generate demand for two Neighborhood Parks (or 19.6 acres) and 19.6 acres of Community parkland for a total of about 40 acres, based on LARPD service level standards.

While the combined 38.4-acre park and plaza space would not meet the total estimated parkland demand of 40 acres, the Isabel Neighborhood will have approximately 236.1 acres of combined park, plaza, and passive and scenic open space at build-out.

New development within the Planning Area would be required to dedicate park and recreational facilities or pay in-lieu fees that are used to build and maintain parks and recreational facilities. In the event of a shortage of active recreational facilities (sports fields and courts) in the Planning Area as the area develops, there is an opportunity to develop shared use agreements between the City and Las Positas College to allow Neighborhood residents to access existing athletic facilities at the college for specific hours, days of the week, or purposes. The City is actively pursuing shared use opportunities with Las Positas College. In addition, if a school locates in the School Overlay Zone, the playfields that have been approved at this location could be built. The development of new recreational facilities would be subject to existing building and construction regulations and INSP policies that would ensure that construction activities have a minimal effect on the surrounding environment.

There are no changes contained within the INSP Amendment that would substantially change the number of new residents anticipated at buildout, nor the amount of parkland to be contained in the Planning Area. No part of the INSP Amendment would change the INSP's policies regarding parkland dedication and maintenance. Thus, the impact to parks and recreational facilities under the INSP Amendment is not expected to be substantially different from that identified by the 2018 EIR.

Government Facilities (Criterion 11c)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on the provision of government services, as well as any associated environmental impacts, would be less than significant.

Given that growth under the INSP is accounted for under the existing General Plan, no additional schools would be required to meet overall demand. The combination of Statutory Developer fees, and the INSP policies that support school resources are expected to provide adequate capacity to meet demand for school facilities, resulting in a less-than-significant impact related to school facilities.

According to the LPPFD, the existing nearby fire stations would provide sufficient coverage for the Planning Area, and no new facilities would be required to serve new development resulting from implementation of the INSP.

The City of Livermore Police Department increases staffing as needed to keep up with population growth. To serve the overall demand for increased services from both residential and commercial development, the Department estimates an overall need for 15 additional officers by buildout. Given this anticipated need for additional police services and the distance to the main Police Station, the Department anticipates the need for a small police substation in the Isabel Neighborhood for internal police use only (not for the public). The small substation could be incorporated within an existing or new fire station or other public/commercial building. The Police Department would coordinate with Valley Transit and the Fire Department to determine the appropriate location and design for the police facility, as the Plan is implemented. ¹ Construction of the substation would comply with policies to reduce environmental impacts.

There is no established industry standard for the amount of library space per capita of population. Since population growth under the INSP is accounted for under the remaining General Plan capacity, it is expected that existing library facilities would accommodate the additional demand for library services. As with other service facilities, the environmental impacts from new or expanded library services would be less than significant due to existing policies and regulations, and INSP policies.

There are no changes contained within the INSP Amendment that are anticipated to lead to substantial differences in demand for schools, fire protection services, police services, or library services, compared to those assessed in the 2018 EIR. Associated environmental impacts are thus not expected to differ substantially compared to those identified in the 2018 EIR.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, implementation of the INSP Amendment would not substantially increase the severity of any impacts identified in the 2018 EIR, nor would it result in new significant impacts related to parks, recreation, and government facilities that were not identified in the 2018 EIR. The 2018 EIR does not identify any mitigation measures related to the provision of parks, recreation, and government services, and none would be required for development occurring under the INSP Amendment. Development would be required to comply with City-issued policies regulating the provision of these services. Since the approval of the INSP, no new information has emerged, nor have environmental conditions changed such that, new environmental impacts would be expected to emerge or previously identified impacts would become more severe.

¹ August 2017 conversation with Livermore Police Department.

12. Geology and Soils

| <p>Geology and Soils Would the project:</p> | <p>Where Impact Was Analyzed in 2018 INSP FEIR</p> | <p>Do Proposed Changes Involve New or Substantially More Severe Significant Impacts?</p> | <p>Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts?</p> | <p>Any Substantially Important New Information Requiring New Analysis or Verification?</p> | <p>Do Plan FEIR Mitigation Measures Address/Resolve Impacts?</p> |
|---|--|--|---|--|--|
| <p>a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction, or; landslides;</p> | <p>2018 FEIR, Impact 3.12-1</p> | <p>No</p> | <p>No</p> | <p>No</p> | <p>N/A</p> |
| <p>b. Result in substantial soil erosion and topsoil loss;</p> | <p>2018 FEIR, Impact 3.12-2</p> | <p>No</p> | <p>No</p> | <p>No</p> | <p>N/A</p> |
| <p>c. Result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse due to location of structures on a geological unit</p> | <p>2018 FEIR, Impact 3.12-3</p> | <p>No</p> | <p>No</p> | <p>No</p> | <p>N/A</p> |

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| Geology and Soils Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| or soil that is unstable or that would become unstable as a result of the project; | | | | | |
| d. Locate structures on expansive soil, as defined in Section 1803.5.3, Expansive Soil, of the California Building Standards Code (2013), creating substantial risks to life or property; or | 2018 FEIR, Impact 3.12-4 | No | No | No | N/A |
| e. Locate structures on 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. | 2018 FEIR, Impact 3.12-5 | No | No | No | N/A |

Earthquakes (Criterion 12a)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on level of exposure to hazards related to earthquakes, landslides, fault rupture, and ground shaking was less than significant.

Because there are no known active faults within the Planning Area, there would be no impact resulting from the rupture of a known earthquake fault.

Some locations within the Planning Area are prone to liquefaction hazards. Almost all of the areas bordering the Arroyo Las Positas and Collier Canyon Creek are at very high risk of liquefaction due to the presence of soils that are often saturated or characteristic of wetlands. In addition, a small area in the southeast portion of the Planning Area north of East Airway Boulevard and bounding U.S. I-580 is at high risk of liquefaction (ABAG, 2017). However, the majority of these high-risk areas would be preserved as open space in the Plan and would not be developed with buildings or roadways.

In areas of moderate risk of liquefaction where buildings or roadways would be constructed, impacts from ground failure resulting from liquefaction would be addressed through site-specific geotechnical studies prepared in accordance with CBC requirements or Caltrans standards and standard industry practices.

A small area to the north of Portola Avenue and east of Campus Hill Drive may be landslide susceptible due to slopes of 20 percent (see Figure 3.12-3). Most of this area is designated Open Space under the Plan, and a portion is already developed with residential use (Shea Montage Homes). Other nearby landslide-susceptible land is located northwest of the Planning Area, which is designated as Open Space. The remaining areas that are landslide-susceptible land are located outside the Planning Area. The potential for the development of future structures within the Planning Area to exacerbate existing hazards associated with the potential for the occurrence of landslides would be addressed through site-specific geotechnical studies prepared in accordance with CBC requirements and standard industry practices, which would specifically address landslide hazards located in landslide hazard areas

Development occurring under the INSP would be required to conform to the current seismic design provisions of the most current version of the CBC. The CBC contains the latest seismic safety requirements to resist impacts from ground shaking, landslides, and liquefaction. Road construction would be required to conform to Caltrans standards and standard industry practices.

There are no changes contained within the INSP Amendment that would alter open space designations or alter the probability of development occurring in areas of high or moderate earthquake, liquefaction, or landslide potential, compared to what was proposed in the INSP. Therefore, implementation of the INSP Amendment is not anticipated to result in any substantial difference in environmental impact, compared to what was identified in the 2018 EIR.

Soil Suitability for Development (Criteria 12b-d)

The 2018 EIR determined that compliance with applicable codes and regulations would reduce the potential for substantial soil erosion or topsoil loss resulting from implementation of the INSP to be less than significant. Similarly, compliance with standard industry practices and State requirements would ensure that impacts related to landslides, lateral spreading, subsidence, liquefaction, or collapse resulting from implementation of the INSP would be less than significant. Compliance would also require soil and geologic investigations that would identify the presence of expansive and corrosive soils prior to development. These conditions will not change under implementation of the INSP Amendment, and environmental impact is thus not anticipated to change.

Septic Systems (Criterion 12e)

Future development that may result from implementation of the INSP would not require septic systems or other alternative wastewater disposal systems. Therefore, implementation of the INSP would have no impact related to the location of structures on soils incapable of supporting septic tanks or alternative wastewater disposal systems. These conditions will not change under implementation of the INSP Amendment, and environmental impact is thus not anticipated to change.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, implementation of the INSP Amendment would not substantially increase the severity of any impacts identified in the 2018 EIR, nor would it result in new significant impacts related to earthquakes, soil stability, or septic systems that were not identified in the 2018 EIR. The 2018 EIR did not identify any mitigation measures pertaining to geology and soils, and none would be required for development occurring under the INSP Amendment. Development occurring under the INSP Amendment would be required to comply with City regulations designed to promote soil and land stability and associated development safety. Since the approval of the INSP, no new information has emerged, nor have environmental conditions changed such that, new environmental impacts would be expected to emerge or previously identified impacts would become more severe.

13. Cultural and Tribal Resources

| Cultural and Tribal Resources Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| a. Cause a substantial change to the significance of a historical resource, defined as physical demolition, destruction, relocation, or alteration of the resources or its immediate surroundings such that the significance of a historical resource would be materially impaired; | 2018 FEIR, Impact 3.13-1 | No | No | No | No feasible mitigation measure |
| b. Cause substantial adverse change in the significance of an archaeological resource pursuant to §15064.5; | 2018 FEIR, Impact 3.13-2 | No | No | No | N/A |
| c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; | 2018 FEIR, Impact 3.13-3 | No | No | No | N/A |
| d. Result in a significant disturbance to human remains, including those interred | 2018 FEIR, Impact 3.13-4 | No | No | No | N/A |

| Cultural and Tribal Resources Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
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| outside of formal cemeteries; or | | | | | |
| e. Cause a substantial adverse change in the significance of a tribal cultural resource. | 2018 FEIR, Impact 3.13-5 | No | No | No | N/A |

Historical Resources (Criterion 13a)

The 2018 EIR determined that the adoption and implementation of the INSP would result in impacts to historic resources that would be significant and unavoidable. This determination is due to the presence of the Gandolfo Ranch, eligible for listing in the National Register of Historic Properties, that is identified for development of residential or park uses under the INSP. Development of this large agricultural property as proposed would require the parcel to be subdivided into separate lots and roads. The subdivision and development of the property as part of the INSP would result in the demolition, destruction, relocation, and/or alteration of the historical resource such that the significance of the resource would be significantly materially impaired. The INSP Amendment does not contain any changes to the development potential designation of or development policies pertaining to Gandolfo Ranch, and therefore not result in an environmental impact significantly different from that identified in the 2018 EIR.

Archaeological Resources, Paleontological Resources, and Human Remains (Criteria 13b-d)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on archaeological and paleontological resources and human remains would be less than significant. Although implementation of the INSP may result in actions that could adversely affect archaeological resources, paleontological resources, and human remains, the INSP contains policies to require project-level archaeological review of sites that require site-specific environmental review, consultation with paleontologists when necessary, and protection and preservation of any human remains discovered during project activities. These policies would not be changed under the INSP Amendment; environmental impact would thus not change compared to that identified in the 2018 EIR.

Tribal Cultural Resources (Criterion 13e)

After consultation with the NAHC and seven Native American tribes were contacted, pursuant to AB 52 and SB 18, the 2018 EIR concluded that the adoption and implementation of the INSP would have no impact on tribal cultural resources. The INSP Amendment contains no features that would alter this conclusion.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, implementation of the INSP Amendment would not substantially increase the severity of any impacts identified in the 2018 EIR, nor would it result in new significant impacts related to cultural and tribal resources that were not identified in the 2018 EIR. The 2018 EIR did not identify any feasible mitigation measures pertaining to these resources. Development occurring under the INSP Amendment would be required to comply with City regulations designed to promote soil and land stability and associated development safety. Since the approval of the INSP, no new information has emerged, nor have environmental conditions changed such that, new environmental impacts would be expected to emerge or previously identified impacts would become more severe.

14. Agricultural Resources

| Agricultural Resources | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| Would the project: | | | | | |
| a. Convert Prime Farmland or Unique Farmland to non-agricultural use; | 2018 FEIR, Impact 3.14-1 | No | No | No | No feasible mitigation measure |
| b. Conflict with an existing zoning for agricultural use, or a Williamson Act contract; or | 2018 FEIR, Impact 3.14-2 | No | No | No | No feasible mitigation measure |
| c. Result in changes in the existing environment which, due to their location | 2018 FEIR, Impact 3.14-3 | No | No | No | N/A |

| Agricultural Resources Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
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| or nature, could result in conversion of Farmland to non-agricultural use. | | | | | |

Conversion of Prime Farmland (Criterion 14a)

The 2018 EIR determined that the adoption and implementation of the INSP would have a significant and unavoidable impact on the conversion of Prime Farmland into non-agricultural use. This evaluation is due to the presence of several sites throughout the Planning Area that are designated as Prime Farmland and designated as sites for future urban development under the INSP.

Individual projects under the INSP would be required to address impacts on agricultural lands. While these policies would reduce impacts, there would still be a significant and unavoidable impact related to the conversion of Prime Farmland, Farmland of Statewide Importance, or Unique farmland.

The INSP Amendment does not contain any changes to the designated development potential of those parcels designated as Prime Farmland. Nor does it contain any changes to the INSP policies pertaining to development impacts to agricultural lands. Therefore, the environmental impact of the INSP Amendment would not be substantially different from that identified in the 2018 EIR.

Zoning for Agricultural Use (Criterion 14b)

The 2018 EIR determined that the impact of the adoption and implementation of the INSP on agriculturally zoned land would be significant and unavoidable. This is due to the presence of parcels that allow for agricultural uses in the northern portion of the Planning Area, both of which would be zoned for Transition Residential under the INSP. These land designations are not changed under the INSP Amendment, and the resulting environmental impact is thus unchanged from that identified in the 2018 EIR.

Conversion of Farmland to Non-Agricultural Use (14c)

The 2018 EIR determined that the adoption and implementation of the INSP would have a less-than-significant impact of the conversion of farmland to non-agricultural uses. The areas of Unique Farmland and Farmland of Statewide Importance in the periphery of the northwestern part of the Planning Area are located immediately north of lands designated as Business Park and Residential Transition under the INSP. However, these land use designations are proposed where there are existing townhomes and condominiums, offices, business parks, and industrial uses, where people already live and work. Therefore, the INSP would not result in a new threat to existing, active farmland. The INSP Amendment does not make any changes in land use designation of farmland, compared to that analyzed in the 2018 EIR. The environmental impact of the INSP Amendment is thus not anticipated to be substantially different from that identified in the 2018 EIR.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2018 EIR, implementation of the INSP Amendment would not substantially increase the severity of any impacts identified in the 2018 EIR, nor would it result in new significant impacts related agricultural resources that were not identified in the 2018 EIR. The 2018 EIR did not identify any feasible mitigation measures pertaining to preservation of agricultural resources. Development occurring under the INSP Amendment would be required to comply with City regulations designed to promote soil and land stability and associated development safety. Since the approval of the INSP, no new information has emerged, nor have environmental conditions changed such that, new environmental impacts would be expected to emerge or previously identified impacts would become more severe.

Mandatory Findings of Significance

| Mandatory Findings of Significance Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to | N/A | No | No | No | N/A |

| Mandatory Findings of Significance Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|--|---|---|--|---|---|
| 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? | | | | | |
| b. Have impacts which are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects). | N/A | No | No | No | N/A |
| c. Have environmental effects which cause substantial adverse effects on human | N/A | No | No | No | N/A |

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 Isabel Neighborhood Specific Plan Amendment

| Mandatory Findings of Significance Would the project: | Where Impact Was Analyzed in 2018 INSP FEIR | Do Proposed Changes Involve New or Substantially More Severe Significant Impacts? | Do Any New Circumstances Involve New or Substantially More Severe Significant Impacts? | Any Substantially Important New Information Requiring New Analysis or Verification? | Do Plan FEIR Mitigation Measures Address/Resolve Impacts? |
|---|---|---|--|---|---|
| beings, either directly or indirectly? | | | | | |

Would the project have the potential to degrade the quality of the environment, substantially reduce the habitat of 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 rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact. Buildout under the INSP Amendment would not reduce habitat for wildlife species, threaten to eliminate plant and animal communities, reduce the number of rare plants, or disturb important examples of California history and/or prehistory to an extent greater than that identified in the 2018 EIR conducted for the INSP. Additional analysis in the SEIR is not required.

Does the project have impacts which are individually limited, but cumulatively considerable?

Less than Significant Impact. The INSP Amendment would not, in conjunction with other development occurring in the Isabel Neighborhood and City of Livermore, result in significant cumulative environmental impacts to an extent greater than that identified in the 2018 EIR of the INSP. Further analysis in the SEIR is not required.

Does the project have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact. Buildout under the INSP Amendment would not have a greater potential to result in substantial adverse effects on human beings than that analyzed for the INSP in the original EIR. Further analysis in the SEIR is not required.

D. REFERENCES

Isabel Neighborhood Specific Plan Final Environmental Impact Report (SCH#2016042039).
City of Livermore. 2018.

BART to Livermore Extension Final Program Environmental Impact Report Responses to
Comments (SCH#2008062026). San Francisco Bay Area Rapid Transit District. 2010.

E. LIST OF PREPARERS

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November 25, 2019

Ashley McBride
Livermore, City of
1052 South Livermore Avenue
Livermore, CA 94550

RE: SCH# 2016042039, Isabel Neighborhood Specific Plan Amendment Project, Alameda County

Dear Ms. McBride:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subs. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
 - a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
 - a. Avoidance and preservation of the resources in place, including, but not limited to:
 - i. Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i. Protecting the cultural character and integrity of the resource.
 - ii. Protecting the traditional use of the resource.
 - iii. Protecting the confidentiality of the resource.
 - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
 - e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
 - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
 - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
 - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subs. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,



Nancy Gonzalez-Lopez
Staff Services Analyst

cc: State Clearinghouse

Vera, Ashley

From: Teddy Lee <teddylee84@gmail.com>
Sent: Tuesday, December 17, 2019 9:49 PM
To: McBride, Ashley
Subject: Draft Supplemental Environmental Impact Report for the Isabel Neighborhood Specific Plan

CAUTION

This email was sent from outside of the City of Livermore email system. If you do not know the sender, do not click on links or open attachments.

To whom it may concern,

I am a homeowner in the Sage community between Isabel and Portola Avenues directly adjacent to Interstate 580 and near the proposed Isabel train station. My concern with the building of a new rail line and train station is the additional noise that will be generated as a result of this project.

Currently, the sound level that is generated from the freeway is a daily nuisance, especially at night. Assuming the highway will have to be widened to make room for the rail service, it would mean the source of the current highway and additional rail noise will get closer to my property, my fellow homeowner's property, as well as increase in decibels. I would like to propose the addition of a sound wall/barrier to be built along the northern side of Interstate 580 near the Sage community to reduce the additional noise that will be generated as a result of the rail project and highway widening. If you have any questions, please feel free to reply back to me.

Teddy Lee

DEPARTMENT OF TRANSPORTATION

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



*Making Conservation
a California Way of Life.*

December 20, 2019

SCH #2016042039
GTS # 04-2018-00480
GTS ID: 9208
ALA/580/PM 13.99

Ashley McBride, Associate Planner
City of Livermore, Planning Division
1052 South Livermore Avenue
Livermore, CA 94550

Project: Isabel Neighborhood Specific Plan (INSP) Update – Notice of Preparation (NOP)/Initial Study (IS)

Dear Ashley McBride:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the INSP Update. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the November 2019 NOP/IS.

Project Understanding

The City of Livermore (City) is now considering allowing the INSP to proceed with a Valley Link Station due to the Bay Area Rapid Transit (BART) Board of Directors' decision to not advance BART to Livermore. The Valley Link rail project is a fixed-rail service from the existing Dublin/Pleasanton BART Station to the approved Altamont Corridor Express (ACE) North Lathrop Station, with an ultimate Phase II extension to Stockton. Similar to the BART to Livermore Extension project, Valley Link proposes a rail station at Isabel Avenue. The City intends to retain the proposed base land use designations, allowable densities/intensities, and urban design and other features of the INSP. The only proposed amendments to the INSP are 1) the removal of a parking overlay designation in a small area north of the station, and 2) the incorporation of station design changes. The project is adjacent to both Interstate (I)-580 and State Route (SR)-84. According to Plan Bay Area 2040, the INSP is indicated as a potential Priority Development Area.

Travel Demand Analysis

Please submit an updated travel demand analysis that provides a Vehicle Miles Traveled (VMT) analysis resulting from the proposed project. With the enactment of Senate Bill (SB) 743, Caltrans is focusing on transportation infrastructure that supports smart growth and efficient development to ensure alignment with State policies using efficient development patterns, innovative travel demand reduction strategies, multimodal improvements, and VMT as the primary transportation impact metric. Please ensure that the travel demand analysis includes a VMT analysis pursuant to the City's guidelines or, if the City has no guidelines, the Office of Planning and Research's Draft Guidelines. Projects that result in automobile VMT per capita greater than 15% below existing (i.e. baseline) city-wide or regional values for similar land use types may indicate a significant impact. If necessary, mitigation for increasing VMT should be identified. Mitigation should support the use of transit and active transportation modes. Potential mitigation measures that include the requirements of other agencies such as Caltrans are fully enforceable through permit conditions, agreements, or other legally-binding instruments under the control of the City.

With respect to the local and regional roadway system, provide project related trip generation, distribution, and assignment estimates. To ensure that queue formation does not create traffic conflicts, the project-generated trips should be added to the existing, future and cumulative scenario traffic volumes for the intersections and freeway ramps listed below. Potential queuing issues should be evaluated including on-ramp storage capacity and analysis of freeway segments near the project; turning movements should also be evaluated. In conducting these evaluations, it is necessary to use demand volumes rather than output volumes or constrained flow volume.

- Intersections and Ramps:
 - I-580 and Isabel Avenue on- and off-ramps

Valley Link Coordination

Please ensure that the appropriate coordination between this project and the Valley Link project takes place, especially given that the Valley Link project is currently going through its own separate environmental review process.

Vehicle Trip Reduction

From Caltrans' *Smart Mobility 2010: A Call to Action for the New Decade*, the project site is identified as **Place Type 4: Suburban Communities** where location efficiency factors, such as community design, are often weak and regional accessibility varies. Given the place, type and size of the project, the INSP should, at minimum, retain its Transportation Demand Management (TDM)

measures as described in the 2018 Draft Environmental Impact Report (DEIR) to reduce VMT and greenhouse gas emissions. Such measures are critical to facilitating efficient site access.

TDM programs should be documented with annual monitoring reports by a TDM coordinator to demonstrate effectiveness. If the project does not achieve the VMT reduction goals, the reports should also include next steps to take in order to achieve those targets. Also, reducing parking supply can encourage active forms of transportation, reduce regional VMT, and lessen future transportation impacts on State facilities. These smart growth approaches are consistent with the MTC's Regional Transportation Plan/SCS goals and would help meet Caltrans Strategic Management Plan sustainability goals.

Additionally, the project should ensure that Valley Link connects with frequent transit services such as Livermore Amador Valley Transit Authority's Route 30R.

For additional TDM options, please refer to the Federal Highway Administration's *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (Chapter 8). The reference is available online at: <http://www.ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf>.

Transportation Impact Fees

The Lead Agency should identify project-generated travel demand and estimate the costs of transit and active transportation improvements necessitated by the INSP; viable funding sources such as development and/or transportation impact fees should also be identified. We encourage a sufficient allocation of fair share contributions toward multimodal and regional transit improvements to fully mitigate cumulative impacts to regional transportation. We also strongly support measures to increase sustainable mode shares, thereby reducing VMT. The City should also consider fair share fees for shuttles that use the public curb space.

The City should also ensure that a capital improvement plan identifying the cost of needed improvements, funding sources, and a scheduled plan for implementation is prepared along with the General Plan. Caltrans welcomes the opportunity to work with the City and local partners to secure the funding for needed mitigation. Traffic mitigation- or cooperative agreements are examples of such measures.

Construction-Related Impacts

Potential impacts to the State Right-of-Way (ROW) from project-related temporary access points should be analyzed. Mitigation for significant impacts due to construction and noise should be identified in the EIR. Project work that requires movement of oversized or excessive load vehicles on state roadways requires a transportation permit that is issued by Caltrans. To apply, visit: <https://dot.ca.gov/programs/traffic-operations/transportation-permits>.

Prior to construction, coordination is required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the STN.

Utilities

Any utilities that are proposed, moved or modified within Caltrans' ROW shall be discussed. If utilities are impacted by the project, provide site plans that show the location of existing and/or proposed utilities. These modifications require a Caltrans-issued encroachment permit.

Lead Agency

As the Lead Agency, the City is responsible for all project mitigation, including any needed improvements to the State Transportation Network (STN). The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Encroachment Permit

Please be advised that any work or traffic control that encroaches onto the State ROW requires a Caltrans-issued encroachment permit. To obtain an encroachment permit, a completed encroachment permit application, environmental documentation, six (6) sets of plans clearly indicating the State ROW, and six (6) copies of signed, dated and stamped (include stamp expiration date) traffic control plans must be submitted to: Office of Encroachment Permits, California DOT, District 4, P.O. Box 23660, Oakland, CA 94623-0660. To download the permit application and obtain more information, visit <https://dot.ca.gov/programs/traffic-operations/ep/applications>.

Ashley McBride, Associate Planner
December 20, 2019
Page 5

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Andrew Chan at 510-622-5433 or andrew.chan@dot.ca.gov.

Sincerely,



Mark Leong
District Branch Chief
Local Development - Intergovernmental Review

c: State Clearinghouse

John Stein, 1334 Kathy Court, Livermore, California 94550

Ashley McBride, Associate Planner
City of Livermore, Planning Division
1052 South Livermore Avenue
Livermore, California 94550

December 20, 2019

Dear Ashley,

I have some concerns regarding the Proposed NOP for the Isabel Neighborhood Specific Plan. I realize that this plan has had a major investment of time and resources; however, the prime reason for it and the underlying shape of the development has been lost. There have been changes since the original Environmental Impact Report was prepared. The most significant is that the BART Board has decided that system maintenance and upgrades has taken priority from suburban extensions. A BART extension to Livermore appears dead. The entire plan was contingent up on the start of a BART extension. The proposed Valley Link is significantly different from the BART extension. It is unclear why the City Council has decided to consider re-adoption of the plan at this time.

Based upon Mr. Vinn's comments at the last Planning Commission meeting there are still major uncertainties in the funding both for construction and operation and maintenance, construction phasing, type of equipment and maintenance, parking type and location, and completion of date of the extension of Valley Link into the Tri-Valley. There is also uncertainty if pedestrian access to the Isabel station will be available from the north side of 1580. It is also unclear if a single line system can reliably meeting the proposed level of service.

The questions are will the proposed Supplemental Environmental Report (SEIR) consider all of the various potential alternatives effect on traffic congestion, parking requirements, air quality, generation of greenhouse gasses, ridership, travel times and fare costs. BART is on the top of the funding food chain, with major representation of its area on MTC and ABAG, while Valley Link is not. Based upon funding uncertainty will the SEIR consider the effects of multiyear delays in funding? Will one alternative be no construction of Valley Link or insufficient funding to provide the operational funding for full operation? Why is there not a delay until there is more certainty in the design of the in valley portion of Valley Link? Will Valley Link or the City of Livermore provide funding for parking?

There have been other significant changes. The Livermore Airport now has a high end restaurant, the Fixed Base Operation is in full operation, pilot training and flight operations are increasing. A San Jose is working to close Reid Hillview by 2030 because of noise and safety concerns. This may base more aircraft to Livermore. Will the noise and overflight impacts, particularly in the evening, be reevaluated?

The Livermore Charter School has closed and demographics are changing with seniors selling homes to families with children. Will LVJUSD and LAVATA be contacted as to availability and access to elementary, middle and high school availability and access?

With the widening of I580 and Highway 4 wildlife corridors between the Diablo and Costal Range have been impacted . leading to increased habitat fragmentation. Will the various environmental groups and California Fish and Wildlife as well as local environmental groups be contacted to see if additional protection is needed to protect the critical wildlife corridors in the planning area?

It would appear that before continuing with the Isabel Specific Plan there should be an evaluation of the costs and benefits to current and future Livermore residents? Without the BART constraints could buildings be moved further from I580 reducing noise and air pollution impacts and perhaps impacts on the scenic corridor? Is housing on the south side of I580 needed so close to the Livermore Airport approach? Could more parking be provided north of I580 to reduce traffic impacts? Does it make sense to build high density housing so far from the city's center and public and private services?

Thank you for your attention,



John Stein



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY • LIVERMORE, CA 94551 • PHONE (925) 454-5000 • FAX (925) 454-5727

December 20, 2019

Ashley McBride, Assistant Planner
City of Livermore, Planning Division
1052 South Livermore Avenue
Livermore, CA 94550
Sent by e-mail to: asmcbride@cityoflivermore.net

Re: Comments on Draft SEIR for the Isabel Neighborhood Plan Draft

Dear Ms. McBride,

Zone 7 Water Agency (Zone 7, or Zone 7 of the Alameda County Flood Control and Water Conservation District) has reviewed the referenced document in the context of Zone 7's mission to provide water supply, flood protection, and groundwater and stream management within the Livermore-Amador Valley. Following are our comments for your consideration:

1). See Zone 7's comment letter on the 2018 Draft EIR, attached.

We appreciate the opportunity to comment on this project. If you have any questions on this letter, please feel free to contact me at (925) 454-5005 or via email at erank@zone7water.com.

Sincerely,

Elke Rank

cc: Carol Mahoney, Amparo Flores, file

attachment



February 26, 2018

Ashley McBride, Assistant Planner
City of Livermore, Planning Division
1052 South Livermore Avenue
Livermore, CA 94550
Sent by e-mail to: asmcbride@cityoflivermore.net

Re: *Comments on Isabel Neighborhood Plan Draft EIR*

Dear Ms. McBride,

Zone 7 Water Agency (Zone 7, or Zone 7 of the Alameda County Flood Control and Water Conservation District) has reviewed the referenced document in the context of Zone 7's mission to provide water supply, flood protection, and groundwater and stream management within the Livermore-Amador Valley. Following are our comments for your consideration:

1. Page 3.9-1, last paragraph

There is a reference to LLNL draining wastewater to the Arroyo Seco. Zone 7's line facility designation is "Line P" (along southwestern side of LLNL), not Line P-1, unless it was meant to say it drains to the relocated Arroyo las Positas, Line P-1, located along the northern portion of LLNL. Please confirm and correct accordingly.

2. Page 3.9-2, first paragraph

The Draft EIR states that the Alameda County Flood Control and Water Conservation District is responsible for sections of Arroyo las Positas; please update to read Zone 7 Water Agency. Further, Zone 7 does have some capital improvement plans to modify drainage within the Arroyo las Positas in the Planning Area, which were originally identified in the 2006 Stream Management Master Plan (SMMP). An amendment to the SMMP is nearly complete, which will propose improvements to the reach of Arroyo las Positas north of I-580 and west of the Portola Ave overcrossing, as well as the reach of Arroyo las Positas between Isabel Ave and Airway Blvd. For additional information, contact Jeff Tang at (925) 454-5075.

3. Page 3.9-14, Local Regulations

Several Zone 7 programs and ordinances should be included here:

- **Development Impact Fee.** New development and the expansion of existing development may impose a burden on the existing flood protection and storm drainage infrastructure within the Zone 7 service area. Developments creating new impervious areas within the Livermore-Amador Valley are subject to the assessment of the Development Impact Fee for Flood Protection and Storm Water Drainage. These fees are

collected for Zone 7 by the local governing agency: 1) upon approval of final map for public improvements creating new impervious areas; and/or 2) upon issuance of a building or use permit required for site improvements creating new impervious areas. Fees are dependent on whether post-project impervious area conditions are greater than pre-project conditions and/or whether fees have previously been paid. Please refer to Zone 7's Flood Protection & Storm Water Drainage Development Impact Fee Ordinance and additional information at: <http://www.zone7water.com/permits-a-fees> .

- **Stream Management Master Plan (SMMP).** Zone 7's SMMP was first completed in 2006, and it identified projects in the Planning Area. These projects are currently planned to be superseded with a new project in the SMMP Amendment to be released in the near term, which will address regional flooding issues. For additional information, contact Jeff Tang at (925) 454-5075.
- **Groundwater Management.** The project area lies over a groundwater basin (Livermore Valley Groundwater Basin) that is used for municipal, industrial, and domestic and irrigation water supply. To support protection of groundwater quality, the project should be consistent with or comply with appropriate plans and regulations such as Zone 7's Salt and Nutrient Management Plan and the Sustainable Groundwater Management Ordinance, the State's Water Recycling Policy (and associated orders), the State's storm water protection measures, and the County's Water Wells Ordinance.

Our records indicate that there are 30 water wells in the project area (see attached table and maps). Five wells (3S1E1F2, 3S1E1H3, 3S1E1L1, 3S1E1P2, 3S1E2J3) are Zone 7 monitoring program wells owned by Zone 7 Water Agency and will need to be protected. Well 3S1E1P3 is not owned by Zone 7 but is part of Zone 7's monitoring program. This well and the remaining wells need to be protected or decommissioned. The approximate locations are shown on the enclosed Well Location maps. Please immediately notify Zone 7 if any other wells exist in the project area. All well locations should be field verified and noted on the plans.

Any planned new well, well repair or modification, well decommissioning or destruction, or exploratory soil boring that may intersect groundwater within Zone 7's jurisdiction must be permitted by Zone 7 before starting the work. In addition, a Zone 7 drilling permit is required to dig, drill, bore, drive, advance by direct push any exploratory soil boring 10 feet or greater in depth within the groundwater basins of Zone 7 regardless of groundwater depth. Find more information at: <http://www.zone7water.com/permits-a-fees/36-public/content/64-well-drilling-and-destruction-permits>, or contact Michelle Parent at (925) 454-5077.

4. Page 3.10-2, Potable and Non-Potable Water, second paragraph

Please add the word "planned" to the sentence as follows: Based on the adopted UWMPs and updated projections, Zone 7 has indicated that there is sufficient **planned** water supply at this time to serve the City's General Plan anticipated growth, which accounts for development under the Isabel Neighborhood Plan. This should also be reflected in the Isabel Neighborhood Plan on page 4-21.

5. Land Use Plan Needs Addition of Zone 7 Flood Easement

Per the 2011 El Charro Specific Plan Agreement between the City and Zone 7, the parcel shown circled in blue in the image at right is an easement from the City of Livermore to Zone 7 for flood protection purposes, and therefore should not be zoned for commercial development in the Plan.



6. Relation to BART

BART was proposing to extend their system to a corporation yard north of Portola Ave, yet the Draft EIR only shows where the proposed station ends and does not indicate any additional track extension to the northeast that may be required.

7. Zone 7 Pipeline and Other Infrastructure

Zone 7 has two pipelines/easements within the Plan area. The Altamont Pipeline runs easterly along E. Airway Blvd., from Isabel Ave. to beyond Portola Ave. The Cross-Valley Pipeline runs easterly along Kittyhawk Rd. to a pump station located at the corner of E. Airway & Isabel Ave., then southerly along Isabel Ave. Other water supply facilities are also located within the Planning Area, and need to be protected. Any work within Zone 7's easements will require an encroachment permit. Contact John Koltz, 925-454-5067.

8. Water Supply Assessment

Incorporated here by reference is Zone 7's comment letter to the City of Livermore regarding the Water Supply Assessment for the Isabel Neighborhood Plan. Please review and incorporate as appropriate.

9. Additional Information

Included here for additional information is Zone 7's October 2017 comment letter on the Notice of Availability of Draft Environmental Impact Report for the BART to Livermore Extension, as well as letters to the City of Livermore dated June 2017 and November 2017 regarding the Isabel Plan.

We appreciate the opportunity to comment on this project. If you have any questions on this letter, please feel free to contact me at (925) 454-5005 or via email at erank@zone7water.com.

Sincerely,



Elke Rank

cc: Carol Mahoney, Amparo Flores, file

Attachment 1. Zone 7 comment letter on BART to Livermore Extension Draft EIR, October 2017

Attachment 2a/b. List and maps of known wells in the plan area

Attachment 3. Zone 7 comment letter to Livermore regarding water supply for Isabel Plan, June 2017

Attachment 4. Zone 7 comment letter to Livermore regarding Isabel Plan, November 2017



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7
100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551-9486 • PHONE (925) 454-5000

October 16, 2017

BART to Livermore Extension Project
21st Floor, 300 Lakeside Drive
Oakland, CA 94612.

Sent via e-mail to barttolivermore@bart.gov

Re: Notice of Availability of Draft Environmental Impact Report for the BART to Livermore Extension Project and Public Meetings

Zone 7 Water Agency (Zone 7, or Zone 7 of the Alameda County Flood Control and Water Conservation District) has reviewed the referenced Draft EIR in the context of Zone 7's mission to provide water supply, flood protection, and groundwater and stream management within the Livermore-Amador Valley. We have the following comments for your consideration:

1. **New Development / Impervious Surfaces.** New development and the expansion of existing development may impose a burden on the existing flood protection and storm drainage infrastructure within the Zone 7 service area. Developments creating new impervious areas within the Livermore-Amador Valley are subject to the assessment of the Development Impact Fee for Flood Protection and Storm Water Drainage. These fees are collected for Zone 7 by the local governing agency: 1) upon approval of final map for public improvements creating new impervious areas; and/or 2) upon issuance of a building or use permit required for site improvements creating new impervious areas. Fees are dependent on whether post-project impervious area conditions are greater than pre-project conditions and/or whether fees have previously been paid. Please refer to Zone 7's Flood Protection & Storm Water Drainage Development Impact Fee Ordinance and additional information at: <http://www.zone7water.com/permits-a-fees>.
2. **Section HYD-9 / Mitigation Measure HYD-5, Impacts to Hydrology.** As noted in the Draft EIR, we expect BART to continue to consult with Zone 7 staff on plans for maintaining the existing hydraulic capacity and velocities for storm flows at channel crossing locations.
3. **Zone 7 Stream Management Master Plan (SMMP) Project R5-2.** Sediment management is a key component for overall regional flood protection. In the 2006 SMMP (which is currently being updated), Zone 7 identified a potential location for a new sedimentation basin along Arroyo Las Positas near Portola Avenue and Interstate 580 (see the Project R5-2 description, attached). The BART project includes facilities near that proposed location. Please contact Jeff Tang, 925-454-5075 or jtang@zone7water.com to discuss potential compatibility of these facilities.
4. **Table 1-1, and page 782:** Zone 7 is the permitting agency for drilling and well permits. Any drilling (well destruction, well construction, geotechnical borings, etc.) must be permitted by Zone 7 before starting work. Find more information at: <http://www.zone7water.com/permits-a-fees/36-public/content/64-well-drilling-and-destruction-permits>

5. **Existing wells.** Several wells within Zone 7's groundwater monitoring network are within the project limits and have the potential to be impacted. Wells may need to be properly destroyed and a replacement well constructed. BART should consult with Zone 7 for specific rules and practices; contact Matt Katen, 925-454-5071 or mkaten@zone7water.com.
6. **Page 748, last paragraph:** The EIR states that Arroyo Mocho is perennial due to mining discharges. This information is out of date, as the mining companies have not discharged to the Mocho since December 2013. Note also that Zone 7 releases water, when available from the State Water Project, to Arroyo Mocho for groundwater recharge.
7. **Figure 3.H-2:** The depiction of the lakes within the mining area is inaccurate. Lakes F, G, H, and I are not shown but a lake is shown south of where Lake I is. In addition to the image below for reference, included here as an attachment is a pdf with the current pond outlines. Note that due to active mining at some of these lakes, the outline of the lakes can change somewhat from year to year.

Figure 4-B: Map of Future Chain of Lakes



This figure depicts the future Chain of Lakes.

Source: Groundwater Management Program Annual Report 2016 (available at <http://www.zone7water.com/36-public/content/76-groundwater-management-program-annual-report>)

8. **Zone 7 Existing Facilities.** Water transmission and pumping facilities are located in the Southwest corner of the proposed development at Isabel & East Airway. See Figures 1 and 2, below. We would request that our facility not be within the confines of the BART facilities (including parking areas) to ensure our ability for access during maintenance or emergency activities. Additionally, the Zone 7 facilities could be impacted by construction as it runs along the frontage road of East Airway Ave. Any work with Zone 7's easements will require an encroachment permit; Contact John Koltz, 925-454-5067.



Figure 1. The red oval indicates the location of a Zone 7 pipeline along the south side of 580 between Santa Rita and Isabel Ave.; this could be impacted by the BART project dependent on how far to the south 580 would be widened to accommodate the BART tracks.



Figure 2. The blue line denotes a Zone 7 pipeline and the red rectangle denotes a pumping facility.

9. **Water Supply Evaluation.** Note that Zone 7 provided comments to the City of Livermore on their Draft Water Supply Assessment for the Isabel Neighborhood Plan, which may be relevant to BART's analysis.

On behalf of Zone 7, I appreciate the opportunity to comment on this project. If you have any questions on this letter, please feel free to contact me at (925) 454-5005 or via email at erank@zone7water.com.

Sincerely,

Elke Rank

cc: Carol Mahoney, Amparo Flores, Matt Katen, Rhett Alzona, Jeff Tang, Joe Seto, file

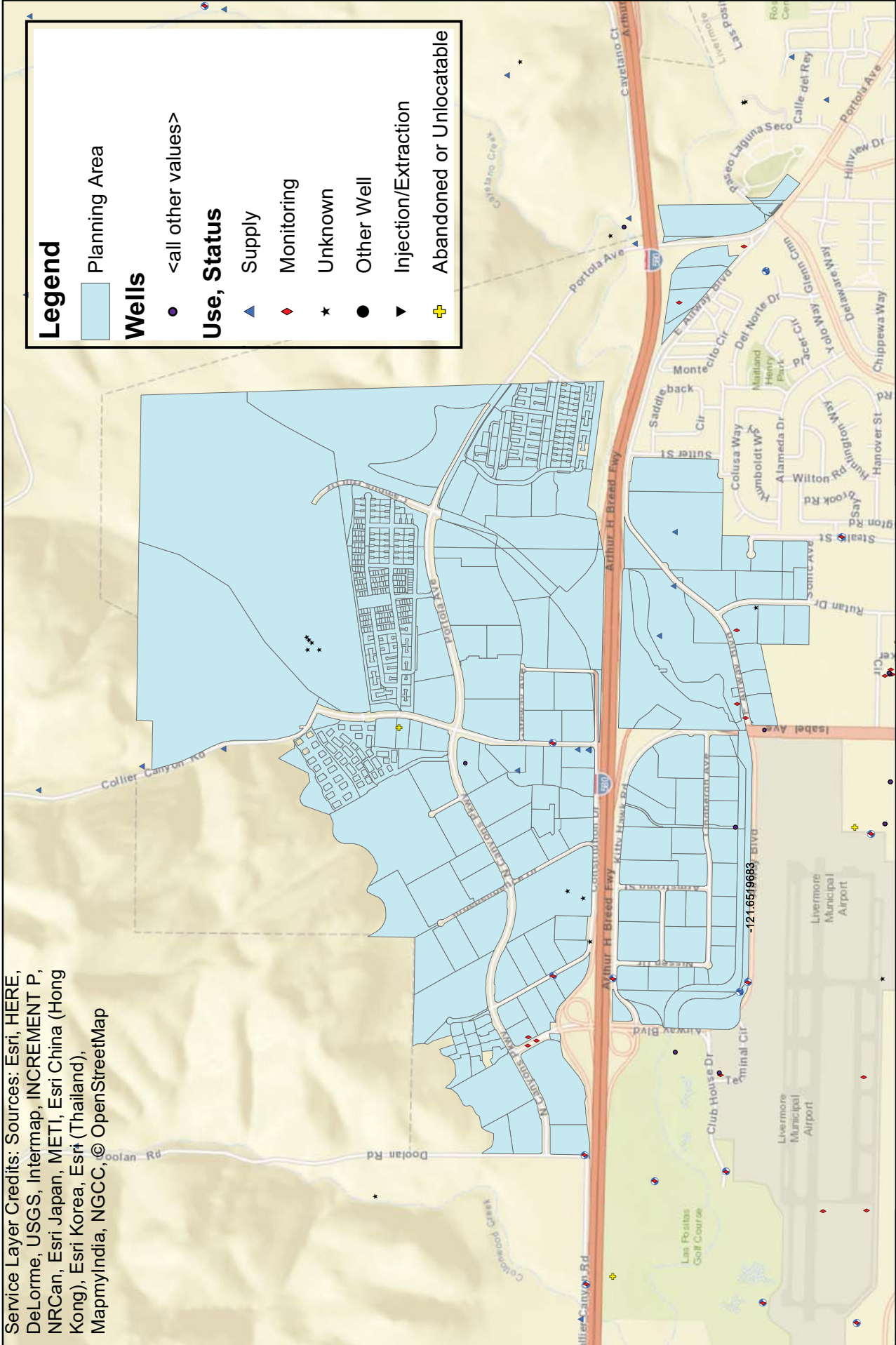
Attachments (2)

Isabel Neighborhood Plan Well List

| Well Number | Use | Address | City | Location | Basin | Status | ComplDate | PermitNum | Driller | Category | SubCategory | GS_Elev | GElevFromDem |
|-------------|------------|-------------------------------------|-----------|--------------|----------|----------|------------|-----------|-------------------|-------------|-------------|---------|--------------|
| 25/ZE 31N 1 | unknown | <Null> | <Null> | <Null> | <Null> | unknown | <Null> | 0 | <Null> | well-static | unknown | 473.4 | 473.3633 |
| 25/ZE 31N 2 | unknown | <Null> | <Null> | <Null> | <Null> | unknown | <Null> | 0 | <Null> | well-static | unknown | 474.5 | 474.4546 |
| 25/ZE 31N 3 | unknown | <Null> | <Null> | <Null> | <Null> | unknown | <Null> | 0 | <Null> | well-static | unknown | 474.4 | 474.4123 |
| 25/ZE 31N 4 | unknown | <Null> | <Null> | <Null> | <Null> | unknown | <Null> | 0 | <Null> | well-static | unknown | 474.3 | 474.2333 |
| 25/ZE 31N 5 | unknown | <Null> | <Null> | <Null> | <Null> | unknown | <Null> | 0 | <Null> | well-static | unknown | 471.4 | 471.3096 |
| 35/1E 1F 2 | monitor | CONSTITUTION DR & N. CANYONS PKWY | Livermore | <Null> | Mocho II | active | 12/18/2000 | 20231 | WOODWARD | well-static | monitor | 431.3 | 431.3042 |
| 35/1E 1F 8 | monitor | 1051 AIRWAY BLVD | Livermore | <Null> | Camp | unknown | <Null> | 27027 | APEX | well-static | monitor | 443.8 | 443.9955 |
| 35/1E 1F 9 | monitor | 1051 AIRWAY BLVD | Livermore | <Null> | Camp | unknown | <Null> | 27027 | CLOSURE SOLUTIONS | well-static | monitor | 443.8 | 443.6602 |
| 35/1E 1F 10 | monitor | 1051 AIRWAY BLVD | Livermore | <Null> | Camp | unknown | <Null> | 27027 | CLOSURE SOLUTIONS | well-static | monitor | 441.9 | 441.9184 |
| 35/1E 1G 1 | unknown | 465 COLLIER CANYON RD | Livermore | <Null> | Mocho II | unknown | <Null> | 0 | <Null> | well-static | unknown | 423.3 | 423.2601 |
| 35/1E 1H 1 | supply | 2620 COLLIER CANYON RD. | Livermore | <Null> | Mocho II | unknown | <Null> | 0 | <Null> | well-supply | supply | 422.3 | 422.4379 |
| 35/1E 1H 3 | monitor | COLLIER CANYON CT. | Livermore | <Null> | Mocho II | active | 10/19/1977 | 0 | USGS HEW | well-static | monitor | 424.2 | 424.1928 |
| 35/1E 1H 4 | supply | 2740 COLLIER CANYON RD | Livermore | <Null> | Mocho II | unknown | <Null> | 0 | <Null> | well-supply | supply | 425 | 425.0229 |
| 35/1E 1J 3 | irrigation | Collier Canyon Rd & Constitution Dr | Livermore | <Null> | Mocho II | unknown | 4/14/2000 | 20028 | GLENN MARTELL | well-supply | irrigation | 420.9 | 420.8683 |
| 35/1E 1J 4 | supply | Collier Canyon Road | Livermore | At corner of | <Null> | active | <Null> | 2017083 | Hennings Brothers | well-supply | irrigation | <Null> | <Null> |
| 35/1E 1K 1 | unknown | <Null> | <Null> | <Null> | Mocho II | unknown | <Null> | 0 | <Null> | well-static | unknown | 430 | 430.0116 |
| 35/1E 1K 2 | unknown | <Null> | <Null> | <Null> | Mocho II | unknown | <Null> | 0 | <Null> | well-static | unknown | 427.4 | 427.5027 |
| 35/1E 1L 1 | monitor | KITTY HAWK RD & NISSEN DR | Livermore | <Null> | Camp | active | 12/19/2000 | 20230 | WOODWARD | well-static | monitor | 402.9 | 402.8736 |
| 35/1E 1P 2 | monitor | AIRWAY BLVD ACROSS FROM TOWER | <Null> | <Null> | Amador | active | <Null> | 0 | USGS HEW | well-static | monitor | 390.6 | 390.5753 |
| 35/1E 1P 3 | supply | AIRWAY BLVD | Livermore | <Null> | Amador | inactive | 7/28/1988 | 88288 | MAGGIORA BROS. | well-supply | supply | 391.2 | 391.302 |
| 35/1E 2I 3 | monitor | COLLIER CYN RD & DOOLAN RD | Livermore | <Null> | Camp | active | 7/16/2003 | 23087 | WOODWARD | well-static | monitor | 406.9 | 406.842 |
| 35/ZE 5N 6 | monitor | 800 EAST AIRWAY BLVD | Livermore | <Null> | Mocho II | unknown | 4/8/1991 | 91167 | BLYMWER ENGINEERS | well-static | monitor | 442.1 | 441.9813 |
| 35/ZE 5N 11 | monitor | AIRWAY BLVD & PORTOLA AVE | Livermore | <Null> | Mocho II | unknown | 8/18/2005 | 25106 | GEOMATRIX | well-static | monitor | 445.1 | 445.119 |
| 35/ZE 6L 1 | supply | 200 EAST AIRWAY BLVD | Livermore | <Null> | Mocho II | unknown | <Null> | 0 | <Null> | well-supply | supply | 405.3 | 405.324 |
| 35/ZE 6L 3 | supply | <Null> | <Null> | <Null> | Mocho II | unknown | <Null> | 0 | <Null> | well-supply | supply | 417.1 | 417.0959 |
| 35/ZE 6N 1 | monitor | AIRWAY BLVD & RUTAN DR | Livermore | <Null> | Mocho II | unknown | 2/2/1989 | 0 | <Null> | well-supply | supply | 413.2 | 413.1471 |
| 35/ZE 6N 3 | monitor | AIRWAY BLVD & KITTY HAWK RD | Livermore | <Null> | Mocho II | unknown | 8/23/2005 | 25106 | GEOMATRIX | well-static | monitor | 402.9 | 402.9144 |
| 35/ZE 6N 4 | monitor | E. AIRWAY BLVD & KITTY HAWK RD | Livermore | <Null> | Mocho II | unknown | <Null> | 28169 | GREGG DRILLING | well-static | monitor | 404.9 | 404.9679 |
| 35/ZE 6P 1 | supply | 1487 PORTOLA AVE | Livermore | <Null> | Mocho II | unknown | <Null> | 0 | <Null> | well-supply | supply | 421.4 | 421.2807 |
| 35/ZE 6P 5 | unknown | <Null> | <Null> | <Null> | Mocho II | unknown | <Null> | 0 | <Null> | well-static | unknown | 413.3 | 413.1217 |

* Zone 7 Program wells are highlighted in red

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap



ZONE 7 WATER AGENCY
 100 North Canyons Parkway, Livermore, CA

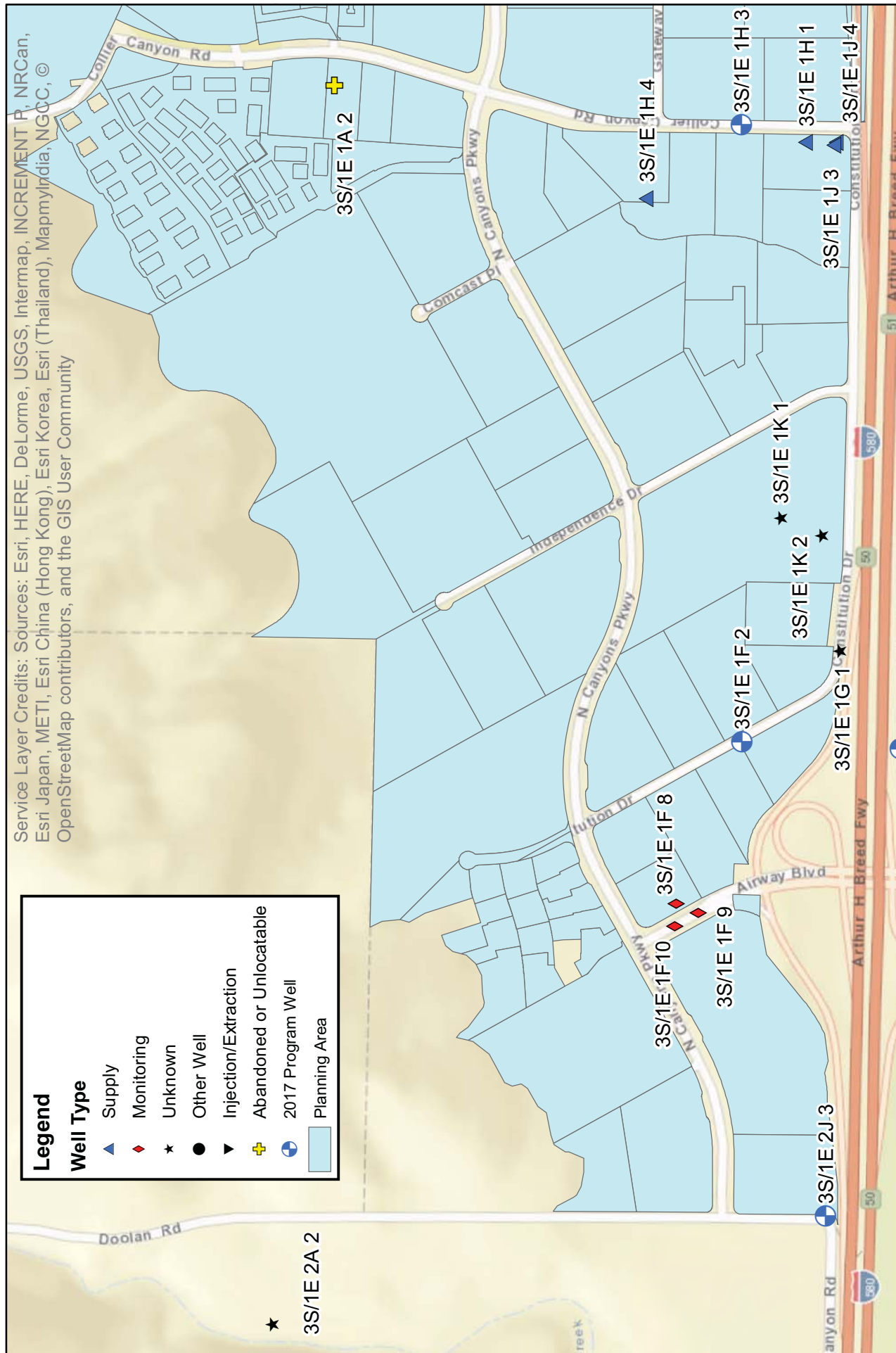
**Isabel Neighborhood Plan
 Planning Area**

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Legend

Well Type

- ▲ Supply
- ◆ Monitoring
- ★ Unknown
- Other Well
- ▼ Injection/Extraction
- ✚ Abandoned or Unlocatable
- ⊕ 2017 Program Well
- Planning Area



ZONE 7 WATER AGENCY
 100 North Canyons Parkway, Livermore, CA

Isabel Neighborhood Plan
Well Location Map 1

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community



Legend

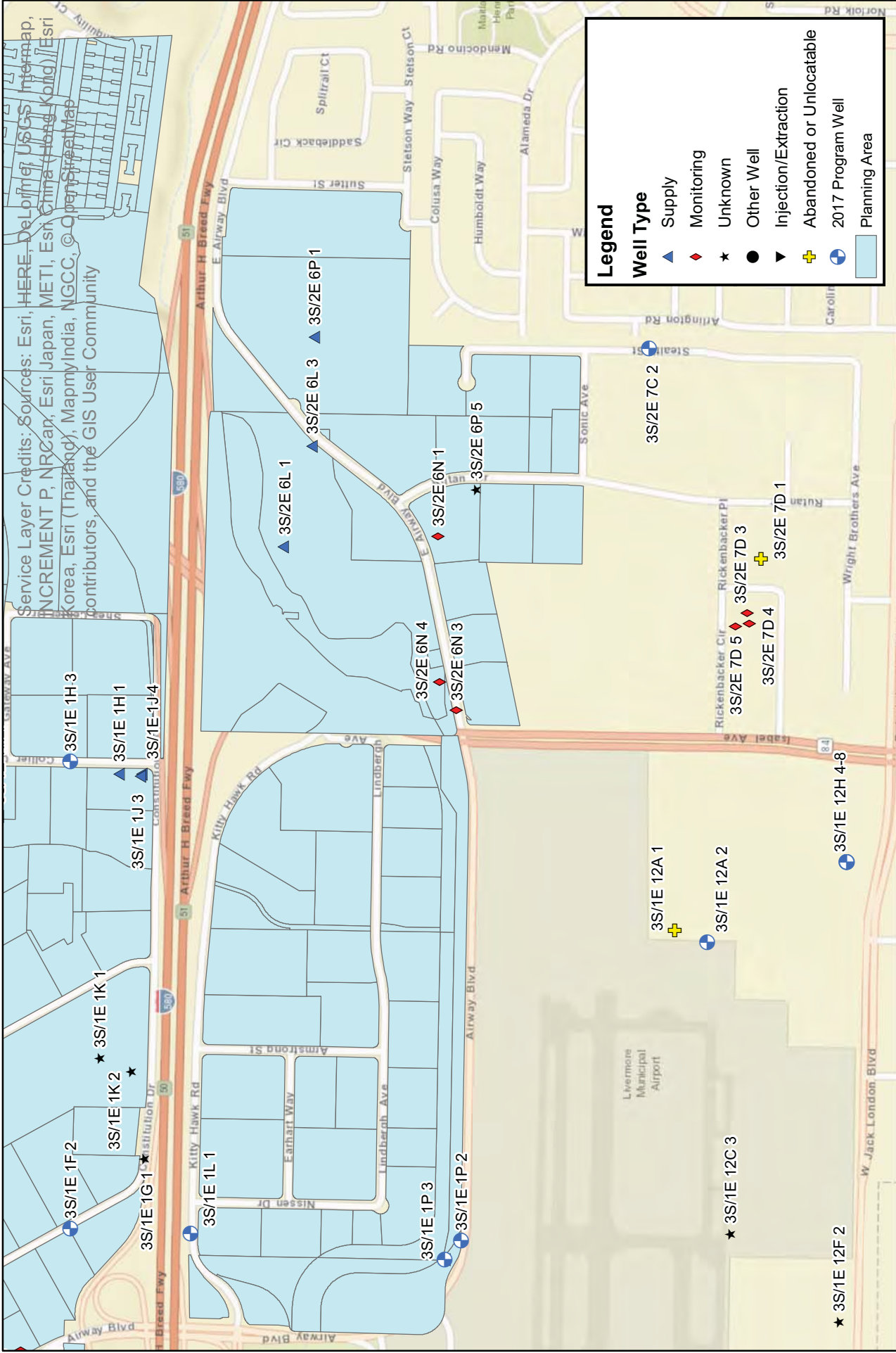
Well Type

- ▲ Supply
- ◆ Monitoring
- ★ Unknown
- Other Well
- ▼ Injection/Extraction
- ⊕ Abandoned or Unlocatable
- ⊕ 2017 Program Well
- Planning Area

**Isabel Neighborhood Plan
Well Location Map 2**

ZONE 7 WATER AGENCY
100 North Canyons Parkway, Livermore, CA





ZONE 7 WATER AGENCY
 100 North Canyons Parkway, Livermore, CA

Isabel Neighborhood Plan
Well Location Map 3



Legend

| Well Type | Symbol |
|--------------------------|------------------------|
| Supply | ▲ |
| Monitoring | ◆ |
| Unknown | ★ |
| Other Well | ● |
| Injection/Extraction | ▼ |
| Abandoned or Unlocatable | ⊕ |
| 2017 Program Well | ⊕ |
| Planning Area | Light Blue Shaded Area |

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Swire Hong Kong, Swire, Esri Korea, Esri (Thailand), MapmyIndia, ©OpenStreetMap contributors, and the GIS User Community



ZONE 7 WATER AGENCY
 100 North Canyons Parkway, Livermore, CA

Isabel Neighborhood Plan
Well Location Map 4



June 15, 2017

Helen Ling
Water Resources Division Manager
Livermore Water Resources/Public Works Division
101 West Jack London Boulevard.
Livermore, CA 94551

Subject: ***Response to Request for Input on WSA – Isabel Neighborhood Plan***

Dear Ms. ~~Ling~~ *Helen*:

This letter responds to your letter dated May 15, 2017 regarding “*Request for Input on Water Supply Assessment for Isabel Neighborhood Plan.*”

We would like to respond to two separate issues raised in your letter:

1. ***Updated Demand Projections*** - The City of Livermore is currently completing a Draft Water Master Plan that includes updated demand projections based on Livermore’s current General Plan. Based on Zone 7’s understanding, the analysis indicates that the projected buildout demand will increase from the 6,966 acre-feet annually (AFA) of demand presented in Livermore’s 2015 Urban Water Management Plan (UWMP) (Livermore, 2016) to 8,225 AFA, or an increase of 1,259 AFA.


The UWMP, which is prepared every five years, documents analyses conducted to determine available water supplies for the following twenty years and is the formal document used by Zone 7 and other water agencies to communicate water supply conditions to the public; any updated demand projections provided by Livermore, and other retailers, will therefore be formally analyzed and incorporated, as appropriate, into the 2020 UWMP. Note, however, that Zone 7’s projected water supplies as shown in Tables 7-12, 7-13, and 7-14 of Zone 7’s 2015 UWMP show excess supplies available under normal and dry conditions. This is intended to include some conservatism for planning purposes, including accounting for extreme conditions and uncertainty in the demand projections. The additional demand estimated by Livermore could likely be served by these planned excess supplies. The requested increase in demand amounts to about 20% of the projected excess supply in 2035, the latest projection in Zone 7’s 2015 UWMP (buildout is expected to be nearly complete at this time).

2. ***Isabel Neighborhood Plan*** – According to Livermore’s analysis, incorporating the Isabel Neighborhood Plan (INP), a proposed development, into Livermore’s General Plan would increase Livermore’s total demand by 140 acre feet annually/AFA (67 AFA in the area served by Livermore and 73 AFA in the area served by Cal Water). For the area

served by Livermore, potable water will only be used to meet indoor demands and recycled water will be used provide landscape irrigation. Should the Livermore City Council approve this development, this demand increase is less than 1% of demands for Livermore and Cal Water combined and is therefore not considered a significant increase requiring any interim analysis since it is well within the margin of error for Zone 7's projected water demands and planned future water supplies.

As you know, Zone 7 strongly supports the use of recycled water for landscaping and encourages incorporation of water use efficiency in any future developments such as this one. If you have any questions, please contact either Amparo Flores or me.

Sincerely,


G.F. Duerig
General Manager

cc: Dan McIntyre, DSRSD
Kathleen Yurchak, Pleasanton
Frank Vallejo, Cal Water
Carol Mahoney
Amparo Flores



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551-9486 • PHONE (925) 454-5000

ATTACHMENT 4

November 6, 2017

Ashley McBride, Assistant Planner
Livermore Community Development Department
1052 South Livermore Avenue
Livermore, CA 94550

Subject: *Comments on Draft Sections for Isabel Neighborhood Plan*

Dear Ms. McBride:

Thank you for the opportunity to comment on the preliminary draft sections that are in preparation (introduction and utilities) for the Draft Isabel Neighborhood Plan. In addition to comments previously provided on the draft Water Supply Assessment (attached), Zone 7 has the following comments for your consideration:

INTRODUCTION

- Zone 7's 2006 Stream Management Master Plan should be referenced: "In August 2006, the Zone 7 Board adopted a new flood control master plan, the Stream Management Master Plan (SMMP). The SMMP included 45 individual multi-benefit projects throughout the Livermore-Amador Valley while focusing mainly on regional storage of flood and storm waters within the Chain of Lakes to limit peak flows downstream. The SMMP also focuses on achieving project goals by incorporating multi-benefit and environmentally-friendly objectives, while forming partnerships with related agencies." For more details about flood control project(s) that may be implemented in the area, see Zone 7's comment letter to BART dated October 16, 2017, attached.

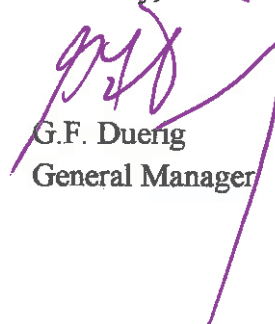
SECTION 4.1 UTILITIES

- Under 'Water Supply and Infrastructure,' third paragraph, last sentence, please add the word "planned" to the sentence as follows: *Based on the adopted UWMPs and updated projections, Zone 7 has indicated that there is sufficient planned water supply at this time to serve the City's General Plan anticipated growth, which accounts for development under the Isabel Neighborhood Plan.* Please also see (attached) Zone 7's letter to Helen Ling, City of Livermore's Water Resources Division Manager, dated June 15, 2017, regarding the Water Supply Assessment for the Isabel Neighborhood Plan.
- Water Supply and Infrastructure: Also note that there are Zone 7 facilities (pump stations, turnouts, and pipelines) in the area as follows:

- a. The Zone 7 Kittyhawk Pump Station and related facilities (including underground electrical facilities and a discharge structure) as well as a portion of the Altamont Pipeline are in the area of the Southwest corner of Isabel & East Airway.
 - b. The Zone 7 Liv. #5 Turnout is north of Arroyo Las Positas along Kittyhawk Ave, within the City's Wastewater Pump Station fence line.
 - c. The Cross Valley Pipeline runs East/West on the south side of I-580 between Santa Rita and Isabel.
 - d. South of East Airway, the Cross Valley Pipeline runs North/South, on the east side of Isabel (Hwy 84).
 - e. North of East Airway, the Cross Valley Pipeline runs along Kittyhawk Ave., typically along the south edge.
 - f. All of the above facilities could be impacted by the Plan. An encroachment permit will be required for any modifications or crossings of the facilities. Please also see attached Zone 7's comment letter to BART dated October 16, 2017.
- Under 'Stormwater,' first paragraph, fifth sentence, please add "and maintains" to the sentence as follows: *Zone 7 only owns and maintains the north side of Arroyo Las Positas (Line H) from Isabel to the crossing under Airway Boulevard.*
 - Stormwater facilities: Zone 7 owns the portion of Collier Canyon Creek (aka Line M) that runs through Zone 7's North Canyons Office parcel, since Zone 7 purchased the property at 100 North Canyons Parkway earlier this year.

If you have any questions, please contact either Elke Rank or me at (925) 454-5000.

Sincerely,



G.F. Duerig
General Manager

cc: Amparo Flores
Carol Mahoney
Elke Rank

Attachment

Appendix C: Air Quality and Greenhouse Gas Data

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INSP Update Existing (2013) - Alameda County, Annual

INSP Update Existing (2013)

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 1,314.00 | Dwelling Unit | 34.58 | 1,314,000.00 | 3758 |
| Industrial Park | 231.55 | 1000sqft | 5.32 | 231,550.00 | 0 |
| Junior College (2Yr) | 7,237.00 | Student | 7.25 | 315,911.24 | 0 |
| Manufacturing | 2,549.28 | 1000sqft | 58.52 | 2,549,280.00 | 0 |
| Office Park | 713.75 | 1000sqft | 16.39 | 713,750.00 | 0 |
| Regional Shopping Center | 902.98 | 1000sqft | 20.73 | 902,980.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2013 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 427 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Existing (2013) - Alameda County, Annual

Project Characteristics - 2013 PG&E pounds of CO2/MWh.

Land Use - Existing (2013) land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match existing (2013) VMT from traffic data.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - Based on the City's existing (2013) solid waste diversion rate.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 2,356,736.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 7,070,207.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 886,950.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 2,660,850.00 | 0.00 |
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| tblConstructionPhase | NumDays | 3,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 200.00 | 0.00 |
| tblConstructionPhase | NumDays | 310.00 | 0.00 |
| tblConstructionPhase | NumDays | 220.00 | 0.00 |

INSP Update Existing (2013) - Alameda County, Annual

| | | | |
|----------------------|----------------------------|------------|------------|
| tblConstructionPhase | NumDays | 120.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/14/2029 | 4/12/2028 |
| tblConstructionPhase | PhaseEndDate | 6/9/2027 | 7/22/2015 |
| tblConstructionPhase | PhaseEndDate | 11/27/2013 | 2/20/2013 |
| tblConstructionPhase | PhaseEndDate | 7/22/2015 | 5/14/2014 |
| tblConstructionPhase | PhaseEndDate | 4/12/2028 | 6/9/2027 |
| tblConstructionPhase | PhaseEndDate | 5/14/2014 | 11/27/2013 |
| tblFireplaces | NumberWood | 223.38 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |

INSP Update Existing (2013) - Alameda County, Annual

| | | | |
|---------------------------|--------------------|----------|--------|
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 427 |
| tblTripsAndVMT | VendorTripNumber | 913.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 2,764.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 553.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

INSP Update Existing (2013) - Alameda County, Annual

| | | | |
|-----------------|--------|-------|--------|
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| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.22 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |

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| | | | |
|-----------------|--------------------|-------|--------|
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 6.62 |
| tblVehicleTrips | ST_TR | 2.49 | 6.80 |
| tblVehicleTrips | ST_TR | 0.42 | 1.22 |
| tblVehicleTrips | ST_TR | 1.49 | 3.80 |
| tblVehicleTrips | ST_TR | 1.64 | 11.36 |
| tblVehicleTrips | ST_TR | 49.97 | 42.49 |
| tblVehicleTrips | SU_TR | 5.86 | 6.62 |
| tblVehicleTrips | SU_TR | 0.73 | 6.80 |
| tblVehicleTrips | SU_TR | 0.04 | 1.22 |
| tblVehicleTrips | SU_TR | 0.62 | 3.80 |
| tblVehicleTrips | SU_TR | 0.76 | 11.36 |
| tblVehicleTrips | SU_TR | 25.24 | 42.49 |
| tblVehicleTrips | WD_TR | 6.65 | 6.62 |
| tblVehicleTrips | WD_TR | 6.83 | 6.80 |
| tblVehicleTrips | WD_TR | 1.23 | 1.22 |
| tblVehicleTrips | WD_TR | 3.82 | 3.80 |
| tblVehicleTrips | WD_TR | 11.42 | 11.36 |
| tblVehicleTrips | WD_TR | 42.70 | 42.49 |
| tblWoodstoves | NumberCatalytic | 26.28 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 26.28 | 0.00 |

2.0 Emissions Summary

INSP Update Existing (2013) - Alameda County, Annual

2.1 Overall Construction

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 | | | | | |
| 2013 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2014 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2015 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2027 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2028 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Maximum | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | 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 |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|----------|--|--|
| | | Highest | | |

INSP Update Existing (2013) - Alameda County, Annual

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 | 27.2720 | 0.1423 | 10.1794 | 6.6000e-004 | | 0.0550 | 0.0550 | | 0.0550 | 0.0550 | 0.0000 | 40.7510 | 40.7510 | 0.0186 | 4.5000e-004 | 41.3498 |
| Energy | 0.5782 | 5.2230 | 4.1705 | 0.0315 | | 0.3995 | 0.3995 | | 0.3995 | 0.3995 | 0.0000 | 16,707.1409 | 16,707.1409 | 0.8557 | 0.2593 | 16,805.7942 |
| Mobile | 60.5408 | 345.4779 | 729.6804 | 1.4092 | 94.8392 | 6.3890 | 101.2283 | 25.5534 | 6.0891 | 31.6425 | 0.0000 | 128,646.5391 | 128,646.5391 | 8.8386 | 0.0000 | 128,867.5048 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1,417.9609 | 0.0000 | 1,417.9609 | 83.7991 | 0.0000 | 3,512.9381 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 297.5581 | 1,116.4749 | 1,414.0330 | 30.6379 | 0.7373 | 2,399.7032 |
| Total | 88.3910 | 350.8431 | 744.0303 | 1.4414 | 94.8392 | 6.8435 | 101.6828 | 25.5534 | 6.5436 | 32.0970 | 1,715.5190 | 146,510.9059 | 148,226.4249 | 124.1499 | 0.9970 | 151,627.2901 |

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2.2 Overall Operational

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|-----------------|-----------------|---------------|----------------|---------------|-----------------|----------------|---------------|----------------|-----------------|---------------------|---------------------|----------------|---------------|---------------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 27.2720 | 0.1423 | 10.1794 | 6.6000e-004 | | 0.0550 | 0.0550 | | 0.0550 | 0.0550 | 0.0000 | 40.7510 | 40.7510 | 0.0186 | 4.5000e-004 | 41.3498 |
| Energy | 0.5782 | 5.2230 | 4.1705 | 0.0315 | | 0.3995 | 0.3995 | | 0.3995 | 0.3995 | 0.0000 | 16,707.1409 | 16,707.1409 | 0.8557 | 0.2593 | 16,805.7942 |
| Mobile | 60.5408 | 345.4779 | 729.6804 | 1.4092 | 94.8392 | 6.3890 | 101.2283 | 25.5534 | 6.0891 | 31.6425 | 0.0000 | 128,646.5391 | 128,646.5391 | 8.8386 | 0.0000 | 128,867.5048 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 326.1310 | 0.0000 | 326.1310 | 19.2738 | 0.0000 | 807.9758 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 297.5581 | 1,116.4749 | 1,414.0330 | 30.6379 | 0.7373 | 2,399.7032 |
| Total | 88.3910 | 350.8431 | 744.0303 | 1.4414 | 94.8392 | 6.8435 | 101.6828 | 25.5534 | 6.5436 | 32.0970 | 623.6891 | 146,510.9059 | 147,134.5950 | 59.6246 | 0.9970 | 148,922.3277 |

| | 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 | 63.64 | 0.00 | 0.74 | 51.97 | 0.00 | 1.78 |

3.0 Construction Detail

Construction Phase

INSP Update Existing (2013) - Alameda County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 2/21/2013 | 2/20/2013 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 11/28/2013 | 11/27/2013 | 5 | 0 | |
| 3 | Grading | Grading | 5/15/2014 | 5/14/2014 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 7/23/2015 | 7/22/2015 | 5 | 0 | |
| 5 | Paving | Paving | 6/10/2027 | 6/9/2027 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 4/13/2028 | 4/12/2028 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

INSP Update Existing (2013) - Alameda County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

INSP Update Existing (2013) - Alameda County, Annual

3.7 Architectural Coating - 2028

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

INSP Update Existing (2013) - Alameda County, Annual

| | 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 | 60.5408 | 345.4779 | 729.6804 | 1.4092 | 94.8392 | 6.3890 | 101.2283 | 25.5534 | 6.0891 | 31.6425 | 0.0000 | 128,646.5391 | 128,646.5391 | 8.8386 | 0.0000 | 128,867.5048 |
| Unmitigated | 60.5408 | 345.4779 | 729.6804 | 1.4092 | 94.8392 | 6.3890 | 101.2283 | 25.5534 | 6.0891 | 31.6425 | 0.0000 | 128,646.5391 | 128,646.5391 | 8.8386 | 0.0000 | 128,867.5048 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|-----------|-----------|-------------|-------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 8,694.74 | 8,694.74 | 8694.74 | 29,180,236 | 29,180,236 |
| Industrial Park | 1,573.61 | 1,573.61 | 1573.61 | 5,281,174 | 5,281,174 |
| Junior College (2Yr) | 8,858.09 | 8,858.09 | 8858.09 | 29,728,452 | 29,728,452 |
| Manufacturing | 9,689.81 | 9,689.81 | 9689.81 | 32,519,789 | 32,519,789 |
| Office Park | 8,110.34 | 8,110.34 | 8110.34 | 27,218,954 | 27,218,954 |
| Regional Shopping Center | 38,363.11 | 38,364.01 | 38364.01 | 128,750,516 | 128,750,516 |
| Total | 75,289.70 | 75,290.60 | 75,290.60 | 252,679,121 | 252,679,121 |

4.3 Trip Type Information

INSP Update Existing (2013) - Alameda County, Annual

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Industrial Park | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Junior College (2Yr) | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Manufacturing | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Office Park | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Regional Shopping Center | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

INSP Update Existing (2013) - Alameda County, Annual

| | 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 | 10,984.9335 | 10,984.9335 | 0.7461 | 0.1544 | 11,049.5825 |
| Electricity Unmitigated | | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 10,984.9335 | 10,984.9335 | 0.7461 | 0.1544 | 11,049.5825 |
| NaturalGas Mitigated | 0.5782 | 5.2230 | 4.1705 | 0.0315 | | | 0.3995 | 0.3995 | | 0.3995 | 0.3995 | 5,722.2075 | 5,722.2075 | 0.1097 | 0.1049 | 5,756.2117 |
| NaturalGas Unmitigated | 0.5782 | 5.2230 | 4.1705 | 0.0315 | | | 0.3995 | 0.3995 | | 0.3995 | 0.3995 | 5,722.2075 | 5,722.2075 | 0.1097 | 0.1049 | 5,756.2117 |

INSP Update Existing (2013) - Alameda County, Annual

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 Mid Rise | 1.13522e+007 | 0.0612 | 0.5231 | 0.2226 | 3.3400e-003 | | 0.0423 | 0.0423 | | 0.0423 | 0.0423 | 0.0000 | 605.7986 | 605.7986 | 0.0116 | 0.0111 | 609.3986 |
| Industrial Park | 3.79047e+006 | 0.0204 | 0.1858 | 0.1561 | 1.1100e-003 | | 0.0141 | 0.0141 | | 0.0141 | 0.0141 | 0.0000 | 202.2741 | 202.2741 | 3.8800e-003 | 3.7100e-003 | 203.4761 |
| Junior College (2Yr) | 7.62294e+006 | 0.0411 | 0.3737 | 0.3139 | 2.2400e-003 | | 0.0284 | 0.0284 | | 0.0284 | 0.0284 | 0.0000 | 406.7890 | 406.7890 | 7.8000e-003 | 7.4600e-003 | 409.2064 |
| Manufacturing | 6.725e+007 | 0.3626 | 3.2966 | 2.7691 | 0.0198 | | 0.2505 | 0.2505 | | 0.2505 | 0.2505 | 0.0000 | 3,588.7165 | 3,588.7165 | 0.0688 | 0.0658 | 3,610.0424 |
| Office Park | 1.50744e+007 | 0.0813 | 0.7389 | 0.6207 | 4.4300e-003 | | 0.0562 | 0.0562 | | 0.0562 | 0.0562 | 0.0000 | 804.4274 | 804.4274 | 0.0154 | 0.0148 | 809.2077 |
| Regional Shopping Center | 2.14006e+006 | 0.0115 | 0.1049 | 0.0881 | 6.3000e-004 | | 7.9700e-003 | 7.9700e-003 | | 7.9700e-003 | 7.9700e-003 | 0.0000 | 114.2019 | 114.2019 | 2.1900e-003 | 2.0900e-003 | 114.8805 |
| Total | | 0.5782 | 5.2230 | 4.1705 | 0.0315 | | 0.3995 | 0.3995 | | 0.3995 | 0.3995 | 0.0000 | 5,722.2075 | 5,722.2075 | 0.1097 | 0.1049 | 5,756.2117 |

INSP Update Existing (2013) - Alameda County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|-------------------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Mid Rise | 1.13522e+007 | 0.0612 | 0.5231 | 0.2226 | 3.3400e-003 | | 0.0423 | 0.0423 | | 0.0423 | 0.0423 | 0.0000 | 605.7986 | 605.7986 | 0.0116 | 0.0111 | 609.3986 |
| Industrial Park | 3.79047e+006 | 0.0204 | 0.1858 | 0.1561 | 1.1100e-003 | | 0.0141 | 0.0141 | | 0.0141 | 0.0141 | 0.0000 | 202.2741 | 202.2741 | 3.8800e-003 | 3.7100e-003 | 203.4761 |
| Junior College (2Yr) | 7.62294e+006 | 0.0411 | 0.3737 | 0.3139 | 2.2400e-003 | | 0.0284 | 0.0284 | | 0.0284 | 0.0284 | 0.0000 | 406.7890 | 406.7890 | 7.8000e-003 | 7.4600e-003 | 409.2064 |
| Manufacturing | 6.725e+007 | 0.3626 | 3.2966 | 2.7691 | 0.0198 | | 0.2505 | 0.2505 | | 0.2505 | 0.2505 | 0.0000 | 3,588.7165 | 3,588.7165 | 0.0688 | 0.0658 | 3,610.0424 |
| Office Park | 1.50744e+007 | 0.0813 | 0.7389 | 0.6207 | 4.4300e-003 | | 0.0562 | 0.0562 | | 0.0562 | 0.0562 | 0.0000 | 804.4274 | 804.4274 | 0.0154 | 0.0148 | 809.2077 |
| Regional Shopping Center | 2.14006e+006 | 0.0115 | 0.1049 | 0.0881 | 6.3000e-004 | | 7.9700e-003 | 7.9700e-003 | | 7.9700e-003 | 7.9700e-003 | 0.0000 | 114.2019 | 114.2019 | 2.1900e-003 | 2.0900e-003 | 114.8805 |
| Total | | 0.5782 | 5.2230 | 4.1705 | 0.0315 | | 0.3995 | 0.3995 | | 0.3995 | 0.3995 | 0.0000 | 5,722.2075 | 5,722.2075 | 0.1097 | 0.1049 | 5,756.2117 |

INSP Update Existing (2013) - Alameda County, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|-----------------|--------------------|---------------|---------------|--------------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 5.42465e+006 | 1,050.6680 | 0.0714 | 0.0148 | 1,056.8514 |
| Industrial Park | 4.12854e+006 | 799.6312 | 0.0543 | 0.0112 | 804.3373 |
| Junior College (2Yr) | 2.49886e+006 | 483.9887 | 0.0329 | 6.8000e-003 | 486.8370 |
| Manufacturing | 2.10571e+007 | 4,078.4130 | 0.2770 | 0.0573 | 4,102.4155 |
| Office Park | 1.39538e+007 | 2,702.6294 | 0.1836 | 0.0380 | 2,718.5351 |
| Regional Shopping Center | 9.65286e+006 | 1,869.6032 | 0.1270 | 0.0263 | 1,880.6063 |
| Total | | 10,984.9335 | 0.7461 | 0.1544 | 11,049.5825 |

INSP Update Existing (2013) - Alameda County, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|-----------------|--------------------|---------------|---------------|--------------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 5.42465e+006 | 1,050.6680 | 0.0714 | 0.0148 | 1,056.8514 |
| Industrial Park | 4.12854e+006 | 799.6312 | 0.0543 | 0.0112 | 804.3373 |
| Junior College (2Yr) | 2.49886e+006 | 483.9887 | 0.0329 | 6.8000e-003 | 486.8370 |
| Manufacturing | 2.10571e+007 | 4,078.4130 | 0.2770 | 0.0573 | 4,102.4155 |
| Office Park | 1.39538e+007 | 2,702.6294 | 0.1836 | 0.0380 | 2,718.5351 |
| Regional Shopping Center | 9.65286e+006 | 1,869.6032 | 0.1270 | 0.0263 | 1,880.6063 |
| Total | | 10,984.9335 | 0.7461 | 0.1544 | 11,049.5825 |

6.0 Area Detail**6.1 Mitigation Measures Area**

INSP Update Existing (2013) - Alameda County, Annual

| | 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 | 27.2720 | 0.1423 | 10.1794 | 6.6000e-004 | | 0.0550 | 0.0550 | | 0.0550 | 0.0550 | 0.0000 | 40.7510 | 40.7510 | 0.0186 | 4.5000e-004 | 41.3498 |
| Unmitigated | 27.2720 | 0.1423 | 10.1794 | 6.6000e-004 | | 0.0550 | 0.0550 | | 0.0550 | 0.0550 | 0.0000 | 40.7510 | 40.7510 | 0.0186 | 4.5000e-004 | 41.3498 |

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 | 3.3828 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 23.5403 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 2.4900e-003 | 0.0213 | 9.0400e-003 | 1.4000e-004 | | 1.7200e-003 | 1.7200e-003 | | 1.7200e-003 | 1.7200e-003 | 0.0000 | 24.6058 | 24.6058 | 4.7000e-004 | 4.5000e-004 | 24.7520 |
| Landscaping | 0.3465 | 0.1210 | 10.1703 | 5.2000e-004 | | 0.0533 | 0.0533 | | 0.0533 | 0.0533 | 0.0000 | 16.1451 | 16.1451 | 0.0181 | 0.0000 | 16.5978 |
| Total | 27.2721 | 0.1423 | 10.1794 | 6.6000e-004 | | 0.0550 | 0.0550 | | 0.0550 | 0.0550 | 0.0000 | 40.7510 | 40.7510 | 0.0186 | 4.5000e-004 | 41.3498 |

INSP Update Existing (2013) - Alameda County, Annual

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|----------------|---------------|----------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|--------------------|----------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 3.3828 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 23.5403 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 2.4900e-003 | 0.0213 | 9.0400e-003 | 1.4000e-004 | | 1.7200e-003 | 1.7200e-003 | | 1.7200e-003 | 1.7200e-003 | 0.0000 | 24.6058 | 24.6058 | 4.7000e-004 | 4.5000e-004 | 24.7520 |
| Landscaping | 0.3465 | 0.1210 | 10.1703 | 5.2000e-004 | | 0.0533 | 0.0533 | | 0.0533 | 0.0533 | 0.0000 | 16.1451 | 16.1451 | 0.0181 | 0.0000 | 16.5978 |
| Total | 27.2721 | 0.1423 | 10.1794 | 6.6000e-004 | | 0.0550 | 0.0550 | | 0.0550 | 0.0550 | 0.0000 | 40.7510 | 40.7510 | 0.0186 | 4.5000e-004 | 41.3498 |

7.0 Water Detail

7.1 Mitigation Measures Water

INSP Update Existing (2013) - Alameda County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|----------------|---------|--------|----------------|
| Category | MT/yr | | | |
| Mitigated | 1,414.033 0 | 30.6379 | 0.7373 | 2,399.703 2 |
| Unmitigated | 1,414.033 0 | 30.6379 | 0.7373 | 2,399.703 2 |

INSP Update Existing (2013) - Alameda County, Annual

7.2 Water by Land Use

Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|--------------------|-------------------|----------------|---------------|-------------------|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 85.6124 / 53.973 | 153.4727 | 2.7983 | 0.0677 | 243.5875 |
| Industrial Park | 53.5459 / 0 | 73.1051 | 1.7486 | 0.0420 | 129.3323 |
| Junior College (2Yr) | 15.4951 / 24.236 | 37.5846 | 0.5071 | 0.0124 | 53.9524 |
| Manufacturing | 589.521 / 0 | 804.8599 | 19.2515 | 0.4623 | 1,423.9013 |
| Office Park | 126.857 / 77.7513 | 225.9028 | 4.1463 | 0.1002 | 359.4229 |
| Regional Shopping Center | 66.886 / 40.9946 | 119.1080 | 2.1861 | 0.0528 | 189.5069 |
| Total | | 1,414.0330 | 30.6379 | 0.7373 | 2,399.7032 |

INSP Update Existing (2013) - Alameda County, Annual

7.2 Water by Land Use**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|--------------------|-------------------|----------------|---------------|-------------------|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 85.6124 / 53.973 | 153.4727 | 2.7983 | 0.0677 | 243.5875 |
| Industrial Park | 53.5459 / 0 | 73.1051 | 1.7486 | 0.0420 | 129.3323 |
| Junior College (2Yr) | 15.4951 / 24.236 | 37.5846 | 0.5071 | 0.0124 | 53.9524 |
| Manufacturing | 589.521 / 0 | 804.8599 | 19.2515 | 0.4623 | 1,423.9013 |
| Office Park | 126.857 / 77.7513 | 225.9028 | 4.1463 | 0.1002 | 359.4229 |
| Regional Shopping Center | 66.886 / 40.9946 | 119.1080 | 2.1861 | 0.0528 | 189.5069 |
| Total | | 1,414.0330 | 30.6379 | 0.7373 | 2,399.7032 |

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

INSP Update Existing (2013) - Alameda County, Annual

Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|------------|---------|--------|------------|
| | MT/yr | | | |
| Mitigated | 326.1310 | 19.2738 | 0.0000 | 807.9758 |
| Unmitigated | 1,417.9609 | 83.7991 | 0.0000 | 3,512.9381 |

INSP Update Existing (2013) - Alameda County, Annual

8.2 Waste by Land Use**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|-------------------|----------------|---------------|-------------------|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 604.44 | 122.6959 | 7.2511 | 0.0000 | 303.9738 |
| Industrial Park | 287.12 | 58.2828 | 3.4444 | 0.0000 | 144.3931 |
| Junior College (2Yr) | 1320.75 | 268.1003 | 15.8443 | 0.0000 | 664.2072 |
| Manufacturing | 3161.11 | 641.6768 | 37.9220 | 0.0000 | 1,589.7270 |
| Office Park | 663.79 | 134.7434 | 7.9631 | 0.0000 | 333.8210 |
| Regional Shopping Center | 948.13 | 192.4618 | 11.3742 | 0.0000 | 476.8160 |
| Total | | 1,417.9609 | 83.7991 | 0.0000 | 3,512.9381 |

INSP Update Existing (2013) - Alameda County, Annual

8.2 Waste by Land Use

Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|-----------------|----------------|---------------|-----------------|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 139.021 | 28.2201 | 1.6678 | 0.0000 | 69.9140 |
| Industrial Park | 66.0376 | 13.4050 | 0.7922 | 0.0000 | 33.2104 |
| Junior College (2Yr) | 303.772 | 61.6631 | 3.6442 | 0.0000 | 152.7677 |
| Manufacturing | 727.055 | 147.5857 | 8.7221 | 0.0000 | 365.6372 |
| Office Park | 152.672 | 30.9910 | 1.8315 | 0.0000 | 76.7788 |
| Regional Shopping Center | 218.07 | 44.2662 | 2.6161 | 0.0000 | 109.6677 |
| Total | | 326.1310 | 19.2738 | 0.0000 | 807.9758 |

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

INSP Update Existing (2013) - Alameda County, Annual

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

INSP Update Existing (2013) - Alameda County, Summer

INSP Update Existing (2013)

Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 1,314.00 | Dwelling Unit | 34.58 | 1,314,000.00 | 3758 |
| Industrial Park | 231.55 | 1000sqft | 5.32 | 231,550.00 | 0 |
| Junior College (2Yr) | 7,237.00 | Student | 7.25 | 315,911.24 | 0 |
| Manufacturing | 2,549.28 | 1000sqft | 58.52 | 2,549,280.00 | 0 |
| Office Park | 713.75 | 1000sqft | 16.39 | 713,750.00 | 0 |
| Regional Shopping Center | 902.98 | 1000sqft | 20.73 | 902,980.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2013 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 427 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Existing (2013) - Alameda County, Summer

Project Characteristics - 2013 PG&E pounds of CO2/MWh.

Land Use - Existing (2013) land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match existing (2013) VMT from traffic data.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - Based on the City's existing (2013) solid waste diversion rate.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 2,356,736.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 7,070,207.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 886,950.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 2,660,850.00 | 0.00 |
| tblConstructionPhase | NumDays | 220.00 | 0.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 200.00 | 0.00 |
| tblConstructionPhase | NumDays | 310.00 | 0.00 |
| tblConstructionPhase | NumDays | 220.00 | 0.00 |

INSP Update Existing (2013) - Alameda County, Summer

| | | | |
|----------------------|----------------------------|------------|------------|
| tblConstructionPhase | NumDays | 120.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/14/2029 | 4/12/2028 |
| tblConstructionPhase | PhaseEndDate | 6/9/2027 | 7/22/2015 |
| tblConstructionPhase | PhaseEndDate | 11/27/2013 | 2/20/2013 |
| tblConstructionPhase | PhaseEndDate | 7/22/2015 | 5/14/2014 |
| tblConstructionPhase | PhaseEndDate | 4/12/2028 | 6/9/2027 |
| tblConstructionPhase | PhaseEndDate | 5/14/2014 | 11/27/2013 |
| tblFireplaces | NumberWood | 223.38 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |

INSP Update Existing (2013) - Alameda County, Summer

| | | | |
|---------------------------|--------------------|----------|--------|
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 427 |
| tblTripsAndVMT | VendorTripNumber | 913.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 2,764.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 553.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

INSP Update Existing (2013) - Alameda County, Summer

| | | | |
|-----------------|--------|-------|--------|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.22 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |

INSP Update Existing (2013) - Alameda County, Summer

| | | | |
|-----------------|--------------------|-------|--------|
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 6.62 |
| tblVehicleTrips | ST_TR | 2.49 | 6.80 |
| tblVehicleTrips | ST_TR | 0.42 | 1.22 |
| tblVehicleTrips | ST_TR | 1.49 | 3.80 |
| tblVehicleTrips | ST_TR | 1.64 | 11.36 |
| tblVehicleTrips | ST_TR | 49.97 | 42.49 |
| tblVehicleTrips | SU_TR | 5.86 | 6.62 |
| tblVehicleTrips | SU_TR | 0.73 | 6.80 |
| tblVehicleTrips | SU_TR | 0.04 | 1.22 |
| tblVehicleTrips | SU_TR | 0.62 | 3.80 |
| tblVehicleTrips | SU_TR | 0.76 | 11.36 |
| tblVehicleTrips | SU_TR | 25.24 | 42.49 |
| tblVehicleTrips | WD_TR | 6.65 | 6.62 |
| tblVehicleTrips | WD_TR | 6.83 | 6.80 |
| tblVehicleTrips | WD_TR | 1.23 | 1.22 |
| tblVehicleTrips | WD_TR | 3.82 | 3.80 |
| tblVehicleTrips | WD_TR | 11.42 | 11.36 |
| tblVehicleTrips | WD_TR | 42.70 | 42.49 |
| tblWoodstoves | NumberCatalytic | 26.28 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 26.28 | 0.00 |

2.0 Emissions Summary

INSP Update Existing (2013) - Alameda County, Summer

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 | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.2734 | 5,067.2734 | 0.3151 | 0.0893 | 5,101.7543 |
| Energy | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.4877 | 34,562.4877 | 0.6625 | 0.6337 | 34,767.8753 |
| Mobile | 362.5382 | 1,816.6489 | 4,181.7977 | 8.1921 | 540.9007 | 35.0349 | 575.9356 | 145.2649 | 33.3896 | 178.6545 | | 823,964.9410 | 823,964.9410 | 54.1166 | | 825,317.8560 |
| Total | 517.5264 | 1,850.4271 | 4,319.2765 | 8.3951 | 540.9007 | 38.1246 | 579.0253 | 145.2649 | 36.4792 | 181.7442 | 0.0000 | 863,594.7020 | 863,594.7020 | 55.0941 | 0.7229 | 865,187.4856 |

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 | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.2734 | 5,067.2734 | 0.3151 | 0.0893 | 5,101.7543 |
| Energy | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.4877 | 34,562.4877 | 0.6625 | 0.6337 | 34,767.8753 |
| Mobile | 362.5382 | 1,816.6489 | 4,181.7977 | 8.1921 | 540.9007 | 35.0349 | 575.9356 | 145.2649 | 33.3896 | 178.6545 | | 823,964.9410 | 823,964.9410 | 54.1166 | | 825,317.8560 |
| Total | 517.5264 | 1,850.4271 | 4,319.2765 | 8.3951 | 540.9007 | 38.1246 | 579.0253 | 145.2649 | 36.4792 | 181.7442 | 0.0000 | 863,594.7020 | 863,594.7020 | 55.0941 | 0.7229 | 865,187.4856 |

INSP Update Existing (2013) - Alameda County, Summer

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

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 2/21/2013 | 2/20/2013 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 11/28/2013 | 11/27/2013 | 5 | 0 | |
| 3 | Grading | Grading | 5/15/2014 | 5/14/2014 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 7/23/2015 | 7/22/2015 | 5 | 0 | |
| 5 | Paving | Paving | 6/10/2027 | 6/9/2027 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 4/13/2028 | 4/12/2028 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

INSP Update Existing (2013) - Alameda County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

INSP Update Existing (2013) - Alameda County, Summer

3.7 Architectural Coating - 2028

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 | 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

INSP Update Existing (2013) - Alameda County, Summer

| | 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 | 362.5382 | 1,816.6489 | 4,181.7977 | 8.1921 | 540.9007 | 35.0349 | 575.9356 | 145.2649 | 33.3896 | 178.6545 | | 823,964.9410 | 823,964.9410 | 54.1166 | | 825,317.8560 |
| Unmitigated | 362.5382 | 1,816.6489 | 4,181.7977 | 8.1921 | 540.9007 | 35.0349 | 575.9356 | 145.2649 | 33.3896 | 178.6545 | | 823,964.9410 | 823,964.9410 | 54.1166 | | 825,317.8560 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|-----------|-----------|-------------|-------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 8,694.74 | 8,694.74 | 8694.74 | 29,180,236 | 29,180,236 |
| Industrial Park | 1,573.61 | 1,573.61 | 1573.61 | 5,281,174 | 5,281,174 |
| Junior College (2Yr) | 8,858.09 | 8,858.09 | 8858.09 | 29,728,452 | 29,728,452 |
| Manufacturing | 9,689.81 | 9,689.81 | 9689.81 | 32,519,789 | 32,519,789 |
| Office Park | 8,110.34 | 8,110.34 | 8110.34 | 27,218,954 | 27,218,954 |
| Regional Shopping Center | 38,363.11 | 38,364.01 | 38364.01 | 128,750,516 | 128,750,516 |
| Total | 75,289.70 | 75,290.60 | 75,290.60 | 252,679,121 | 252,679,121 |

4.3 Trip Type Information

INSP Update Existing (2013) - Alameda County, Summer

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Industrial Park | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Junior College (2Yr) | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Manufacturing | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Office Park | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Regional Shopping Center | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

INSP Update Existing (2013) - Alameda County, Summer

| | 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 | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.48 77 | 34,562.48 77 | 0.6625 | 0.6337 | 34,767.87 53 |
| NaturalGas Unmitigated | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.48 77 | 34,562.48 77 | 0.6625 | 0.6337 | 34,767.87 53 |

INSP Update Existing (2013) - Alameda County, Summer

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 Mid Rise | 31102 | 0.3354 | 2.8663 | 1.2197 | 0.0183 | | 0.2317 | 0.2317 | | 0.2317 | 0.2317 | | 3,659.0612 | 3,659.0612 | 0.0701 | 0.0671 | 3,680.8052 |
| Industrial Park | 10384.9 | 0.1120 | 1.0181 | 0.8552 | 6.1100e-003 | | 0.0774 | 0.0774 | | 0.0774 | 0.0774 | | 1,221.7481 | 1,221.7481 | 0.0234 | 0.0224 | 1,229.0083 |
| Junior College (2Yr) | 20884.8 | 0.2252 | 2.0475 | 1.7199 | 0.0123 | | 0.1556 | 0.1556 | | 0.1556 | 0.1556 | | 2,457.0309 | 2,457.0309 | 0.0471 | 0.0451 | 2,471.6318 |
| Manufacturing | 184247 | 1.9870 | 18.0634 | 15.1733 | 0.1084 | | 1.3728 | 1.3728 | | 1.3728 | 1.3728 | | 21,676.0698 | 21,676.0698 | 0.4155 | 0.3974 | 21,804.8798 |
| Office Park | 41299.7 | 0.4454 | 4.0490 | 3.4012 | 0.0243 | | 0.3077 | 0.3077 | | 0.3077 | 0.3077 | | 4,858.7913 | 4,858.7913 | 0.0931 | 0.0891 | 4,887.6647 |
| Regional Shopping Center | 5863.19 | 0.0632 | 0.5748 | 0.4829 | 3.4500e-003 | | 0.0437 | 0.0437 | | 0.0437 | 0.0437 | | 689.7865 | 689.7865 | 0.0132 | 0.0127 | 693.8856 |
| Total | | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.4877 | 34,562.4877 | 0.6625 | 0.6337 | 34,767.8753 |

INSP Update Existing (2013) - Alameda County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 31.102 | 0.3354 | 2.8663 | 1.2197 | 0.0183 | | 0.2317 | 0.2317 | | 0.2317 | 0.2317 | | 3,659.0612 | 3,659.0612 | 0.0701 | 0.0671 | 3,680.8052 |
| Industrial Park | 10.3849 | 0.1120 | 1.0181 | 0.8552 | 6.1100e-003 | | 0.0774 | 0.0774 | | 0.0774 | 0.0774 | | 1,221.7481 | 1,221.7481 | 0.0234 | 0.0224 | 1,229.0083 |
| Junior College (2Yr) | 20.8848 | 0.2252 | 2.0475 | 1.7199 | 0.0123 | | 0.1556 | 0.1556 | | 0.1556 | 0.1556 | | 2,457.0309 | 2,457.0309 | 0.0471 | 0.0451 | 2,471.6318 |
| Manufacturing | 184.247 | 1.9870 | 18.0634 | 15.1733 | 0.1084 | | 1.3728 | 1.3728 | | 1.3728 | 1.3728 | | 21,676.0698 | 21,676.0698 | 0.4155 | 0.3974 | 21,804.8798 |
| Office Park | 41.2997 | 0.4454 | 4.0490 | 3.4012 | 0.0243 | | 0.3077 | 0.3077 | | 0.3077 | 0.3077 | | 4,858.7913 | 4,858.7913 | 0.0931 | 0.0891 | 4,887.6647 |
| Regional Shopping Center | 5.86319 | 0.0632 | 0.5748 | 0.4829 | 3.4500e-003 | | 0.0437 | 0.0437 | | 0.0437 | 0.0437 | | 689.7865 | 689.7865 | 0.0132 | 0.0127 | 693.8856 |
| Total | | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.4877 | 34,562.4877 | 0.6625 | 0.6337 | 34,767.8753 |

6.0 Area Detail

6.1 Mitigation Measures Area

INSP Update Existing (2013) - Alameda County, Summer

| | 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 | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.273 4 | 5,067.273 4 | 0.3151 | 0.0893 | 5,101.754 3 |
| Unmitigated | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.273 4 | 5,067.273 4 | 0.3151 | 0.0893 | 5,101.754 3 |

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 | 18.5357 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 128.9879 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.4464 | 3.8145 | 1.6232 | 0.0244 | | 0.3084 | 0.3084 | | 0.3084 | 0.3084 | 0.0000 | 4,869.529 4 | 4,869.529 4 | 0.0933 | 0.0893 | 4,898.466 6 |
| Landscaping | 3.8501 | 1.3446 | 113.0035 | 5.8100e-003 | | 0.5923 | 0.5923 | | 0.5923 | 0.5923 | | 197.7440 | 197.7440 | 0.2218 | | 203.2877 |
| Total | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.273 4 | 5,067.273 4 | 0.3151 | 0.0893 | 5,101.754 3 |

INSP Update Existing (2013) - Alameda County, Summer

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|-----------------|---------------|-----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|-------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 18.5357 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 128.9879 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.4464 | 3.8145 | 1.6232 | 0.0244 | | 0.3084 | 0.3084 | | 0.3084 | 0.3084 | 0.0000 | 4,869.5294 | 4,869.5294 | 0.0933 | 0.0893 | 4,898.4666 |
| Landscaping | 3.8501 | 1.3446 | 113.0035 | 5.8100e-003 | | 0.5923 | 0.5923 | | 0.5923 | 0.5923 | | 197.7440 | 197.7440 | 0.2218 | | 203.2877 |
| Total | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.2734 | 5,067.2734 | 0.3151 | 0.0893 | 5,101.7543 |

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

INSP Update Existing (2013) - Alameda County, Summer

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

INSP Update Existing (2013) - Alameda County, Winter

INSP Update Existing (2013)

Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 1,314.00 | Dwelling Unit | 34.58 | 1,314,000.00 | 3758 |
| Industrial Park | 231.55 | 1000sqft | 5.32 | 231,550.00 | 0 |
| Junior College (2Yr) | 7,237.00 | Student | 7.25 | 315,911.24 | 0 |
| Manufacturing | 2,549.28 | 1000sqft | 58.52 | 2,549,280.00 | 0 |
| Office Park | 713.75 | 1000sqft | 16.39 | 713,750.00 | 0 |
| Regional Shopping Center | 902.98 | 1000sqft | 20.73 | 902,980.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2013 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 427 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Existing (2013) - Alameda County, Winter

Project Characteristics - 2013 PG&E pounds of CO2/MWh.

Land Use - Existing (2013) land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match existing (2013) VMT from traffic data.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - Based on the City's existing (2013) solid waste diversion rate.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 2,356,736.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 7,070,207.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 886,950.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 2,660,850.00 | 0.00 |
| tblConstructionPhase | NumDays | 220.00 | 0.00 |
| tblConstructionPhase | NumDays | 3,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 200.00 | 0.00 |
| tblConstructionPhase | NumDays | 310.00 | 0.00 |
| tblConstructionPhase | NumDays | 220.00 | 0.00 |

INSP Update Existing (2013) - Alameda County, Winter

| | | | |
|----------------------|----------------------------|------------|------------|
| tblConstructionPhase | NumDays | 120.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/14/2029 | 4/12/2028 |
| tblConstructionPhase | PhaseEndDate | 6/9/2027 | 7/22/2015 |
| tblConstructionPhase | PhaseEndDate | 11/27/2013 | 2/20/2013 |
| tblConstructionPhase | PhaseEndDate | 7/22/2015 | 5/14/2014 |
| tblConstructionPhase | PhaseEndDate | 4/12/2028 | 6/9/2027 |
| tblConstructionPhase | PhaseEndDate | 5/14/2014 | 11/27/2013 |
| tblFireplaces | NumberWood | 223.38 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |

INSP Update Existing (2013) - Alameda County, Winter

| | | | |
|---------------------------|--------------------|----------|--------|
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 427 |
| tblTripsAndVMT | VendorTripNumber | 913.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 2,764.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 553.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TL | 7.30 | 9.22 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

INSP Update Existing (2013) - Alameda County, Winter

| | | | |
|-----------------|--------|-------|--------|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.22 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |

INSP Update Existing (2013) - Alameda County, Winter

| | | | |
|-----------------|--------------------|-------|--------|
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 6.62 |
| tblVehicleTrips | ST_TR | 2.49 | 6.80 |
| tblVehicleTrips | ST_TR | 0.42 | 1.22 |
| tblVehicleTrips | ST_TR | 1.49 | 3.80 |
| tblVehicleTrips | ST_TR | 1.64 | 11.36 |
| tblVehicleTrips | ST_TR | 49.97 | 42.49 |
| tblVehicleTrips | SU_TR | 5.86 | 6.62 |
| tblVehicleTrips | SU_TR | 0.73 | 6.80 |
| tblVehicleTrips | SU_TR | 0.04 | 1.22 |
| tblVehicleTrips | SU_TR | 0.62 | 3.80 |
| tblVehicleTrips | SU_TR | 0.76 | 11.36 |
| tblVehicleTrips | SU_TR | 25.24 | 42.49 |
| tblVehicleTrips | WD_TR | 6.65 | 6.62 |
| tblVehicleTrips | WD_TR | 6.83 | 6.80 |
| tblVehicleTrips | WD_TR | 1.23 | 1.22 |
| tblVehicleTrips | WD_TR | 3.82 | 3.80 |
| tblVehicleTrips | WD_TR | 11.42 | 11.36 |
| tblVehicleTrips | WD_TR | 42.70 | 42.49 |
| tblWoodstoves | NumberCatalytic | 26.28 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 26.28 | 0.00 |

2.0 Emissions Summary

INSP Update Existing (2013) - Alameda County, Winter

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 | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.2734 | 5,067.2734 | 0.3151 | 0.0893 | 5,101.7543 |
| Energy | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.4877 | 34,562.4877 | 0.6625 | 0.6337 | 34,767.8753 |
| Mobile | 339.1998 | 1,947.9141 | 4,208.1124 | 7.6968 | 540.9007 | 35.3010 | 576.2017 | 145.2649 | 33.6442 | 178.9091 | | 774,126.9734 | 774,126.9734 | 54.9357 | | 775,500.3654 |
| Total | 494.1881 | 1,981.6923 | 4,345.5912 | 7.8997 | 540.9007 | 38.3907 | 579.2914 | 145.2649 | 36.7339 | 181.9988 | 0.0000 | 813,756.7345 | 813,756.7345 | 55.9132 | 0.7229 | 815,369.9950 |

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 | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.2734 | 5,067.2734 | 0.3151 | 0.0893 | 5,101.7543 |
| Energy | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.4877 | 34,562.4877 | 0.6625 | 0.6337 | 34,767.8753 |
| Mobile | 339.1998 | 1,947.9141 | 4,208.1124 | 7.6968 | 540.9007 | 35.3010 | 576.2017 | 145.2649 | 33.6442 | 178.9091 | | 774,126.9734 | 774,126.9734 | 54.9357 | | 775,500.3654 |
| Total | 494.1881 | 1,981.6923 | 4,345.5912 | 7.8997 | 540.9007 | 38.3907 | 579.2914 | 145.2649 | 36.7339 | 181.9988 | 0.0000 | 813,756.7345 | 813,756.7345 | 55.9132 | 0.7229 | 815,369.9950 |

INSP Update Existing (2013) - Alameda County, Winter

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

3.0 Construction Detail**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 2/21/2013 | 2/20/2013 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 11/28/2013 | 11/27/2013 | 5 | 0 | |
| 3 | Grading | Grading | 5/15/2014 | 5/14/2014 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 7/23/2015 | 7/22/2015 | 5 | 0 | |
| 5 | Paving | Paving | 6/10/2027 | 6/9/2027 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 4/13/2028 | 4/12/2028 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

INSP Update Existing (2013) - Alameda County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

INSP Update Existing (2013) - Alameda County, Winter

3.7 Architectural Coating - 2028

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 | 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

INSP Update Existing (2013) - Alameda County, Winter

| | 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 | 339.1998 | 1,947.914 1 | 4,208.112 4 | 7.6968 | 540.9007 | 35.3010 | 576.2017 | 145.2649 | 33.6442 | 178.9091 | | 774,126.9 734 | 774,126.9 734 | 54.9357 | | 775,500.3 654 |
| Unmitigated | 339.1998 | 1,947.914 1 | 4,208.1124 | 7.6968 | 540.9007 | 35.3010 | 576.2017 | 145.2649 | 33.6442 | 178.9091 | | 774,126.9 734 | 774,126.9 734 | 54.9357 | | 775,500.3 654 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|------------------|------------------|--------------------|--------------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 8,694.74 | 8,694.74 | 8694.74 | 29,180,236 | 29,180,236 |
| Industrial Park | 1,573.61 | 1,573.61 | 1573.61 | 5,281,174 | 5,281,174 |
| Junior College (2Yr) | 8,858.09 | 8,858.09 | 8858.09 | 29,728,452 | 29,728,452 |
| Manufacturing | 9,689.81 | 9,689.81 | 9689.81 | 32,519,789 | 32,519,789 |
| Office Park | 8,110.34 | 8,110.34 | 8110.34 | 27,218,954 | 27,218,954 |
| Regional Shopping Center | 38,363.11 | 38,364.01 | 38364.01 | 128,750,516 | 128,750,516 |
| Total | 75,289.70 | 75,290.60 | 75,290.60 | 252,679,121 | 252,679,121 |

4.3 Trip Type Information

INSP Update Existing (2013) - Alameda County, Winter

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.22 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Industrial Park | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Junior College (2Yr) | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Manufacturing | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Office Park | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |
| Regional Shopping Center | 0.542522 | 0.050811 | 0.188180 | 0.116444 | 0.023901 | 0.005213 | 0.020538 | 0.039278 | 0.001869 | 0.004398 | 0.005686 | 0.000232 | 0.000928 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

INSP Update Existing (2013) - Alameda County, Winter

| | 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 | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.48 77 | 34,562.48 77 | 0.6625 | 0.6337 | 34,767.87 53 |
| NaturalGas Unmitigated | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.48 77 | 34,562.48 77 | 0.6625 | 0.6337 | 34,767.87 53 |

INSP Update Existing (2013) - Alameda County, Winter

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 Mid Rise | 31102 | 0.3354 | 2.8663 | 1.2197 | 0.0183 | | 0.2317 | 0.2317 | | 0.2317 | 0.2317 | | 3,659.0612 | 3,659.0612 | 0.0701 | 0.0671 | 3,680.8052 |
| Industrial Park | 10384.9 | 0.1120 | 1.0181 | 0.8552 | 6.1100e-003 | | 0.0774 | 0.0774 | | 0.0774 | 0.0774 | | 1,221.7481 | 1,221.7481 | 0.0234 | 0.0224 | 1,229.0083 |
| Junior College (2Yr) | 20884.8 | 0.2252 | 2.0475 | 1.7199 | 0.0123 | | 0.1556 | 0.1556 | | 0.1556 | 0.1556 | | 2,457.0309 | 2,457.0309 | 0.0471 | 0.0451 | 2,471.6318 |
| Manufacturing | 184247 | 1.9870 | 18.0634 | 15.1733 | 0.1084 | | 1.3728 | 1.3728 | | 1.3728 | 1.3728 | | 21,676.0698 | 21,676.0698 | 0.4155 | 0.3974 | 21,804.8798 |
| Office Park | 41299.7 | 0.4454 | 4.0490 | 3.4012 | 0.0243 | | 0.3077 | 0.3077 | | 0.3077 | 0.3077 | | 4,858.7913 | 4,858.7913 | 0.0931 | 0.0891 | 4,887.6647 |
| Regional Shopping Center | 5863.19 | 0.0632 | 0.5748 | 0.4829 | 3.4500e-003 | | 0.0437 | 0.0437 | | 0.0437 | 0.0437 | | 689.7865 | 689.7865 | 0.0132 | 0.0127 | 693.8856 |
| Total | | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.4877 | 34,562.4877 | 0.6625 | 0.6337 | 34,767.8753 |

INSP Update Existing (2013) - Alameda County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 31.102 | 0.3354 | 2.8663 | 1.2197 | 0.0183 | | 0.2317 | 0.2317 | | 0.2317 | 0.2317 | | 3,659.0612 | 3,659.0612 | 0.0701 | 0.0671 | 3,680.8052 |
| Industrial Park | 10.3849 | 0.1120 | 1.0181 | 0.8552 | 6.1100e-003 | | 0.0774 | 0.0774 | | 0.0774 | 0.0774 | | 1,221.7481 | 1,221.7481 | 0.0234 | 0.0224 | 1,229.0083 |
| Junior College (2Yr) | 20.8848 | 0.2252 | 2.0475 | 1.7199 | 0.0123 | | 0.1556 | 0.1556 | | 0.1556 | 0.1556 | | 2,457.0309 | 2,457.0309 | 0.0471 | 0.0451 | 2,471.6318 |
| Manufacturing | 184.247 | 1.9870 | 18.0634 | 15.1733 | 0.1084 | | 1.3728 | 1.3728 | | 1.3728 | 1.3728 | | 21,676.0698 | 21,676.0698 | 0.4155 | 0.3974 | 21,804.8798 |
| Office Park | 41.2997 | 0.4454 | 4.0490 | 3.4012 | 0.0243 | | 0.3077 | 0.3077 | | 0.3077 | 0.3077 | | 4,858.7913 | 4,858.7913 | 0.0931 | 0.0891 | 4,887.6647 |
| Regional Shopping Center | 5.86319 | 0.0632 | 0.5748 | 0.4829 | 3.4500e-003 | | 0.0437 | 0.0437 | | 0.0437 | 0.0437 | | 689.7865 | 689.7865 | 0.0132 | 0.0127 | 693.8856 |
| Total | | 3.1682 | 28.6191 | 22.8521 | 0.1728 | | 2.1890 | 2.1890 | | 2.1890 | 2.1890 | | 34,562.4877 | 34,562.4877 | 0.6625 | 0.6337 | 34,767.8753 |

6.0 Area Detail

6.1 Mitigation Measures Area

INSP Update Existing (2013) - Alameda County, Winter

| | 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 | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.273 4 | 5,067.273 4 | 0.3151 | 0.0893 | 5,101.754 3 |
| Unmitigated | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.273 4 | 5,067.273 4 | 0.3151 | 0.0893 | 5,101.754 3 |

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 | 18.5357 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 128.9879 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.4464 | 3.8145 | 1.6232 | 0.0244 | | 0.3084 | 0.3084 | | 0.3084 | 0.3084 | 0.0000 | 4,869.529 4 | 4,869.529 4 | 0.0933 | 0.0893 | 4,898.466 6 |
| Landscaping | 3.8501 | 1.3446 | 113.0035 | 5.8100e-003 | | 0.5923 | 0.5923 | | 0.5923 | 0.5923 | | 197.7440 | 197.7440 | 0.2218 | | 203.2877 |
| Total | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.273 4 | 5,067.273 4 | 0.3151 | 0.0893 | 5,101.754 3 |

INSP Update Existing (2013) - Alameda County, Winter

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|-----------------|---------------|-----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|-------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 18.5357 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 128.9879 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.4464 | 3.8145 | 1.6232 | 0.0244 | | 0.3084 | 0.3084 | | 0.3084 | 0.3084 | 0.0000 | 4,869.5294 | 4,869.5294 | 0.0933 | 0.0893 | 4,898.4666 |
| Landscaping | 3.8501 | 1.3446 | 113.0035 | 5.8100e-003 | | 0.5923 | 0.5923 | | 0.5923 | 0.5923 | | 197.7440 | 197.7440 | 0.2218 | | 203.2877 |
| Total | 151.8200 | 5.1591 | 114.6267 | 0.0302 | | 0.9007 | 0.9007 | | 0.9007 | 0.9007 | 0.0000 | 5,067.2734 | 5,067.2734 | 0.3151 | 0.0893 | 5,101.7543 |

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

INSP Update Existing (2013) - Alameda County, Winter

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

INSP Update Proposed Plan (2025) - Alameda County, Annual

INSP Update Proposed Plan (2025)
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Office Park | 335.25 | 1000sqft | 7.70 | 335,250.00 | 0 |
| Junior College (2Yr) | 7,237.00 | Student | 7.25 | 315,911.24 | 0 |
| Industrial Park | 5,237.00 | 1000sqft | 120.22 | 5,237,000.00 | 0 |
| Manufacturing | 5,238.75 | 1000sqft | 120.27 | 5,238,750.00 | 0 |
| Apartments Mid Rise | 2,914.00 | Dwelling Unit | 76.68 | 2,914,000.00 | 8334 |
| Regional Shopping Center | 549.50 | 1000sqft | 12.61 | 549,500.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2025 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 291 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Proposed Plan (2025) - Alameda County, Annual

Project Characteristics - Intensity factor includes RPS benefit up to 2025.

Land Use - Future (2025) Proposed Plan land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match VMT resulting from implementation of the Proposed Plan.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - Based on City's most recent solid waste diversion rate.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 5,838,206.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 17,514,617.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 1,966,950.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 5,900,850.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 6,200.00 | 0.00 |
| tblConstructionPhase | NumDays | 400.00 | 0.00 |
| tblConstructionPhase | NumDays | 620.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |

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| | | | |
|----------------------|----------------------------|-----------|-----------|
| tblConstructionPhase | NumDays | 240.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/21/2052 | 6/15/2050 |
| tblConstructionPhase | PhaseEndDate | 10/7/2048 | 1/1/2025 |
| tblConstructionPhase | PhaseEndDate | 9/15/2021 | 3/4/2020 |
| tblConstructionPhase | PhaseEndDate | 1/1/2025 | 8/17/2022 |
| tblConstructionPhase | PhaseEndDate | 6/15/2050 | 10/7/2048 |
| tblConstructionPhase | PhaseEndDate | 8/17/2022 | 9/15/2021 |
| tblFireplaces | NumberWood | 495.38 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |

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| | | | |
|---------------------------|--------------------|----------|--------|
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 291 |
| tblTripsAndVMT | VendorTripNumber | 2,225.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 6,914.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 1,383.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

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| | | | |
|-----------------|--------|-------|--------|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.39 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |

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| | | | |
|-----------------|--------------------|-------|--------|
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 5.29 |
| tblVehicleTrips | ST_TR | 2.49 | 5.43 |
| tblVehicleTrips | ST_TR | 0.42 | 0.98 |
| tblVehicleTrips | ST_TR | 1.49 | 3.04 |
| tblVehicleTrips | ST_TR | 1.64 | 9.08 |
| tblVehicleTrips | ST_TR | 49.97 | 33.95 |
| tblVehicleTrips | SU_TR | 5.86 | 5.29 |
| tblVehicleTrips | SU_TR | 0.73 | 5.43 |
| tblVehicleTrips | SU_TR | 0.04 | 0.98 |
| tblVehicleTrips | SU_TR | 0.62 | 3.04 |
| tblVehicleTrips | SU_TR | 0.76 | 9.08 |
| tblVehicleTrips | SU_TR | 25.24 | 33.95 |
| tblVehicleTrips | WD_TR | 6.65 | 5.29 |
| tblVehicleTrips | WD_TR | 6.83 | 5.43 |
| tblVehicleTrips | WD_TR | 1.23 | 0.98 |
| tblVehicleTrips | WD_TR | 3.82 | 3.04 |
| tblVehicleTrips | WD_TR | 11.42 | 9.08 |
| tblVehicleTrips | WD_TR | 42.70 | 33.95 |
| tblWoodstoves | NumberCatalytic | 58.28 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 58.28 | 0.00 |

2.0 Emissions Summary

INSP Update Proposed Plan (2025) - Alameda County, Annual

2.1 Overall Construction

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 | | | | | |
| 2020 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2021 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2025 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2048 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2050 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Maximum | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | 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 |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|----------|--|--|
| | | Highest | | |

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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 | 65.7929 | 0.2977 | 21.8068 | 1.4600e-003 | | 0.1244 | 0.1244 | | 0.1244 | 0.1244 | 0.0000 | 90.2429 | 90.2429 | 0.0358 | 1.0000e-003 | 91.4349 |
| Energy | 1.4295 | 12.9215 | 10.3733 | 0.0780 | | 0.9877 | 0.9877 | | 0.9877 | 0.9877 | 0.0000 | 35,742.3233 | 35,742.3233 | 2.4232 | 0.7046 | 36,012.8828 |
| Mobile | 22.4634 | 150.2846 | 281.5292 | 1.2984 | 113.1734 | 1.0371 | 114.2105 | 30.4121 | 0.9705 | 31.3826 | 0.0000 | 120,006.5479 | 120,006.5479 | 4.0919 | 0.0000 | 120,108.8445 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3,357.4462 | 0.0000 | 3,357.4462 | 198.4194 | 0.0000 | 8,317.9308 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 865.5191 | 2,043.4149 | 2,908.9339 | 89.1008 | 2.1412 | 5,774.5259 |
| Total | 89.6858 | 163.5038 | 313.7092 | 1.3778 | 113.1734 | 2.1492 | 115.3226 | 30.4121 | 2.0826 | 32.4946 | 4,222.9652 | 157,882.5289 | 162,105.4941 | 294.0710 | 2.8468 | 170,305.6188 |

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2.2 Overall Operational

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|-----------------|-----------------|---------------|-----------------|---------------|-----------------|----------------|---------------|----------------|-------------------|---------------------|---------------------|-----------------|---------------|---------------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 65.7929 | 0.2977 | 21.8068 | 1.4600e-003 | | 0.1244 | 0.1244 | | 0.1244 | 0.1244 | 0.0000 | 90.2429 | 90.2429 | 0.0358 | 1.0000e-003 | 91.4349 |
| Energy | 1.4295 | 12.9215 | 10.3733 | 0.0780 | | 0.9877 | 0.9877 | | 0.9877 | 0.9877 | 0.0000 | 35,742.3233 | 35,742.3233 | 2.4232 | 0.7046 | 36,012.8828 |
| Mobile | 22.4634 | 150.2846 | 281.5292 | 1.2984 | 113.1734 | 1.0371 | 114.2105 | 30.4121 | 0.9705 | 31.3826 | 0.0000 | 120,006.5479 | 120,006.5479 | 4.0919 | 0.0000 | 120,108.8445 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 839.3615 | 0.0000 | 839.3615 | 49.6049 | 0.0000 | 2,079.4827 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 865.5191 | 2,043.4149 | 2,908.9339 | 89.1008 | 2.1412 | 5,774.5259 |
| Total | 89.6858 | 163.5038 | 313.7092 | 1.3778 | 113.1734 | 2.1492 | 115.3226 | 30.4121 | 2.0826 | 32.4946 | 1,704.8806 | 157,882.5289 | 159,587.4095 | 145.2565 | 2.8468 | 164,067.1707 |

| | 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 | 59.63 | 0.00 | 1.55 | 50.60 | 0.00 | 3.66 |

3.0 Construction Detail

Construction Phase

INSP Update Proposed Plan (2025) - Alameda County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 3/5/2020 | 3/4/2020 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 9/16/2021 | 9/15/2021 | 5 | 0 | |
| 3 | Grading | Grading | 8/18/2022 | 8/17/2022 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 1/2/2025 | 1/1/2025 | 5 | 0 | |
| 5 | Paving | Paving | 10/8/2048 | 10/7/2048 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 6/16/2050 | 6/15/2050 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

INSP Update Proposed Plan (2025) - Alameda County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

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3.7 Architectural Coating - 2050

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

INSP Update Proposed Plan (2025) - Alameda County, Annual

| | 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 | 22.4634 | 150.2846 | 281.5292 | 1.2984 | 113.1734 | 1.0371 | 114.2105 | 30.4121 | 0.9705 | 31.3826 | 0.0000 | 120,006.5479 | 120,006.5479 | 4.0919 | 0.0000 | 120,108.8445 |
| Unmitigated | 22.4634 | 150.2846 | 281.5292 | 1.2984 | 113.1734 | 1.0371 | 114.2105 | 30.4121 | 0.9705 | 31.3826 | 0.0000 | 120,006.5479 | 120,006.5479 | 4.0919 | 0.0000 | 120,108.8445 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|------------------|------------------|--------------------|--------------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 15,409.23 | 15,409.23 | 15409.23 | 52,668,139 | 52,668,139 |
| Industrial Park | 28,442.15 | 28,442.15 | 28442.15 | 97,214,121 | 97,214,121 |
| Junior College (2Yr) | 7,077.79 | 7,077.79 | 7077.79 | 24,191,589 | 24,191,589 |
| Manufacturing | 15,915.32 | 15,915.32 | 15915.32 | 54,397,936 | 54,397,936 |
| Office Park | 3,044.41 | 3,044.41 | 3044.41 | 10,405,655 | 10,405,655 |
| Regional Shopping Center | 18,657.72 | 18,657.72 | 18657.72 | 63,771,351 | 63,771,351 |
| Total | 88,546.62 | 88,546.62 | 88,546.62 | 302,648,791 | 302,648,791 |

4.3 Trip Type Information

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| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Industrial Park | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Junior College (2Yr) | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Manufacturing | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Office Park | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Regional Shopping Center | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

INSP Update Proposed Plan (2025) - Alameda County, Annual

| | 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 | 21,595.0971 | 21,595.0971 | 2.1521 | 0.4453 | 21,781.5868 |
| Electricity Unmitigated | | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 21,595.0971 | 21,595.0971 | 2.1521 | 0.4453 | 21,781.5868 |
| NaturalGas Mitigated | 1.4295 | 12.9215 | 10.3733 | 0.0780 | | | 0.9877 | 0.9877 | | 0.9877 | 0.9877 | 14,147.2261 | 14,147.2261 | 0.2712 | 0.2594 | 14,231.2960 |
| NaturalGas Unmitigated | 1.4295 | 12.9215 | 10.3733 | 0.0780 | | | 0.9877 | 0.9877 | | 0.9877 | 0.9877 | 14,147.2261 | 14,147.2261 | 0.2712 | 0.2594 | 14,231.2960 |

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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 Mid Rise | 2.51754e+007 | 0.1358 | 1.1600 | 0.4936 | 7.4000e-003 | | 0.0938 | 0.0938 | | 0.0938 | 0.0938 | 0.0000 | 1,343.4529 | 1,343.4529 | 0.0258 | 0.0246 | 1,351.4364 |
| Industrial Park | 8.57297e+007 | 0.4623 | 4.2024 | 3.5301 | 0.0252 | | 0.3194 | 0.3194 | | 0.3194 | 0.3194 | 0.0000 | 4,574.8627 | 4,574.8627 | 0.0877 | 0.0839 | 4,602.0489 |
| Junior College (2Yr) | 7.62294e+006 | 0.0411 | 0.3737 | 0.3139 | 2.2400e-003 | | 0.0284 | 0.0284 | | 0.0284 | 0.0284 | 0.0000 | 406.7890 | 406.7890 | 7.8000e-003 | 7.4600e-003 | 409.2064 |
| Manufacturing | 1.38198e+008 | 0.7452 | 6.7744 | 5.6905 | 0.0407 | | 0.5149 | 0.5149 | | 0.5149 | 0.5149 | 0.0000 | 7,374.7836 | 7,374.7836 | 0.1414 | 0.1352 | 7,418.6082 |
| Office Park | 7.08048e+006 | 0.0382 | 0.3471 | 0.2916 | 2.0800e-003 | | 0.0264 | 0.0264 | | 0.0264 | 0.0264 | 0.0000 | 377.8414 | 377.8414 | 7.2400e-003 | 6.9300e-003 | 380.0867 |
| Regional Shopping Center | 1.30232e+006 | 7.0200e-003 | 0.0638 | 0.0536 | 3.8000e-004 | | 4.8500e-003 | 4.8500e-003 | | 4.8500e-003 | 4.8500e-003 | 0.0000 | 69.4965 | 69.4965 | 1.3300e-003 | 1.2700e-003 | 69.9095 |
| Total | | 1.4295 | 12.9215 | 10.3733 | 0.0780 | | 0.9877 | 0.9877 | | 0.9877 | 0.9877 | 0.0000 | 14,147.2261 | 14,147.2261 | 0.2712 | 0.2594 | 14,231.2960 |

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5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Mid Rise | 2.51754e+007 | 0.1358 | 1.1600 | 0.4936 | 7.4000e-003 | | 0.0938 | 0.0938 | | 0.0938 | 0.0938 | 0.0000 | 1,343.4529 | 1,343.4529 | 0.0258 | 0.0246 | 1,351.4364 |
| Industrial Park | 8.57297e+007 | 0.4623 | 4.2024 | 3.5301 | 0.0252 | | 0.3194 | 0.3194 | | 0.3194 | 0.3194 | 0.0000 | 4,574.8627 | 4,574.8627 | 0.0877 | 0.0839 | 4,602.0489 |
| Junior College (2Yr) | 7.62294e+006 | 0.0411 | 0.3737 | 0.3139 | 2.2400e-003 | | 0.0284 | 0.0284 | | 0.0284 | 0.0284 | 0.0000 | 406.7890 | 406.7890 | 7.8000e-003 | 7.4600e-003 | 409.2064 |
| Manufacturing | 1.38198e+008 | 0.7452 | 6.7744 | 5.6905 | 0.0407 | | 0.5149 | 0.5149 | | 0.5149 | 0.5149 | 0.0000 | 7,374.7836 | 7,374.7836 | 0.1414 | 0.1352 | 7,418.6082 |
| Office Park | 7.08048e+006 | 0.0382 | 0.3471 | 0.2916 | 2.0800e-003 | | 0.0264 | 0.0264 | | 0.0264 | 0.0264 | 0.0000 | 377.8414 | 377.8414 | 7.2400e-003 | 6.9300e-003 | 380.0867 |
| Regional Shopping Center | 1.30232e+006 | 7.0200e-003 | 0.0638 | 0.0536 | 3.8000e-004 | | 4.8500e-003 | 4.8500e-003 | | 4.8500e-003 | 4.8500e-003 | 0.0000 | 69.4965 | 69.4965 | 1.3300e-003 | 1.2700e-003 | 69.9095 |
| Total | | 1.4295 | 12.9215 | 10.3733 | 0.0780 | | 0.9877 | 0.9877 | | 0.9877 | 0.9877 | 0.0000 | 14,147.2261 | 14,147.2261 | 0.2712 | 0.2594 | 14,231.2960 |

INSP Update Proposed Plan (2025) - Alameda County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|-----------------|--------------------|---------------|---------------|--------------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 1.203e+007 | 1,587.9060 | 0.1582 | 0.0327 | 1,601.6187 |
| Industrial Park | 9.33757e+007 | 12,325.1623 | 1.2283 | 0.2541 | 12,431.5992 |
| Junior College (2Yr) | 2.49886e+006 | 329.8377 | 0.0329 | 6.8000e-003 | 332.6861 |
| Manufacturing | 4.32721e+007 | 5,711.7140 | 0.5692 | 0.1178 | 5,761.0388 |
| Office Park | 6.55414e+006 | 865.1159 | 0.0862 | 0.0178 | 872.5868 |
| Regional Shopping Center | 5.87416e+006 | 775.3613 | 0.0773 | 0.0160 | 782.0571 |
| Total | | 21,595.0971 | 2.1521 | 0.4453 | 21,781.5868 |

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5.3 Energy by Land Use - Electricity

Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|-----------------|--------------------|---------------|---------------|--------------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 1.203e+007 | 1,587.9060 | 0.1582 | 0.0327 | 1,601.6187 |
| Industrial Park | 9.33757e+007 | 12,325.1623 | 1.2283 | 0.2541 | 12,431.5992 |
| Junior College (2Yr) | 2.49886e+006 | 329.8377 | 0.0329 | 6.8000e-003 | 332.6861 |
| Manufacturing | 4.32721e+007 | 5,711.7140 | 0.5692 | 0.1178 | 5,761.0388 |
| Office Park | 6.55414e+006 | 865.1159 | 0.0862 | 0.0178 | 872.5868 |
| Regional Shopping Center | 5.87416e+006 | 775.3613 | 0.0773 | 0.0160 | 782.0571 |
| Total | | 21,595.0971 | 2.1521 | 0.4453 | 21,781.5868 |

6.0 Area Detail

6.1 Mitigation Measures Area

INSP Update Proposed Plan (2025) - Alameda County, Annual

| | 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 | 65.7929 | 0.2977 | 21.8068 | 1.4600e-003 | | 0.1244 | 0.1244 | | 0.1244 | 0.1244 | 0.0000 | 90.2429 | 90.2429 | 0.0358 | 1.0000e-003 | 91.4349 |
| Unmitigated | 65.7929 | 0.2977 | 21.8068 | 1.4600e-003 | | 0.1244 | 0.1244 | | 0.1244 | 0.1244 | 0.0000 | 90.2429 | 90.2429 | 0.0358 | 1.0000e-003 | 91.4349 |

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 | 8.1398 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 56.9829 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 5.5100e-003 | 0.0471 | 0.0201 | 3.0000e-004 | | 3.8100e-003 | 3.8100e-003 | | 3.8100e-003 | 3.8100e-003 | 0.0000 | 54.5673 | 54.5673 | 1.0500e-003 | 1.0000e-003 | 54.8915 |
| Landscaping | 0.6647 | 0.2505 | 21.7867 | 1.1600e-003 | | 0.1206 | 0.1206 | | 0.1206 | 0.1206 | 0.0000 | 35.6756 | 35.6756 | 0.0347 | 0.0000 | 36.5434 |
| Total | 65.7929 | 0.2977 | 21.8068 | 1.4600e-003 | | 0.1244 | 0.1244 | | 0.1244 | 0.1244 | 0.0000 | 90.2429 | 90.2429 | 0.0358 | 1.0000e-003 | 91.4349 |

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6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|----------------|---------------|----------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|--------------------|----------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 8.1398 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 56.9829 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 5.5100e-003 | 0.0471 | 0.0201 | 3.0000e-004 | | 3.8100e-003 | 3.8100e-003 | | 3.8100e-003 | 3.8100e-003 | 0.0000 | 54.5673 | 54.5673 | 1.0500e-003 | 1.0000e-003 | 54.8915 |
| Landscaping | 0.6647 | 0.2505 | 21.7867 | 1.1600e-003 | | 0.1206 | 0.1206 | | 0.1206 | 0.1206 | 0.0000 | 35.6756 | 35.6756 | 0.0347 | 0.0000 | 36.5434 |
| Total | 65.7929 | 0.2977 | 21.8068 | 1.4600e-003 | | 0.1244 | 0.1244 | | 0.1244 | 0.1244 | 0.0000 | 90.2429 | 90.2429 | 0.0358 | 1.0000e-003 | 91.4349 |

7.0 Water Detail

7.1 Mitigation Measures Water

INSP Update Proposed Plan (2025) - Alameda County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|----------------|---------|--------|----------------|
| Category | MT/yr | | | |
| Mitigated | 2,908.933 9 | 89.1008 | 2.1412 | 5,774.525 9 |
| Unmitigated | 2,908.933 9 | 89.1008 | 2.1412 | 5,774.525 9 |

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7.2 Water by Land Use

Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|--------------------|-------------------|----------------|---------------|-------------------|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 189.859 / 119.694 | 251.1323 | 6.2056 | 0.1500 | 450.9759 |
| Industrial Park | 1211.06 / 0 | 1,249.1814 | 39.5485 | 0.9496 | 2,520.8816 |
| Junior College (2Yr) | 15.4951 / 24.236 | 27.1796 | 0.5071 | 0.0124 | 43.5473 |
| Manufacturing | 1211.46 / 0 | 1,249.5988 | 39.5617 | 0.9499 | 2,521.7239 |
| Office Park | 59.5852 / 36.52 | 78.3327 | 1.9475 | 0.0471 | 141.0474 |
| Regional Shopping Center | 40.7029 / 24.9469 | 53.5093 | 1.3304 | 0.0322 | 96.3499 |
| Total | | 2,908.9339 | 89.1008 | 2.1412 | 5,774.5259 |

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7.2 Water by Land Use

Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|--------------------|-------------------|----------------|---------------|-------------------|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 189.859 / 119.694 | 251.1323 | 6.2056 | 0.1500 | 450.9759 |
| Industrial Park | 1211.06 / 0 | 1,249.1814 | 39.5485 | 0.9496 | 2,520.8816 |
| Junior College (2Yr) | 15.4951 / 24.236 | 27.1796 | 0.5071 | 0.0124 | 43.5473 |
| Manufacturing | 1211.46 / 0 | 1,249.5988 | 39.5617 | 0.9499 | 2,521.7239 |
| Office Park | 59.5852 / 36.52 | 78.3327 | 1.9475 | 0.0471 | 141.0474 |
| Regional Shopping Center | 40.7029 / 24.9469 | 53.5093 | 1.3304 | 0.0322 | 96.3499 |
| Total | | 2,908.9339 | 89.1008 | 2.1412 | 5,774.5259 |

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

INSP Update Proposed Plan (2025) - Alameda County, Annual

Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|------------|----------|--------|------------|
| | MT/yr | | | |
| Mitigated | 839.3615 | 49.6049 | 0.0000 | 2,079.4827 |
| Unmitigated | 3,357.4462 | 198.4194 | 0.0000 | 8,317.9308 |

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8.2 Waste by Land Use

Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|-------------------|-----------------|---------------|-------------------|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 1340.44 | 272.0972 | 16.0805 | 0.0000 | 674.1093 |
| Industrial Park | 6493.88 | 1,318.1990 | 77.9033 | 0.0000 | 3,265.7821 |
| Junior College (2Yr) | 1320.75 | 268.1003 | 15.8443 | 0.0000 | 664.2072 |
| Manufacturing | 6496.05 | 1,318.6394 | 77.9294 | 0.0000 | 3,266.8734 |
| Office Park | 311.78 | 63.2885 | 3.7402 | 0.0000 | 156.7946 |
| Regional Shopping Center | 576.98 | 117.1217 | 6.9217 | 0.0000 | 290.1641 |
| Total | | 3,357.4462 | 198.4194 | 0.0000 | 8,317.9308 |

INSP Update Proposed Plan (2025) - Alameda County, Annual

8.2 Waste by Land Use

Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|-----------------|----------------|---------------|-------------------|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 335.11 | 68.0243 | 4.0201 | 0.0000 | 168.5273 |
| Industrial Park | 1623.47 | 329.5497 | 19.4758 | 0.0000 | 816.4455 |
| Junior College (2Yr) | 330.188 | 67.0251 | 3.9611 | 0.0000 | 166.0518 |
| Manufacturing | 1624.01 | 329.6599 | 19.4823 | 0.0000 | 816.7184 |
| Office Park | 77.945 | 15.8221 | 0.9351 | 0.0000 | 39.1987 |
| Regional Shopping Center | 144.245 | 29.2804 | 1.7304 | 0.0000 | 72.5410 |
| Total | | 839.3615 | 49.6048 | 0.0000 | 2,079.4827 |

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

INSP Update Proposed Plan (2025) - Alameda County, Annual

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

INSP Update Proposed Plan (2025) - Alameda County, Summer

INSP Update Proposed Plan (2025)
Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Office Park | 335.25 | 1000sqft | 7.70 | 335,250.00 | 0 |
| Junior College (2Yr) | 7,237.00 | Student | 7.25 | 315,911.24 | 0 |
| Industrial Park | 5,237.00 | 1000sqft | 120.22 | 5,237,000.00 | 0 |
| Manufacturing | 5,238.75 | 1000sqft | 120.27 | 5,238,750.00 | 0 |
| Apartments Mid Rise | 2,914.00 | Dwelling Unit | 76.68 | 2,914,000.00 | 8334 |
| Regional Shopping Center | 549.50 | 1000sqft | 12.61 | 549,500.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2025 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 291 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Proposed Plan (2025) - Alameda County, Summer

Project Characteristics - Intensity factor includes RPS benefit up to 2025.

Land Use - Future (2025) Proposed Plan land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match VMT resulting from implementation of the Proposed Plan.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - Based on City's most recent solid waste diversion rate.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 5,838,206.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 17,514,617.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 1,966,950.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 5,900,850.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 6,200.00 | 0.00 |
| tblConstructionPhase | NumDays | 400.00 | 0.00 |
| tblConstructionPhase | NumDays | 620.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |

INSP Update Proposed Plan (2025) - Alameda County, Summer

| | | | |
|----------------------|----------------------------|-----------|-----------|
| tblConstructionPhase | NumDays | 240.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/21/2052 | 6/15/2050 |
| tblConstructionPhase | PhaseEndDate | 10/7/2048 | 1/1/2025 |
| tblConstructionPhase | PhaseEndDate | 9/15/2021 | 3/4/2020 |
| tblConstructionPhase | PhaseEndDate | 1/1/2025 | 8/17/2022 |
| tblConstructionPhase | PhaseEndDate | 6/15/2050 | 10/7/2048 |
| tblConstructionPhase | PhaseEndDate | 8/17/2022 | 9/15/2021 |
| tblFireplaces | NumberWood | 495.38 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |

INSP Update Proposed Plan (2025) - Alameda County, Summer

| | | | |
|---------------------------|--------------------|----------|--------|
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 291 |
| tblTripsAndVMT | VendorTripNumber | 2,225.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 6,914.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 1,383.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

INSP Update Proposed Plan (2025) - Alameda County, Summer

| | | | |
|-----------------|--------|-------|--------|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.39 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |

INSP Update Proposed Plan (2025) - Alameda County, Summer

| | | | |
|-----------------|--------------------|-------|--------|
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 5.29 |
| tblVehicleTrips | ST_TR | 2.49 | 5.43 |
| tblVehicleTrips | ST_TR | 0.42 | 0.98 |
| tblVehicleTrips | ST_TR | 1.49 | 3.04 |
| tblVehicleTrips | ST_TR | 1.64 | 9.08 |
| tblVehicleTrips | ST_TR | 49.97 | 33.95 |
| tblVehicleTrips | SU_TR | 5.86 | 5.29 |
| tblVehicleTrips | SU_TR | 0.73 | 5.43 |
| tblVehicleTrips | SU_TR | 0.04 | 0.98 |
| tblVehicleTrips | SU_TR | 0.62 | 3.04 |
| tblVehicleTrips | SU_TR | 0.76 | 9.08 |
| tblVehicleTrips | SU_TR | 25.24 | 33.95 |
| tblVehicleTrips | WD_TR | 6.65 | 5.29 |
| tblVehicleTrips | WD_TR | 6.83 | 5.43 |
| tblVehicleTrips | WD_TR | 1.23 | 0.98 |
| tblVehicleTrips | WD_TR | 3.82 | 3.04 |
| tblVehicleTrips | WD_TR | 11.42 | 9.08 |
| tblVehicleTrips | WD_TR | 42.70 | 33.95 |
| tblWoodstoves | NumberCatalytic | 58.28 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 58.28 | 0.00 |

2.0 Emissions Summary

INSP Update Proposed Plan (2025) - Alameda County, Summer

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 | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.8927 | 11,235.8927 | 0.6321 | 0.1980 | 11,310.6934 |
| Energy | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.1227 | 85,450.1227 | 1.6378 | 1.5666 | 85,957.9100 |
| Mobile | 140.1974 | 804.3070 | 1,640.7203 | 7.5209 | 645.5491 | 5.6975 | 651.2466 | 172.9208 | 5.3315 | 178.2523 | | 765,561.4181 | 765,561.4181 | 24.8500 | | 766,182.6671 |
| Total | 513.2424 | 886.3526 | 1,943.2345 | 8.0150 | 645.5491 | 13.1327 | 658.6818 | 172.9208 | 12.7667 | 185.6875 | 0.0000 | 862,247.4334 | 862,247.4334 | 27.1199 | 1.7646 | 863,451.2705 |

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 | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.8927 | 11,235.8927 | 0.6321 | 0.1980 | 11,310.6934 |
| Energy | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.1227 | 85,450.1227 | 1.6378 | 1.5666 | 85,957.9100 |
| Mobile | 140.1974 | 804.3070 | 1,640.7203 | 7.5209 | 645.5491 | 5.6975 | 651.2466 | 172.9208 | 5.3315 | 178.2523 | | 765,561.4181 | 765,561.4181 | 24.8500 | | 766,182.6671 |
| Total | 513.2424 | 886.3526 | 1,943.2345 | 8.0150 | 645.5491 | 13.1327 | 658.6818 | 172.9208 | 12.7667 | 185.6875 | 0.0000 | 862,247.4334 | 862,247.4334 | 27.1199 | 1.7646 | 863,451.2705 |

INSP Update Proposed Plan (2025) - Alameda County, Summer

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

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 3/5/2020 | 3/4/2020 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 9/16/2021 | 9/15/2021 | 5 | 0 | |
| 3 | Grading | Grading | 8/18/2022 | 8/17/2022 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 1/2/2025 | 1/1/2025 | 5 | 0 | |
| 5 | Paving | Paving | 10/8/2048 | 10/7/2048 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 6/16/2050 | 6/15/2050 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

INSP Update Proposed Plan (2025) - Alameda County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

INSP Update Proposed Plan (2025) - Alameda County, Summer

3.7 Architectural Coating - 2050

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 | 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

INSP Update Proposed Plan (2025) - Alameda County, Summer

| | 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 | 140.1974 | 804.3070 | 1,640.7203 | 7.5209 | 645.5491 | 5.6975 | 651.2466 | 172.9208 | 5.3315 | 178.2523 | | 765,561.4181 | 765,561.4181 | 24.8500 | | 766,182.6671 |
| Unmitigated | 140.1974 | 804.3070 | 1,640.7203 | 7.5209 | 645.5491 | 5.6975 | 651.2466 | 172.9208 | 5.3315 | 178.2523 | | 765,561.4181 | 765,561.4181 | 24.8500 | | 766,182.6671 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|-----------|-----------|-------------|-------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 15,409.23 | 15,409.23 | 15409.23 | 52,668,139 | 52,668,139 |
| Industrial Park | 28,442.15 | 28,442.15 | 28442.15 | 97,214,121 | 97,214,121 |
| Junior College (2Yr) | 7,077.79 | 7,077.79 | 7077.79 | 24,191,589 | 24,191,589 |
| Manufacturing | 15,915.32 | 15,915.32 | 15915.32 | 54,397,936 | 54,397,936 |
| Office Park | 3,044.41 | 3,044.41 | 3044.41 | 10,405,655 | 10,405,655 |
| Regional Shopping Center | 18,657.72 | 18,657.72 | 18657.72 | 63,771,351 | 63,771,351 |
| Total | 88,546.62 | 88,546.62 | 88,546.62 | 302,648,791 | 302,648,791 |

4.3 Trip Type Information

INSP Update Proposed Plan (2025) - Alameda County, Summer

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Industrial Park | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Junior College (2Yr) | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Manufacturing | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Office Park | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Regional Shopping Center | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

INSP Update Proposed Plan (2025) - Alameda County, Summer

| | 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 | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.12 27 | 85,450.12 27 | 1.6378 | 1.5666 | 85,957.91 00 |
| NaturalGas Unmitigated | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.12 27 | 85,450.12 27 | 1.6378 | 1.5666 | 85,957.91 00 |

INSP Update Proposed Plan (2025) - Alameda County, Summer

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 Mid Rise | 68973.6 | 0.7438 | 6.3564 | 2.7049 | 0.0406 | | 0.5139 | 0.5139 | | 0.5139 | 0.5139 | | 8,114.5390 | 8,114.5390 | 0.1555 | 0.1488 | 8,162.7597 |
| Industrial Park | 234876 | 2.5330 | 23.0271 | 19.3427 | 0.1382 | | 1.7501 | 1.7501 | | 1.7501 | 1.7501 | | 27,632.4545 | 27,632.4545 | 0.5296 | 0.5066 | 27,796.6603 |
| Junior College (2Yr) | 20884.8 | 0.2252 | 2.0475 | 1.7199 | 0.0123 | | 0.1556 | 0.1556 | | 0.1556 | 0.1556 | | 2,457.0309 | 2,457.0309 | 0.0471 | 0.0451 | 2,471.6318 |
| Manufacturing | 378625 | 4.0832 | 37.1201 | 31.1809 | 0.2227 | | 2.8211 | 2.8211 | | 2.8211 | 2.8211 | | 44,544.1499 | 44,544.1499 | 0.8538 | 0.8166 | 44,808.8535 |
| Office Park | 19398.6 | 0.2092 | 1.9018 | 1.5975 | 0.0114 | | 0.1445 | 0.1445 | | 0.1445 | 0.1445 | | 2,282.1853 | 2,282.1853 | 0.0437 | 0.0418 | 2,295.7472 |
| Regional Shopping Center | 3567.99 | 0.0385 | 0.3498 | 0.2938 | 2.1000e-003 | | 0.0266 | 0.0266 | | 0.0266 | 0.0266 | | 419.7631 | 419.7631 | 8.0500e-003 | 7.7000e-003 | 422.2575 |
| Total | | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.1226 | 85,450.1226 | 1.6378 | 1.5666 | 85,957.9100 |

INSP Update Proposed Plan (2025) - Alameda County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 68.9736 | 0.7438 | 6.3564 | 2.7049 | 0.0406 | | 0.5139 | 0.5139 | | 0.5139 | 0.5139 | | 8,114.5390 | 8,114.5390 | 0.1555 | 0.1488 | 8,162.7597 |
| Industrial Park | 234.876 | 2.5330 | 23.0271 | 19.3427 | 0.1382 | | 1.7501 | 1.7501 | | 1.7501 | 1.7501 | | 27,632.4545 | 27,632.4545 | 0.5296 | 0.5066 | 27,796.6603 |
| Junior College (2Yr) | 20.8848 | 0.2252 | 2.0475 | 1.7199 | 0.0123 | | 0.1556 | 0.1556 | | 0.1556 | 0.1556 | | 2,457.0309 | 2,457.0309 | 0.0471 | 0.0451 | 2,471.6318 |
| Manufacturing | 378.625 | 4.0832 | 37.1201 | 31.1809 | 0.2227 | | 2.8211 | 2.8211 | | 2.8211 | 2.8211 | | 44,544.1499 | 44,544.1499 | 0.8538 | 0.8166 | 44,808.8535 |
| Office Park | 19.3986 | 0.2092 | 1.9018 | 1.5975 | 0.0114 | | 0.1445 | 0.1445 | | 0.1445 | 0.1445 | | 2,282.1853 | 2,282.1853 | 0.0437 | 0.0418 | 2,295.7472 |
| Regional Shopping Center | 3.56799 | 0.0385 | 0.3498 | 0.2938 | 2.1000e-003 | | 0.0266 | 0.0266 | | 0.0266 | 0.0266 | | 419.7631 | 419.7631 | 8.0500e-003 | 7.7000e-003 | 422.2575 |
| Total | | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.1226 | 85,450.1226 | 1.6378 | 1.5666 | 85,957.9100 |

6.0 Area Detail

6.1 Mitigation Measures Area

INSP Update Proposed Plan (2025) - Alameda County, Summer

| | 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 | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.8927 | 11,235.8927 | 0.6321 | 0.1980 | 11,310.6934 |
| Unmitigated | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.8927 | 11,235.8927 | 0.6321 | 0.1980 | 11,310.6934 |

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 | 44.6017 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 312.2348 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.9899 | 8.4592 | 3.5997 | 0.0540 | | 0.6839 | 0.6839 | | 0.6839 | 0.6839 | 0.0000 | 10,798.9412 | 10,798.9412 | 0.2070 | 0.1980 | 10,863.1139 |
| Landscaping | 7.3857 | 2.7838 | 242.0748 | 0.0128 | | 1.3394 | 1.3394 | | 1.3394 | 1.3394 | | 436.9515 | 436.9515 | 0.4251 | | 447.5795 |
| Total | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.8927 | 11,235.8927 | 0.6321 | 0.1980 | 11,310.6934 |

INSP Update Proposed Plan (2025) - Alameda County, Summer

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|-----------------|----------------|-----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 44.6017 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 312.2348 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.9899 | 8.4592 | 3.5997 | 0.0540 | | 0.6839 | 0.6839 | | 0.6839 | 0.6839 | 0.0000 | 10,798.94 12 | 10,798.94 12 | 0.2070 | 0.1980 | 10,863.113 9 |
| Landscaping | 7.3857 | 2.7838 | 242.0748 | 0.0128 | | 1.3394 | 1.3394 | | 1.3394 | 1.3394 | | 436.9515 | 436.9515 | 0.4251 | | 447.5795 |
| Total | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.89 27 | 11,235.89 27 | 0.6321 | 0.1980 | 11,310.69 34 |

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

INSP Update Proposed Plan (2025) - Alameda County, Summer

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

INSP Update Proposed Plan (2025) - Alameda County, Winter

INSP Update Proposed Plan (2025)
Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Office Park | 335.25 | 1000sqft | 7.70 | 335,250.00 | 0 |
| Junior College (2Yr) | 7,237.00 | Student | 7.25 | 315,911.24 | 0 |
| Industrial Park | 5,237.00 | 1000sqft | 120.22 | 5,237,000.00 | 0 |
| Manufacturing | 5,238.75 | 1000sqft | 120.27 | 5,238,750.00 | 0 |
| Apartments Mid Rise | 2,914.00 | Dwelling Unit | 76.68 | 2,914,000.00 | 8334 |
| Regional Shopping Center | 549.50 | 1000sqft | 12.61 | 549,500.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2025 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 291 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Proposed Plan (2025) - Alameda County, Winter

Project Characteristics - Intensity factor includes RPS benefit up to 2025.

Land Use - Future (2025) Proposed Plan land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match VMT resulting from implementation of the Proposed Plan.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - Based on City's most recent solid waste diversion rate.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 5,838,206.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 17,514,617.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 1,966,950.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 5,900,850.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 6,200.00 | 0.00 |
| tblConstructionPhase | NumDays | 400.00 | 0.00 |
| tblConstructionPhase | NumDays | 620.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |

INSP Update Proposed Plan (2025) - Alameda County, Winter

| | | | |
|----------------------|----------------------------|-----------|-----------|
| tblConstructionPhase | NumDays | 240.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/21/2052 | 6/15/2050 |
| tblConstructionPhase | PhaseEndDate | 10/7/2048 | 1/1/2025 |
| tblConstructionPhase | PhaseEndDate | 9/15/2021 | 3/4/2020 |
| tblConstructionPhase | PhaseEndDate | 1/1/2025 | 8/17/2022 |
| tblConstructionPhase | PhaseEndDate | 6/15/2050 | 10/7/2048 |
| tblConstructionPhase | PhaseEndDate | 8/17/2022 | 9/15/2021 |
| tblFireplaces | NumberWood | 495.38 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |

INSP Update Proposed Plan (2025) - Alameda County, Winter

| | | | |
|---------------------------|--------------------|----------|--------|
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 291 |
| tblTripsAndVMT | VendorTripNumber | 2,225.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 6,914.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 1,383.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TL | 7.30 | 9.39 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

INSP Update Proposed Plan (2025) - Alameda County, Winter

| | | | |
|-----------------|--------|-------|--------|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.39 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |

INSP Update Proposed Plan (2025) - Alameda County, Winter

| | | | |
|-----------------|--------------------|-------|--------|
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 5.29 |
| tblVehicleTrips | ST_TR | 2.49 | 5.43 |
| tblVehicleTrips | ST_TR | 0.42 | 0.98 |
| tblVehicleTrips | ST_TR | 1.49 | 3.04 |
| tblVehicleTrips | ST_TR | 1.64 | 9.08 |
| tblVehicleTrips | ST_TR | 49.97 | 33.95 |
| tblVehicleTrips | SU_TR | 5.86 | 5.29 |
| tblVehicleTrips | SU_TR | 0.73 | 5.43 |
| tblVehicleTrips | SU_TR | 0.04 | 0.98 |
| tblVehicleTrips | SU_TR | 0.62 | 3.04 |
| tblVehicleTrips | SU_TR | 0.76 | 9.08 |
| tblVehicleTrips | SU_TR | 25.24 | 33.95 |
| tblVehicleTrips | WD_TR | 6.65 | 5.29 |
| tblVehicleTrips | WD_TR | 6.83 | 5.43 |
| tblVehicleTrips | WD_TR | 1.23 | 0.98 |
| tblVehicleTrips | WD_TR | 3.82 | 3.04 |
| tblVehicleTrips | WD_TR | 11.42 | 9.08 |
| tblVehicleTrips | WD_TR | 42.70 | 33.95 |
| tblWoodstoves | NumberCatalytic | 58.28 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 58.28 | 0.00 |

2.0 Emissions Summary

INSP Update Proposed Plan (2025) - Alameda County, Winter

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 | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.8927 | 11,235.8927 | 0.6321 | 0.1980 | 11,310.6934 |
| Energy | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.1227 | 85,450.1227 | 1.6378 | 1.5666 | 85,957.9100 |
| Mobile | 122.0979 | 837.7362 | 1,605.2068 | 7.0746 | 645.5491 | 5.7161 | 651.2652 | 172.9208 | 5.3493 | 178.2701 | | 720,592.5927 | 720,592.5927 | 25.4670 | | 721,229.2685 |
| Total | 495.1429 | 919.7818 | 1,907.7209 | 7.5687 | 645.5491 | 13.1513 | 658.7004 | 172.9208 | 12.7845 | 185.7053 | 0.0000 | 817,278.6081 | 817,278.6081 | 27.7369 | 1.7646 | 818,497.8720 |

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 | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.8927 | 11,235.8927 | 0.6321 | 0.1980 | 11,310.6934 |
| Energy | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.1227 | 85,450.1227 | 1.6378 | 1.5666 | 85,957.9100 |
| Mobile | 122.0979 | 837.7362 | 1,605.2068 | 7.0746 | 645.5491 | 5.7161 | 651.2652 | 172.9208 | 5.3493 | 178.2701 | | 720,592.5927 | 720,592.5927 | 25.4670 | | 721,229.2685 |
| Total | 495.1429 | 919.7818 | 1,907.7209 | 7.5687 | 645.5491 | 13.1513 | 658.7004 | 172.9208 | 12.7845 | 185.7053 | 0.0000 | 817,278.6081 | 817,278.6081 | 27.7369 | 1.7646 | 818,497.8720 |

INSP Update Proposed Plan (2025) - Alameda County, Winter

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

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 3/5/2020 | 3/4/2020 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 9/16/2021 | 9/15/2021 | 5 | 0 | |
| 3 | Grading | Grading | 8/18/2022 | 8/17/2022 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 1/2/2025 | 1/1/2025 | 5 | 0 | |
| 5 | Paving | Paving | 10/8/2048 | 10/7/2048 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 6/16/2050 | 6/15/2050 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

INSP Update Proposed Plan (2025) - Alameda County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

INSP Update Proposed Plan (2025) - Alameda County, Winter

3.7 Architectural Coating - 2050

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 | 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

INSP Update Proposed Plan (2025) - Alameda County, Winter

| | 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 | 122.0979 | 837.7362 | 1,605.2068 | 7.0746 | 645.5491 | 5.7161 | 651.2652 | 172.9208 | 5.3493 | 178.2701 | | 720,592.5927 | 720,592.5927 | 25.4670 | | 721,229.2685 |
| Unmitigated | 122.0979 | 837.7362 | 1,605.2068 | 7.0746 | 645.5491 | 5.7161 | 651.2652 | 172.9208 | 5.3493 | 178.2701 | | 720,592.5927 | 720,592.5927 | 25.4670 | | 721,229.2685 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|-----------|-----------|-------------|-------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 15,409.23 | 15,409.23 | 15409.23 | 52,668,139 | 52,668,139 |
| Industrial Park | 28,442.15 | 28,442.15 | 28442.15 | 97,214,121 | 97,214,121 |
| Junior College (2Yr) | 7,077.79 | 7,077.79 | 7077.79 | 24,191,589 | 24,191,589 |
| Manufacturing | 15,915.32 | 15,915.32 | 15915.32 | 54,397,936 | 54,397,936 |
| Office Park | 3,044.41 | 3,044.41 | 3044.41 | 10,405,655 | 10,405,655 |
| Regional Shopping Center | 18,657.72 | 18,657.72 | 18657.72 | 63,771,351 | 63,771,351 |
| Total | 88,546.62 | 88,546.62 | 88,546.62 | 302,648,791 | 302,648,791 |

4.3 Trip Type Information

INSP Update Proposed Plan (2025) - Alameda County, Winter

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.39 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Industrial Park | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Junior College (2Yr) | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Manufacturing | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Office Park | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |
| Regional Shopping Center | 0.563555 | 0.037576 | 0.190339 | 0.105468 | 0.014285 | 0.005132 | 0.025195 | 0.047484 | 0.002230 | 0.002277 | 0.005427 | 0.000351 | 0.000679 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

INSP Update Proposed Plan (2025) - Alameda County, Winter

| | 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 | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.12 27 | 85,450.12 27 | 1.6378 | 1.5666 | 85,957.91 00 |
| NaturalGas Unmitigated | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.12 27 | 85,450.12 27 | 1.6378 | 1.5666 | 85,957.91 00 |

INSP Update Proposed Plan (2025) - Alameda County, Winter

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 Mid Rise | 68973.6 | 0.7438 | 6.3564 | 2.7049 | 0.0406 | | 0.5139 | 0.5139 | | 0.5139 | 0.5139 | | 8,114.5390 | 8,114.5390 | 0.1555 | 0.1488 | 8,162.7597 |
| Industrial Park | 234876 | 2.5330 | 23.0271 | 19.3427 | 0.1382 | | 1.7501 | 1.7501 | | 1.7501 | 1.7501 | | 27,632.4545 | 27,632.4545 | 0.5296 | 0.5066 | 27,796.6603 |
| Junior College (2Yr) | 20884.8 | 0.2252 | 2.0475 | 1.7199 | 0.0123 | | 0.1556 | 0.1556 | | 0.1556 | 0.1556 | | 2,457.0309 | 2,457.0309 | 0.0471 | 0.0451 | 2,471.6318 |
| Manufacturing | 378625 | 4.0832 | 37.1201 | 31.1809 | 0.2227 | | 2.8211 | 2.8211 | | 2.8211 | 2.8211 | | 44,544.1499 | 44,544.1499 | 0.8538 | 0.8166 | 44,808.8535 |
| Office Park | 19398.6 | 0.2092 | 1.9018 | 1.5975 | 0.0114 | | 0.1445 | 0.1445 | | 0.1445 | 0.1445 | | 2,282.1853 | 2,282.1853 | 0.0437 | 0.0418 | 2,295.7472 |
| Regional Shopping Center | 3567.99 | 0.0385 | 0.3498 | 0.2938 | 2.1000e-003 | | 0.0266 | 0.0266 | | 0.0266 | 0.0266 | | 419.7631 | 419.7631 | 8.0500e-003 | 7.7000e-003 | 422.2575 |
| Total | | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.1226 | 85,450.1226 | 1.6378 | 1.5666 | 85,957.9100 |

INSP Update Proposed Plan (2025) - Alameda County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 68.9736 | 0.7438 | 6.3564 | 2.7049 | 0.0406 | | 0.5139 | 0.5139 | | 0.5139 | 0.5139 | | 8,114.5390 | 8,114.5390 | 0.1555 | 0.1488 | 8,162.7597 |
| Industrial Park | 234.876 | 2.5330 | 23.0271 | 19.3427 | 0.1382 | | 1.7501 | 1.7501 | | 1.7501 | 1.7501 | | 27,632.4545 | 27,632.4545 | 0.5296 | 0.5066 | 27,796.6603 |
| Junior College (2Yr) | 20.8848 | 0.2252 | 2.0475 | 1.7199 | 0.0123 | | 0.1556 | 0.1556 | | 0.1556 | 0.1556 | | 2,457.0309 | 2,457.0309 | 0.0471 | 0.0451 | 2,471.6318 |
| Manufacturing | 378.625 | 4.0832 | 37.1201 | 31.1809 | 0.2227 | | 2.8211 | 2.8211 | | 2.8211 | 2.8211 | | 44,544.1499 | 44,544.1499 | 0.8538 | 0.8166 | 44,808.8535 |
| Office Park | 19.3986 | 0.2092 | 1.9018 | 1.5975 | 0.0114 | | 0.1445 | 0.1445 | | 0.1445 | 0.1445 | | 2,282.1853 | 2,282.1853 | 0.0437 | 0.0418 | 2,295.7472 |
| Regional Shopping Center | 3.56799 | 0.0385 | 0.3498 | 0.2938 | 2.1000e-003 | | 0.0266 | 0.0266 | | 0.0266 | 0.0266 | | 419.7631 | 419.7631 | 8.0500e-003 | 7.7000e-003 | 422.2575 |
| Total | | 7.8329 | 70.8027 | 56.8398 | 0.4273 | | 5.4118 | 5.4118 | | 5.4118 | 5.4118 | | 85,450.1226 | 85,450.1226 | 1.6378 | 1.5666 | 85,957.9100 |

6.0 Area Detail

6.1 Mitigation Measures Area

INSP Update Proposed Plan (2025) - Alameda County, Winter

| | 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 | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.8927 | 11,235.8927 | 0.6321 | 0.1980 | 11,310.6934 |
| Unmitigated | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.8927 | 11,235.8927 | 0.6321 | 0.1980 | 11,310.6934 |

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 | 44.6017 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 312.2348 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.9899 | 8.4592 | 3.5997 | 0.0540 | | 0.6839 | 0.6839 | | 0.6839 | 0.6839 | 0.0000 | 10,798.9412 | 10,798.9412 | 0.2070 | 0.1980 | 10,863.1139 |
| Landscaping | 7.3857 | 2.7838 | 242.0748 | 0.0128 | | 1.3394 | 1.3394 | | 1.3394 | 1.3394 | | 436.9515 | 436.9515 | 0.4251 | | 447.5795 |
| Total | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.8927 | 11,235.8927 | 0.6321 | 0.1980 | 11,310.6934 |

INSP Update Proposed Plan (2025) - Alameda County, Winter

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|-----------------|----------------|-----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 44.6017 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 312.2348 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.9899 | 8.4592 | 3.5997 | 0.0540 | | 0.6839 | 0.6839 | | 0.6839 | 0.6839 | 0.0000 | 10,798.94 12 | 10,798.94 12 | 0.2070 | 0.1980 | 10,863.113 9 |
| Landscaping | 7.3857 | 2.7838 | 242.0748 | 0.0128 | | 1.3394 | 1.3394 | | 1.3394 | 1.3394 | | 436.9515 | 436.9515 | 0.4251 | | 447.5795 |
| Total | 365.2121 | 11.2429 | 245.6744 | 0.0668 | | 2.0234 | 2.0234 | | 2.0234 | 2.0234 | 0.0000 | 11,235.89 27 | 11,235.89 27 | 0.6321 | 0.1980 | 11,310.69 34 |

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

INSP Update Proposed Plan (2025) - Alameda County, Winter

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

INSP Update Proposed Plan (2040) - Alameda County, Annual

INSP Update Proposed Plan (2040)
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 5,204.00 | Dwelling Unit | 136.95 | 5,204,000.00 | 14883 |
| Industrial Park | 7,089.30 | 1000sqft | 162.75 | 7,089,300.00 | 0 |
| Junior College (2Yr) | 8,110.00 | Student | 8.13 | 354,019.64 | 0 |
| Manufacturing | 2,540.58 | 1000sqft | 58.32 | 2,540,580.00 | 0 |
| Office Park | 601.75 | 1000sqft | 13.81 | 601,750.00 | 0 |
| Regional Shopping Center | 867.52 | 1000sqft | 19.92 | 867,520.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|---------------------------------|--------------------------------|---------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2040 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MW hr) | 152.2 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Proposed Plan (2040) - Alameda County, Annual

Project Characteristics - Intensity factor includes RPS benefit up to 2030.

Land Use - Future (2040) Proposed Plan land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match VMT resulting from implementation of the Proposed Plan.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - Based on City's most recent solid waste diversion rate.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 5,726,585.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 17,179,754.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 3,512,700.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 10,538,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 6,200.00 | 0.00 |
| tblConstructionPhase | NumDays | 400.00 | 0.00 |
| tblConstructionPhase | NumDays | 620.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |

INSP Update Proposed Plan (2040) - Alameda County, Annual

| | | | |
|----------------------|----------------------------|------------|------------|
| tblConstructionPhase | NumDays | 240.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/9/2052 | 6/3/2050 |
| tblConstructionPhase | PhaseEndDate | 9/25/2048 | 12/20/2024 |
| tblConstructionPhase | PhaseEndDate | 9/3/2021 | 2/23/2020 |
| tblConstructionPhase | PhaseEndDate | 12/20/2024 | 8/5/2022 |
| tblConstructionPhase | PhaseEndDate | 6/3/2050 | 9/25/2048 |
| tblConstructionPhase | PhaseEndDate | 8/5/2022 | 9/3/2021 |
| tblFireplaces | NumberWood | 884.68 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |

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| | | | |
|---------------------------|--------------------|----------|--------|
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 152.2 |
| tblTripsAndVMT | VendorTripNumber | 2,433.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 8,410.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 1,682.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

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| | | | |
|-----------------|--------|-------|--------|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.30 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |

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| | | | |
|-----------------|--------------------|--------|--------|
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 6.54 |
| tblVehicleTrips | ST_TR | 2.49 | 6.72 |
| tblVehicleTrips | ST_TR | 0.42 | 1.21 |
| tblVehicleTrips | ST_TR | 1.49 | 3.76 |
| tblVehicleTrips | ST_TR | 1.64 | 11.23 |
| tblVehicleTrips | ST_TR | 49.97 | 41.99 |
| tblVehicleTrips | SU_TR | 5.86 | 6.54 |
| tblVehicleTrips | SU_TR | 0.73 | 6.72 |
| tblVehicleTrips | SU_TR | 0.04 | 1.21 |
| tblVehicleTrips | SU_TR | 0.62 | 3.76 |
| tblVehicleTrips | SU_TR | 0.76 | 11.23 |
| tblVehicleTrips | SU_TR | 25.24 | 41.99 |
| tblVehicleTrips | WD_TR | 6.65 | 6.54 |
| tblVehicleTrips | WD_TR | 6.83 | 6.72 |
| tblVehicleTrips | WD_TR | 1.23 | 1.21 |
| tblVehicleTrips | WD_TR | 3.82 | 3.76 |
| tblVehicleTrips | WD_TR | 11.42 | 11.23 |
| tblVehicleTrips | WD_TR | 42.70 | 41.99 |
| tblWoodstoves | NumberCatalytic | 104.08 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 104.08 | 0.00 |

2.0 Emissions Summary

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2.1 Overall Construction

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 | | | | | |
| 2020 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2021 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2024 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2048 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2050 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Maximum | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | 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 |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|----------|--|--|
| | | Highest | | |

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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 | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |
| Energy | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | 0.9364 | 0.9364 | | 0.9364 | 0.9364 | 0.0000 | 26,716.4826 | 26,716.4826 | 2.7920 | 0.7704 | 27,015.8514 |
| Mobile | 21.6532 | 214.2016 | 267.9356 | 1.7904 | 182.5501 | 0.7368 | 183.2869 | 49.0392 | 0.6894 | 49.7286 | 0.0000 | 166,785.6443 | 166,785.6443 | 5.3628 | 0.0000 | 166,919.7151 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3,508.8003 | 0.0000 | 3,508.8003 | 207.3642 | 0.0000 | 8,692.9042 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 873.8905 | 1,112.5501 | 1,986.4406 | 89.9689 | 2.1632 | 4,880.3013 |
| Total | 98.8750 | 226.9197 | 315.9969 | 1.8669 | 182.5501 | 1.8949 | 184.4450 | 49.0392 | 1.8475 | 50.8867 | 4,382.6908 | 194,775.5881 | 199,158.2788 | 305.5507 | 2.9354 | 207,671.7862 |

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2.2 Overall Operational

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|-----------------|-----------------|---------------|-----------------|---------------|-----------------|----------------|---------------|----------------|-------------------|---------------------|---------------------|-----------------|---------------|---------------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |
| Energy | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | 0.9364 | 0.9364 | | 0.9364 | 0.9364 | 0.0000 | 26,716.4826 | 26,716.4826 | 2.7920 | 0.7704 | 27,015.8514 |
| Mobile | 21.6532 | 214.2016 | 267.9356 | 1.7904 | 182.5501 | 0.7368 | 183.2869 | 49.0392 | 0.6894 | 49.7286 | 0.0000 | 166,785.6443 | 166,785.6443 | 5.3628 | 0.0000 | 166,919.7151 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 877.2001 | 0.0000 | 877.2001 | 51.8410 | 0.0000 | 2,173.2261 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 873.8905 | 1,112.5501 | 1,986.4406 | 89.9689 | 2.1632 | 4,880.3013 |
| Total | 98.8750 | 226.9197 | 315.9969 | 1.8669 | 182.5501 | 1.8949 | 184.4450 | 49.0392 | 1.8475 | 50.8867 | 1,751.0905 | 194,775.5881 | 196,526.6786 | 150.0276 | 2.9354 | 201,152.1080 |

| | 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 | 60.05 | 0.00 | 1.32 | 50.90 | 0.00 | 3.14 |

3.0 Construction Detail

Construction Phase

INSP Update Proposed Plan (2040) - Alameda County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 2/24/2020 | 2/23/2020 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 9/4/2021 | 9/3/2021 | 5 | 0 | |
| 3 | Grading | Grading | 8/6/2022 | 8/5/2022 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 12/21/2024 | 12/20/2024 | 5 | 0 | |
| 5 | Paving | Paving | 9/26/2048 | 9/25/2048 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 6/4/2050 | 6/3/2050 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

INSP Update Proposed Plan (2040) - Alameda County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

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3.7 Architectural Coating - 2050

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 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

INSP Update Proposed Plan (2040) - Alameda County, Annual

| | 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 | 21.6532 | 214.2016 | 267.9356 | 1.7904 | 182.5501 | 0.7368 | 183.2869 | 49.0392 | 0.6894 | 49.7286 | 0.0000 | 166,785.6 443 | 166,785.6 443 | 5.3628 | 0.0000 | 166,919.7 151 |
| Unmitigated | 21.6532 | 214.2016 | 267.9356 | 1.7904 | 182.5501 | 0.7368 | 183.2869 | 49.0392 | 0.6894 | 49.7286 | 0.0000 | 166,785.6 443 | 166,785.6 443 | 5.3628 | 0.0000 | 166,919.7 151 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|------------|------------|-------------|-------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 34,028.96 | 34,028.96 | 34028.96 | 115,194,822 | 115,194,822 |
| Industrial Park | 47,611.74 | 47,611.74 | 47611.74 | 161,175,258 | 161,175,258 |
| Junior College (2Yr) | 9,804.99 | 9,804.99 | 9804.99 | 33,191,852 | 33,191,852 |
| Manufacturing | 9,542.42 | 9,542.42 | 9542.42 | 32,302,995 | 32,302,995 |
| Office Park | 6,757.65 | 6,757.65 | 6757.65 | 22,876,005 | 22,876,005 |
| Regional Shopping Center | 36,425.43 | 36,425.43 | 36425.43 | 123,307,365 | 123,307,365 |
| Total | 144,171.19 | 144,171.19 | 144,171.19 | 488,048,297 | 488,048,297 |

4.3 Trip Type Information

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| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Industrial Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Junior College (2Yr) | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Manufacturing | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Office Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Regional Shopping Center | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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| | 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 | 13,304.0489 | 13,304.0489 | 2.5349 | 0.5245 | 13,523.7143 |
| Electricity Unmitigated | | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 13,304.0489 | 13,304.0489 | 2.5349 | 0.5245 | 13,523.7143 |
| NaturalGas Mitigated | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | | 0.9364 | 0.9364 | | 0.9364 | 0.0000 | 13,412.4337 | 13,412.4337 | 0.2571 | 0.2459 | 13,492.1371 |
| NaturalGas Unmitigated | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | | 0.9364 | 0.9364 | | 0.9364 | 0.0000 | 13,412.4337 | 13,412.4337 | 0.2571 | 0.2459 | 13,492.1371 |

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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 Mid Rise | 4.49597e+007 | 0.2424 | 2.0717 | 0.8816 | 0.0132 | | 0.1675 | 0.1675 | | 0.1675 | 0.1675 | 0.0000 | 2,399.2207 | 2,399.2207 | 0.0460 | 0.0440 | 2,413.4781 |
| Industrial Park | 1.16052e+008 | 0.6258 | 5.6888 | 4.7786 | 0.0341 | | 0.4324 | 0.4324 | | 0.4324 | 0.4324 | 0.0000 | 6,192.9682 | 6,192.9682 | 0.1187 | 0.1135 | 6,229.7699 |
| Junior College (2Yr) | 8.54249e+006 | 0.0461 | 0.4188 | 0.3518 | 2.5100e-003 | | 0.0318 | 0.0318 | | 0.0318 | 0.0318 | 0.0000 | 455.8600 | 455.8600 | 8.7400e-003 | 8.3600e-003 | 458.5690 |
| Manufacturing | 6.70205e+007 | 0.3614 | 3.2853 | 2.7597 | 0.0197 | | 0.2497 | 0.2497 | | 0.2497 | 0.2497 | 0.0000 | 3,576.4691 | 3,576.4691 | 0.0686 | 0.0656 | 3,597.7223 |
| Office Park | 1.2709e+007 | 0.0685 | 0.6230 | 0.5233 | 3.7400e-003 | | 0.0474 | 0.0474 | | 0.0474 | 0.0474 | 0.0000 | 678.1985 | 678.1985 | 0.0130 | 0.0124 | 682.2287 |
| Regional Shopping Center | 2.05602e+006 | 0.0111 | 0.1008 | 0.0847 | 6.0000e-004 | | 7.6600e-003 | 7.6600e-003 | | 7.6600e-003 | 7.6600e-003 | 0.0000 | 109.7172 | 109.7172 | 2.1000e-003 | 2.0100e-003 | 110.3692 |
| Total | | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | 0.9364 | 0.9364 | | 0.9364 | 0.9364 | 0.0000 | 13,412.4337 | 13,412.4337 | 0.2571 | 0.2459 | 13,492.1371 |

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5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Mid Rise | 4.49597e+007 | 0.2424 | 2.0717 | 0.8816 | 0.0132 | | 0.1675 | 0.1675 | | 0.1675 | 0.1675 | 0.0000 | 2,399.2207 | 2,399.2207 | 0.0460 | 0.0440 | 2,413.4781 |
| Industrial Park | 1.16052e+008 | 0.6258 | 5.6888 | 4.7786 | 0.0341 | | 0.4324 | 0.4324 | | 0.4324 | 0.4324 | 0.0000 | 6,192.9682 | 6,192.9682 | 0.1187 | 0.1135 | 6,229.7699 |
| Junior College (2Yr) | 8.54249e+006 | 0.0461 | 0.4188 | 0.3518 | 2.5100e-003 | | 0.0318 | 0.0318 | | 0.0318 | 0.0318 | 0.0000 | 455.8600 | 455.8600 | 8.7400e-003 | 8.3600e-003 | 458.5690 |
| Manufacturing | 6.70205e+007 | 0.3614 | 3.2853 | 2.7597 | 0.0197 | | 0.2497 | 0.2497 | | 0.2497 | 0.2497 | 0.0000 | 3,576.4691 | 3,576.4691 | 0.0686 | 0.0656 | 3,597.7223 |
| Office Park | 1.2709e+007 | 0.0685 | 0.6230 | 0.5233 | 3.7400e-003 | | 0.0474 | 0.0474 | | 0.0474 | 0.0474 | 0.0000 | 678.1985 | 678.1985 | 0.0130 | 0.0124 | 682.2287 |
| Regional Shopping Center | 2.05602e+006 | 0.0111 | 0.1008 | 0.0847 | 6.0000e-004 | | 7.6600e-003 | 7.6600e-003 | | 7.6600e-003 | 7.6600e-003 | 0.0000 | 109.7172 | 109.7172 | 2.1000e-003 | 2.0100e-003 | 110.3692 |
| Total | | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | 0.9364 | 0.9364 | | 0.9364 | 0.9364 | 0.0000 | 13,412.4337 | 13,412.4337 | 0.2571 | 0.2459 | 13,492.1371 |

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5.3 Energy by Land Use - Electricity

Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|-----------------|--------------------|---------------|---------------|--------------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 2.14839e+007 | 1,483.1811 | 0.2826 | 0.0585 | 1,507.6702 |
| Industrial Park | 1.26402e+008 | 8,726.3995 | 1.6627 | 0.3440 | 8,870.4826 |
| Junior College (2Yr) | 2.8003e+006 | 193.3233 | 0.0368 | 7.6200e-003 | 196.5153 |
| Manufacturing | 2.09852e+007 | 1,448.7496 | 0.2760 | 0.0571 | 1,472.6701 |
| Office Park | 1.17642e+007 | 812.1631 | 0.1548 | 0.0320 | 825.5729 |
| Regional Shopping Center | 9.27379e+006 | 640.2323 | 0.1220 | 0.0252 | 650.8033 |
| Total | | 13,304.0489 | 2.5349 | 0.5245 | 13,523.7143 |

INSP Update Proposed Plan (2040) - Alameda County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|-----------------|--------------------|---------------|---------------|--------------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 2.14839e+007 | 1,483.1811 | 0.2826 | 0.0585 | 1,507.6702 |
| Industrial Park | 1.26402e+008 | 8,726.3995 | 1.6627 | 0.3440 | 8,870.4826 |
| Junior College (2Yr) | 2.8003e+006 | 193.3233 | 0.0368 | 7.6200e-003 | 196.5153 |
| Manufacturing | 2.09852e+007 | 1,448.7496 | 0.2760 | 0.0571 | 1,472.6701 |
| Office Park | 1.17642e+007 | 812.1631 | 0.1548 | 0.0320 | 825.5729 |
| Regional Shopping Center | 9.27379e+006 | 640.2323 | 0.1220 | 0.0252 | 650.8033 |
| Total | | 13,304.0489 | 2.5349 | 0.5245 | 13,523.7143 |

6.0 Area Detail

6.1 Mitigation Measures Area

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| | 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 | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |
| Unmitigated | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |

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 | 9.6354 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 65.0546 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 9.8500e-003 | 0.0842 | 0.0358 | 5.4000e-004 | | 6.8000e-003 | 6.8000e-003 | | 6.8000e-003 | 6.8000e-003 | 0.0000 | 97.4496 | 97.4496 | 1.8700e-003 | 1.7900e-003 | 98.0287 |
| Landscaping | 1.1667 | 0.4456 | 38.6459 | 2.0500e-003 | | 0.2149 | 0.2149 | | 0.2149 | 0.2149 | 0.0000 | 63.4615 | 63.4615 | 0.0610 | 0.0000 | 64.9856 |
| Total | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |

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6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|----------------|---------------|----------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|--------------------|-----------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 9.6354 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 65.0546 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 9.8500e-003 | 0.0842 | 0.0358 | 5.4000e-004 | | 6.8000e-003 | 6.8000e-003 | | 6.8000e-003 | 6.8000e-003 | 0.0000 | 97.4496 | 97.4496 | 1.8700e-003 | 1.7900e-003 | 98.0287 |
| Landscaping | 1.1667 | 0.4456 | 38.6459 | 2.0500e-003 | | 0.2149 | 0.2149 | | 0.2149 | 0.2149 | 0.0000 | 63.4615 | 63.4615 | 0.0610 | 0.0000 | 64.9856 |
| Total | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |

7.0 Water Detail

7.1 Mitigation Measures Water

INSP Update Proposed Plan (2040) - Alameda County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|----------------|---------|--------|----------------|
| Category | MT/yr | | | |
| Mitigated | 1,986.440 6 | 89.9689 | 2.1632 | 4,880.301 3 |
| Unmitigated | 1,986.440 6 | 89.9689 | 2.1632 | 4,880.301 3 |

INSP Update Proposed Plan (2040) - Alameda County, Annual

7.2 Water by Land Use

Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|--------------------|-------------------|----------------|---------------|-------------------|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 339.062 / 213.756 | 285.8773 | 11.0823 | 0.2679 | 642.7703 |
| Industrial Park | 1639.4 / 0 | 1,132.5172 | 53.5366 | 1.2855 | 2,854.0113 |
| Junior College (2Yr) | 17.3643 / 27.1596 | 18.5580 | 0.5683 | 0.0139 | 36.9002 |
| Manufacturing | 587.509 / 0 | 405.8582 | 19.1858 | 0.4607 | 1,022.7870 |
| Office Park | 106.951 / 65.5508 | 89.7222 | 3.4956 | 0.0845 | 202.2906 |
| Regional Shopping Center | 64.2594 / 39.3848 | 53.9076 | 2.1003 | 0.0508 | 121.5420 |
| Total | | 1,986.4406 | 89.9689 | 2.1632 | 4,880.3013 |

INSP Update Proposed Plan (2040) - Alameda County, Annual

7.2 Water by Land Use

Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|--------------------|-------------------|----------------|---------------|-------------------|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 339.062 / 213.756 | 285.8773 | 11.0823 | 0.2679 | 642.7703 |
| Industrial Park | 1639.4 / 0 | 1,132.5172 | 53.5366 | 1.2855 | 2,854.0113 |
| Junior College (2Yr) | 17.3643 / 27.1596 | 18.5580 | 0.5683 | 0.0139 | 36.9002 |
| Manufacturing | 587.509 / 0 | 405.8582 | 19.1858 | 0.4607 | 1,022.7870 |
| Office Park | 106.951 / 65.5508 | 89.7222 | 3.4956 | 0.0845 | 202.2906 |
| Regional Shopping Center | 64.2594 / 39.3848 | 53.9076 | 2.1003 | 0.0508 | 121.5420 |
| Total | | 1,986.4406 | 89.9689 | 2.1632 | 4,880.3013 |

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

INSP Update Proposed Plan (2040) - Alameda County, Annual

Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|----------------|----------|--------|----------------|
| | MT/yr | | | |
| Mitigated | 877.2001 | 51.8410 | 0.0000 | 2,173.226 1 |
| Unmitigated | 3,508.800 3 | 207.3642 | 0.0000 | 8,692.904 2 |

INSP Update Proposed Plan (2040) - Alameda County, Annual

8.2 Waste by Land Use

Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|-------------------|-----------------|---------------|-------------------|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 2393.84 | 485.9279 | 28.7175 | 0.0000 | 1,203.8658 |
| Industrial Park | 8790.73 | 1,784.4388 | 105.4573 | 0.0000 | 4,420.8715 |
| Junior College (2Yr) | 1480.08 | 300.4429 | 17.7557 | 0.0000 | 744.3345 |
| Manufacturing | 3150.32 | 639.4865 | 37.7926 | 0.0000 | 1,584.3007 |
| Office Park | 559.63 | 113.5998 | 6.7136 | 0.0000 | 281.4388 |
| Regional Shopping Center | 910.9 | 184.9045 | 10.9275 | 0.0000 | 458.0930 |
| Total | | 3,508.8003 | 207.3642 | 0.0000 | 8,692.9042 |

INSP Update Proposed Plan (2040) - Alameda County, Annual

8.2 Waste by Land Use

Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|-----------------|----------------|---------------|-------------------|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 598.46 | 121.4820 | 7.1794 | 0.0000 | 300.9664 |
| Industrial Park | 2197.68 | 446.1097 | 26.3643 | 0.0000 | 1,105.2179 |
| Junior College (2Yr) | 370.02 | 75.1107 | 4.4389 | 0.0000 | 186.0836 |
| Manufacturing | 787.58 | 159.8716 | 9.4481 | 0.0000 | 396.0752 |
| Office Park | 139.908 | 28.4000 | 1.6784 | 0.0000 | 70.3597 |
| Regional Shopping Center | 227.725 | 46.2261 | 2.7319 | 0.0000 | 114.5233 |
| Total | | 877.2001 | 51.8411 | 0.0000 | 2,173.2261 |

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

INSP Update Proposed Plan (2040) - Alameda County, Annual

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

INSP Update Proposed Plan (2040) - Alameda County, Summer

INSP Update Proposed Plan (2040)
Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 5,204.00 | Dwelling Unit | 136.95 | 5,204,000.00 | 14883 |
| Industrial Park | 7,089.30 | 1000sqft | 162.75 | 7,089,300.00 | 0 |
| Junior College (2Yr) | 8,110.00 | Student | 8.13 | 354,019.64 | 0 |
| Manufacturing | 2,540.58 | 1000sqft | 58.32 | 2,540,580.00 | 0 |
| Office Park | 601.75 | 1000sqft | 13.81 | 601,750.00 | 0 |
| Regional Shopping Center | 867.52 | 1000sqft | 19.92 | 867,520.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2040 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 152.2 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Proposed Plan (2040) - Alameda County, Summer

Project Characteristics - Intensity factor includes RPS benefit up to 2030.

Land Use - Future (2040) Proposed Plan land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match VMT resulting from implementation of the Proposed Plan.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - Based on City's most recent solid waste diversion rate.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 5,726,585.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 17,179,754.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 3,512,700.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 10,538,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 6,200.00 | 0.00 |
| tblConstructionPhase | NumDays | 400.00 | 0.00 |
| tblConstructionPhase | NumDays | 620.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |

INSP Update Proposed Plan (2040) - Alameda County, Summer

| | | | |
|----------------------|----------------------------|------------|------------|
| tblConstructionPhase | NumDays | 240.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/9/2052 | 6/3/2050 |
| tblConstructionPhase | PhaseEndDate | 9/25/2048 | 12/20/2024 |
| tblConstructionPhase | PhaseEndDate | 9/3/2021 | 2/23/2020 |
| tblConstructionPhase | PhaseEndDate | 12/20/2024 | 8/5/2022 |
| tblConstructionPhase | PhaseEndDate | 6/3/2050 | 9/25/2048 |
| tblConstructionPhase | PhaseEndDate | 8/5/2022 | 9/3/2021 |
| tblFireplaces | NumberWood | 884.68 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |

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| | | | |
|---------------------------|--------------------|----------|--------|
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 152.2 |
| tblTripsAndVMT | VendorTripNumber | 2,433.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 8,410.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 1,682.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

INSP Update Proposed Plan (2040) - Alameda County, Summer

| | | | |
|-----------------|--------|-------|--------|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.30 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |

INSP Update Proposed Plan (2040) - Alameda County, Summer

| | | | |
|-----------------|--------------------|--------|--------|
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 6.54 |
| tblVehicleTrips | ST_TR | 2.49 | 6.72 |
| tblVehicleTrips | ST_TR | 0.42 | 1.21 |
| tblVehicleTrips | ST_TR | 1.49 | 3.76 |
| tblVehicleTrips | ST_TR | 1.64 | 11.23 |
| tblVehicleTrips | ST_TR | 49.97 | 41.99 |
| tblVehicleTrips | SU_TR | 5.86 | 6.54 |
| tblVehicleTrips | SU_TR | 0.73 | 6.72 |
| tblVehicleTrips | SU_TR | 0.04 | 1.21 |
| tblVehicleTrips | SU_TR | 0.62 | 3.76 |
| tblVehicleTrips | SU_TR | 0.76 | 11.23 |
| tblVehicleTrips | SU_TR | 25.24 | 41.99 |
| tblVehicleTrips | WD_TR | 6.65 | 6.54 |
| tblVehicleTrips | WD_TR | 6.83 | 6.72 |
| tblVehicleTrips | WD_TR | 1.23 | 1.21 |
| tblVehicleTrips | WD_TR | 3.82 | 3.76 |
| tblVehicleTrips | WD_TR | 11.42 | 11.23 |
| tblVehicleTrips | WD_TR | 42.70 | 41.99 |
| tblWoodstoves | NumberCatalytic | 104.08 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 104.08 | 0.00 |

2.0 Emissions Summary

INSP Update Proposed Plan (2040) - Alameda County, Summer

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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Energy | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| Mobile | 132.3585 | 1,160.8489 | 1,560.0706 | 10.3145 | 1,041.2687 | 4.0485 | 1,045.3172 | 278.8339 | 3.7881 | 282.6220 | | 1,058,112.5167 | 1,058,112.5167 | 32.0247 | | 1,058,913.1334 |
| Total | 563.7757 | 1,247.6926 | 2,047.2932 | 10.8388 | 1,041.2687 | 12.7885 | 1,054.0572 | 278.8339 | 12.5280 | 291.3620 | 0.0000 | 1,159,187.1295 | 1,159,187.1295 | 34.6937 | 1.8388 | 1,160,602.4297 |

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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Energy | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| Mobile | 132.3585 | 1,160.8489 | 1,560.0706 | 10.3145 | 1,041.2687 | 4.0485 | 1,045.3172 | 278.8339 | 3.7881 | 282.6220 | | 1,058,112.5167 | 1,058,112.5167 | 32.0247 | | 1,058,913.1334 |
| Total | 563.7757 | 1,247.6926 | 2,047.2932 | 10.8388 | 1,041.2687 | 12.7885 | 1,054.0572 | 278.8339 | 12.5280 | 291.3620 | 0.0000 | 1,159,187.1295 | 1,159,187.1295 | 34.6937 | 1.8388 | 1,160,602.4297 |

INSP Update Proposed Plan (2040) - Alameda County, Summer

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

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 2/24/2020 | 2/23/2020 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 9/4/2021 | 9/3/2021 | 5 | 0 | |
| 3 | Grading | Grading | 8/6/2022 | 8/5/2022 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 12/21/2024 | 12/20/2024 | 5 | 0 | |
| 5 | Paving | Paving | 9/26/2048 | 9/25/2048 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 6/4/2050 | 6/3/2050 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

INSP Update Proposed Plan (2040) - Alameda County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

INSP Update Proposed Plan (2040) - Alameda County, Summer

3.7 Architectural Coating - 2050

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 | 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

INSP Update Proposed Plan (2040) - Alameda County, Summer

| | 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 | 132.3585 | 1,160.8489 | 1,560.0706 | 10.3145 | 1,041.2687 | 4.0485 | 1,045.3172 | 278.8339 | 3.7881 | 282.6220 | | 1,058,112.5167 | 1,058,112.5167 | 32.0247 | | 1,058,913.1334 |
| Unmitigated | 132.3585 | 1,160.8489 | 1,560.0706 | 10.3145 | 1,041.2687 | 4.0485 | 1,045.3172 | 278.8339 | 3.7881 | 282.6220 | | 1,058,112.5167 | 1,058,112.5167 | 32.0247 | | 1,058,913.1334 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|-------------------|-------------------|--------------------|--------------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 34,028.96 | 34,028.96 | 34,028.96 | 115,194,822 | 115,194,822 |
| Industrial Park | 47,611.74 | 47,611.74 | 47,611.74 | 161,175,258 | 161,175,258 |
| Junior College (2Yr) | 9,804.99 | 9,804.99 | 9,804.99 | 33,191,852 | 33,191,852 |
| Manufacturing | 9,542.42 | 9,542.42 | 9,542.42 | 32,302,995 | 32,302,995 |
| Office Park | 6,757.65 | 6,757.65 | 6,757.65 | 22,876,005 | 22,876,005 |
| Regional Shopping Center | 36,425.43 | 36,425.43 | 36,425.43 | 123,307,365 | 123,307,365 |
| Total | 144,171.19 | 144,171.19 | 144,171.19 | 488,048,297 | 488,048,297 |

4.3 Trip Type Information

INSP Update Proposed Plan (2040) - Alameda County, Summer

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Industrial Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Junior College (2Yr) | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Manufacturing | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Office Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Regional Shopping Center | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

INSP Update Proposed Plan (2040) - Alameda County, Summer

| | 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 | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| NaturalGas Unmitigated | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |

INSP Update Proposed Plan (2040) - Alameda County, Summer

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 Mid Rise | 123177 | 1.3284 | 11.3516 | 4.8305 | 0.0725 | | 0.9178 | 0.9178 | | 0.9178 | 0.9178 | | 14,491.4417 | 14,491.4417 | 0.2778 | 0.2657 | 14,577.5571 |
| Industrial Park | 317950 | 3.4289 | 31.1716 | 26.1841 | 0.1870 | | 2.3690 | 2.3690 | | 2.3690 | 2.3690 | | 37,405.9117 | 37,405.9117 | 0.7170 | 0.6858 | 37,628.1963 |
| Junior College (2Yr) | 23404.1 | 0.2524 | 2.2945 | 1.9274 | 0.0138 | | 0.1744 | 0.1744 | | 0.1744 | 0.1744 | | 2,753.4227 | 2,753.4227 | 0.0528 | 0.0505 | 2,769.7849 |
| Manufacturing | 183618 | 1.9802 | 18.0018 | 15.1215 | 0.1080 | | 1.3681 | 1.3681 | | 1.3681 | 1.3681 | | 21,602.0952 | 21,602.0952 | 0.4140 | 0.3960 | 21,730.4657 |
| Office Park | 34819.1 | 0.3755 | 3.4136 | 2.8675 | 0.0205 | | 0.2594 | 0.2594 | | 0.2594 | 0.2594 | | 4,096.3610 | 4,096.3610 | 0.0785 | 0.0751 | 4,120.7036 |
| Regional Shopping Center | 5632.94 | 0.0608 | 0.5523 | 0.4639 | 3.3100e-003 | | 0.0420 | 0.0420 | | 0.0420 | 0.0420 | | 662.6986 | 662.6986 | 0.0127 | 0.0122 | 666.6367 |
| Total | | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |

INSP Update Proposed Plan (2040) - Alameda County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 123.177 | 1.3284 | 11.3516 | 4.8305 | 0.0725 | | 0.9178 | 0.9178 | | 0.9178 | 0.9178 | | 14,491.44 17 | 14,491.44 17 | 0.2778 | 0.2657 | 14,577.55 71 |
| Industrial Park | 317.95 | 3.4289 | 31.1716 | 26.1841 | 0.1870 | | 2.3690 | 2.3690 | | 2.3690 | 2.3690 | | 37,405.911 7 | 37,405.911 7 | 0.7170 | 0.6858 | 37,628.19 63 |
| Junior College (2Yr) | 23.4041 | 0.2524 | 2.2945 | 1.9274 | 0.0138 | | 0.1744 | 0.1744 | | 0.1744 | 0.1744 | | 2,753.422 7 | 2,753.422 7 | 0.0528 | 0.0505 | 2,769.784 9 |
| Manufacturing | 183.618 | 1.9802 | 18.0018 | 15.1215 | 0.1080 | | 1.3681 | 1.3681 | | 1.3681 | 1.3681 | | 21,602.09 52 | 21,602.09 52 | 0.4140 | 0.3960 | 21,730.46 57 |
| Office Park | 34.8191 | 0.3755 | 3.4136 | 2.8675 | 0.0205 | | 0.2594 | 0.2594 | | 0.2594 | 0.2594 | | 4,096.361 0 | 4,096.361 0 | 0.0785 | 0.0751 | 4,120.703 6 |
| Regional Shopping Center | 5.63294 | 0.0608 | 0.5523 | 0.4639 | 3.3100e-003 | | 0.0420 | 0.0420 | | 0.0420 | 0.0420 | | 662.6986 | 662.6986 | 0.0127 | 0.0122 | 666.6367 |
| Total | | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.93 09 | 81,011.93 09 | 1.5527 | 1.4852 | 81,493.34 43 |

6.0 Area Detail

6.1 Mitigation Measures Area

INSP Update Proposed Plan (2040) - Alameda County, Summer

| | 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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Unmitigated | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

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 | 52.7968 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 356.4634 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.7678 | 15.1069 | 6.4285 | 0.0964 | | 1.2214 | 1.2214 | | 1.2214 | 1.2214 | 0.0000 | 19,285.4118 | 19,285.4118 | 0.3696 | 0.3536 | 19,400.0153 |
| Landscaping | 12.9630 | 4.9514 | 429.3993 | 0.0228 | | 2.3878 | 2.3878 | | 2.3878 | 2.3878 | | 777.2701 | 777.2701 | 0.7467 | | 795.9367 |
| Total | 423.9911 | 20.0583 | 435.8277 | 0.1193 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

INSP Update Proposed Plan (2040) - Alameda County, Summer

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|-----------------|----------------|-----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 52.7968 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 356.4634 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.7678 | 15.1069 | 6.4285 | 0.0964 | | 1.2214 | 1.2214 | | 1.2214 | 1.2214 | 0.0000 | 19,285.4118 | 19,285.4118 | 0.3696 | 0.3536 | 19,400.0153 |
| Landscaping | 12.9630 | 4.9514 | 429.3993 | 0.0228 | | 2.3878 | 2.3878 | | 2.3878 | 2.3878 | | 777.2701 | 777.2701 | 0.7467 | | 795.9367 |
| Total | 423.9911 | 20.0583 | 435.8277 | 0.1193 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

INSP Update Proposed Plan (2040) - Alameda County, Summer

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

INSP Update Proposed Plan (2040) - Alameda County, Winter

INSP Update Proposed Plan (2040)
Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 5,204.00 | Dwelling Unit | 136.95 | 5,204,000.00 | 14883 |
| Industrial Park | 7,089.30 | 1000sqft | 162.75 | 7,089,300.00 | 0 |
| Junior College (2Yr) | 8,110.00 | Student | 8.13 | 354,019.64 | 0 |
| Manufacturing | 2,540.58 | 1000sqft | 58.32 | 2,540,580.00 | 0 |
| Office Park | 601.75 | 1000sqft | 13.81 | 601,750.00 | 0 |
| Regional Shopping Center | 867.52 | 1000sqft | 19.92 | 867,520.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2040 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 152.2 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Proposed Plan (2040) - Alameda County, Winter

Project Characteristics - Intensity factor includes RPS benefit up to 2030.

Land Use - Future (2040) Proposed Plan land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match VMT resulting from implementation of the Proposed Plan.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - Based on City's most recent solid waste diversion rate.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 5,726,585.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 17,179,754.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 3,512,700.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 10,538,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 6,200.00 | 0.00 |
| tblConstructionPhase | NumDays | 400.00 | 0.00 |
| tblConstructionPhase | NumDays | 620.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |

INSP Update Proposed Plan (2040) - Alameda County, Winter

| | | | |
|----------------------|----------------------------|------------|------------|
| tblConstructionPhase | NumDays | 240.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/9/2052 | 6/3/2050 |
| tblConstructionPhase | PhaseEndDate | 9/25/2048 | 12/20/2024 |
| tblConstructionPhase | PhaseEndDate | 9/3/2021 | 2/23/2020 |
| tblConstructionPhase | PhaseEndDate | 12/20/2024 | 8/5/2022 |
| tblConstructionPhase | PhaseEndDate | 6/3/2050 | 9/25/2048 |
| tblConstructionPhase | PhaseEndDate | 8/5/2022 | 9/3/2021 |
| tblFireplaces | NumberWood | 884.68 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |

INSP Update Proposed Plan (2040) - Alameda County, Winter

| | | | |
|---------------------------|--------------------|----------|--------|
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 152.2 |
| tblTripsAndVMT | VendorTripNumber | 2,433.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 8,410.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 1,682.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

INSP Update Proposed Plan (2040) - Alameda County, Winter

| | | | |
|-----------------|--------|-------|--------|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.30 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |

INSP Update Proposed Plan (2040) - Alameda County, Winter

| | | | |
|-----------------|--------------------|--------|--------|
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 6.54 |
| tblVehicleTrips | ST_TR | 2.49 | 6.72 |
| tblVehicleTrips | ST_TR | 0.42 | 1.21 |
| tblVehicleTrips | ST_TR | 1.49 | 3.76 |
| tblVehicleTrips | ST_TR | 1.64 | 11.23 |
| tblVehicleTrips | ST_TR | 49.97 | 41.99 |
| tblVehicleTrips | SU_TR | 5.86 | 6.54 |
| tblVehicleTrips | SU_TR | 0.73 | 6.72 |
| tblVehicleTrips | SU_TR | 0.04 | 1.21 |
| tblVehicleTrips | SU_TR | 0.62 | 3.76 |
| tblVehicleTrips | SU_TR | 0.76 | 11.23 |
| tblVehicleTrips | SU_TR | 25.24 | 41.99 |
| tblVehicleTrips | WD_TR | 6.65 | 6.54 |
| tblVehicleTrips | WD_TR | 6.83 | 6.72 |
| tblVehicleTrips | WD_TR | 1.23 | 1.21 |
| tblVehicleTrips | WD_TR | 3.82 | 3.76 |
| tblVehicleTrips | WD_TR | 11.42 | 11.23 |
| tblVehicleTrips | WD_TR | 42.70 | 41.99 |
| tblWoodstoves | NumberCatalytic | 104.08 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 104.08 | 0.00 |

2.0 Emissions Summary

INSP Update Proposed Plan (2040) - Alameda County, Winter

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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Energy | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| Mobile | 118.1380 | 1,182.8367 | 1,525.0739 | 9.7468 | 1,041.2687 | 4.0597 | 1,045.3284 | 278.8339 | 3.7988 | 282.6327 | | 1,000,606.8188 | 1,000,606.8188 | 33.6088 | | 1,001,447.0384 |
| Total | 549.5552 | 1,269.6804 | 2,012.2964 | 10.2711 | 1,041.2687 | 12.7997 | 1,054.0684 | 278.8339 | 12.5387 | 291.3727 | 0.0000 | 1,101,681.4316 | 1,101,681.4316 | 36.2778 | 1.8388 | 1,103,136.3347 |

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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Energy | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| Mobile | 118.1380 | 1,182.8367 | 1,525.0739 | 9.7468 | 1,041.2687 | 4.0597 | 1,045.3284 | 278.8339 | 3.7988 | 282.6327 | | 1,000,606.8188 | 1,000,606.8188 | 33.6088 | | 1,001,447.0384 |
| Total | 549.5552 | 1,269.6804 | 2,012.2964 | 10.2711 | 1,041.2687 | 12.7997 | 1,054.0684 | 278.8339 | 12.5387 | 291.3727 | 0.0000 | 1,101,681.4316 | 1,101,681.4316 | 36.2778 | 1.8388 | 1,103,136.3347 |

INSP Update Proposed Plan (2040) - Alameda County, Winter

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

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 2/24/2020 | 2/23/2020 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 9/4/2021 | 9/3/2021 | 5 | 0 | |
| 3 | Grading | Grading | 8/6/2022 | 8/5/2022 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 12/21/2024 | 12/20/2024 | 5 | 0 | |
| 5 | Paving | Paving | 9/26/2048 | 9/25/2048 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 6/4/2050 | 6/3/2050 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

INSP Update Proposed Plan (2040) - Alameda County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

INSP Update Proposed Plan (2040) - Alameda County, Winter

3.7 Architectural Coating - 2050

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 | 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

INSP Update Proposed Plan (2040) - Alameda County, Winter

| | 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 | 118.1380 | 1,182.8367 | 1,525.0739 | 9.7468 | 1,041.2687 | 4.0597 | 1,045.3284 | 278.8339 | 3.7988 | 282.6327 | | 1,000,606.8188 | 1,000,606.8188 | 33.6088 | | 1,001,447.0384 |
| Unmitigated | 118.1380 | 1,182.8367 | 1,525.0739 | 9.7468 | 1,041.2687 | 4.0597 | 1,045.3284 | 278.8339 | 3.7988 | 282.6327 | | 1,000,606.8188 | 1,000,606.8188 | 33.6088 | | 1,001,447.0384 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|------------|------------|-------------|-------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 34,028.96 | 34,028.96 | 34,028.96 | 115,194,822 | 115,194,822 |
| Industrial Park | 47,611.74 | 47,611.74 | 47,611.74 | 161,175,258 | 161,175,258 |
| Junior College (2Yr) | 9,804.99 | 9,804.99 | 9,804.99 | 33,191,852 | 33,191,852 |
| Manufacturing | 9,542.42 | 9,542.42 | 9,542.42 | 32,302,995 | 32,302,995 |
| Office Park | 6,757.65 | 6,757.65 | 6,757.65 | 22,876,005 | 22,876,005 |
| Regional Shopping Center | 36,425.43 | 36,425.43 | 36,425.43 | 123,307,365 | 123,307,365 |
| Total | 144,171.19 | 144,171.19 | 144,171.19 | 488,048,297 | 488,048,297 |

4.3 Trip Type Information

INSP Update Proposed Plan (2040) - Alameda County, Winter

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Industrial Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Junior College (2Yr) | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Manufacturing | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Office Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Regional Shopping Center | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

INSP Update Proposed Plan (2040) - Alameda County, Winter

| | 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 | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| NaturalGas Unmitigated | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |

INSP Update Proposed Plan (2040) - Alameda County, Winter

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 Mid Rise | 123177 | 1.3284 | 11.3516 | 4.8305 | 0.0725 | | 0.9178 | 0.9178 | | 0.9178 | 0.9178 | | 14,491.44 17 | 14,491.44 17 | 0.2778 | 0.2657 | 14,577.55 71 |
| Industrial Park | 317950 | 3.4289 | 31.1716 | 26.1841 | 0.1870 | | 2.3690 | 2.3690 | | 2.3690 | 2.3690 | | 37,405.911 7 | 37,405.911 7 | 0.7170 | 0.6858 | 37,628.19 63 |
| Junior College (2Yr) | 23404.1 | 0.2524 | 2.2945 | 1.9274 | 0.0138 | | 0.1744 | 0.1744 | | 0.1744 | 0.1744 | | 2,753.422 7 | 2,753.422 7 | 0.0528 | 0.0505 | 2,769.784 9 |
| Manufacturing | 183618 | 1.9802 | 18.0018 | 15.1215 | 0.1080 | | 1.3681 | 1.3681 | | 1.3681 | 1.3681 | | 21,602.09 52 | 21,602.09 52 | 0.4140 | 0.3960 | 21,730.46 57 |
| Office Park | 34819.1 | 0.3755 | 3.4136 | 2.8675 | 0.0205 | | 0.2594 | 0.2594 | | 0.2594 | 0.2594 | | 4,096.361 0 | 4,096.361 0 | 0.0785 | 0.0751 | 4,120.703 6 |
| Regional Shopping Center | 5632.94 | 0.0608 | 0.5523 | 0.4639 | 3.3100e-003 | | 0.0420 | 0.0420 | | 0.0420 | 0.0420 | | 662.6986 | 662.6986 | 0.0127 | 0.0122 | 666.6367 |
| Total | | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.93 09 | 81,011.93 09 | 1.5527 | 1.4852 | 81,493.34 43 |

INSP Update Proposed Plan (2040) - Alameda County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 123.177 | 1.3284 | 11.3516 | 4.8305 | 0.0725 | | 0.9178 | 0.9178 | | 0.9178 | 0.9178 | | 14,491.44 17 | 14,491.44 17 | 0.2778 | 0.2657 | 14,577.55 71 |
| Industrial Park | 317.95 | 3.4289 | 31.1716 | 26.1841 | 0.1870 | | 2.3690 | 2.3690 | | 2.3690 | 2.3690 | | 37,405.911 7 | 37,405.911 7 | 0.7170 | 0.6858 | 37,628.19 63 |
| Junior College (2Yr) | 23.4041 | 0.2524 | 2.2945 | 1.9274 | 0.0138 | | 0.1744 | 0.1744 | | 0.1744 | 0.1744 | | 2,753.422 7 | 2,753.422 7 | 0.0528 | 0.0505 | 2,769.784 9 |
| Manufacturing | 183.618 | 1.9802 | 18.0018 | 15.1215 | 0.1080 | | 1.3681 | 1.3681 | | 1.3681 | 1.3681 | | 21,602.09 52 | 21,602.09 52 | 0.4140 | 0.3960 | 21,730.46 57 |
| Office Park | 34.8191 | 0.3755 | 3.4136 | 2.8675 | 0.0205 | | 0.2594 | 0.2594 | | 0.2594 | 0.2594 | | 4,096.361 0 | 4,096.361 0 | 0.0785 | 0.0751 | 4,120.703 6 |
| Regional Shopping Center | 5.63294 | 0.0608 | 0.5523 | 0.4639 | 3.3100e-003 | | 0.0420 | 0.0420 | | 0.0420 | 0.0420 | | 662.6986 | 662.6986 | 0.0127 | 0.0122 | 666.6367 |
| Total | | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.93 09 | 81,011.93 09 | 1.5527 | 1.4852 | 81,493.34 43 |

6.0 Area Detail

6.1 Mitigation Measures Area

INSP Update Proposed Plan (2040) - Alameda County, Winter

| | 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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Unmitigated | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

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 | 52.7968 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 356.4634 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.7678 | 15.1069 | 6.4285 | 0.0964 | | 1.2214 | 1.2214 | | 1.2214 | 1.2214 | 0.0000 | 19,285.4118 | 19,285.4118 | 0.3696 | 0.3536 | 19,400.0153 |
| Landscaping | 12.9630 | 4.9514 | 429.3993 | 0.0228 | | 2.3878 | 2.3878 | | 2.3878 | 2.3878 | | 777.2701 | 777.2701 | 0.7467 | | 795.9367 |
| Total | 423.9911 | 20.0583 | 435.8277 | 0.1193 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

INSP Update Proposed Plan (2040) - Alameda County, Winter

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|-----------------|----------------|-----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 52.7968 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 356.4634 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.7678 | 15.1069 | 6.4285 | 0.0964 | | 1.2214 | 1.2214 | | 1.2214 | 1.2214 | 0.0000 | 19,285.4118 | 19,285.4118 | 0.3696 | 0.3536 | 19,400.0153 |
| Landscaping | 12.9630 | 4.9514 | 429.3993 | 0.0228 | | 2.3878 | 2.3878 | | 2.3878 | 2.3878 | | 777.2701 | 777.2701 | 0.7467 | | 795.9367 |
| Total | 423.9911 | 20.0583 | 435.8277 | 0.1193 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

INSP Update Proposed Plan (2040) - Alameda County, Winter

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

INSP Update Proposed Plan (2040) with Mitigation
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 5,204.00 | Dwelling Unit | 136.95 | 5,204,000.00 | 14883 |
| Industrial Park | 7,089.30 | 1000sqft | 162.75 | 7,089,300.00 | 0 |
| Junior College (2Yr) | 8,110.00 | Student | 8.13 | 354,019.64 | 0 |
| Manufacturing | 2,540.58 | 1000sqft | 58.32 | 2,540,580.00 | 0 |
| Office Park | 601.75 | 1000sqft | 13.81 | 601,750.00 | 0 |
| Regional Shopping Center | 867.52 | 1000sqft | 19.92 | 867,520.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2040 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 152.2 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

Project Characteristics - Intensity factor includes RPS benefit up to 2030.

Land Use - Future (2040) Proposed Plan land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match VMT resulting from implementation of the Proposed Plan.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - See Mitigation Measure GHG-1.

Mobile Land Use Mitigation - See Mitigation Measure GHG-1.

Water Mitigation - See Mitigation Measure GHG-1.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 5,726,585.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 17,179,754.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 3,512,700.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 10,538,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 6,200.00 | 0.00 |
| tblConstructionPhase | NumDays | 400.00 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

| | | | |
|----------------------|----------------------------|------------|------------|
| tblConstructionPhase | NumDays | 620.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 240.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/9/2052 | 6/3/2050 |
| tblConstructionPhase | PhaseEndDate | 9/25/2048 | 12/20/2024 |
| tblConstructionPhase | PhaseEndDate | 9/3/2021 | 2/23/2020 |
| tblConstructionPhase | PhaseEndDate | 12/20/2024 | 8/5/2022 |
| tblConstructionPhase | PhaseEndDate | 6/3/2050 | 9/25/2048 |
| tblConstructionPhase | PhaseEndDate | 8/5/2022 | 9/3/2021 |
| tblFireplaces | NumberWood | 884.68 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

| | | | |
|---------------------------|----------------------------|----------|--------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 152.2 |
| tblTripsAndVMT | VendorTripNumber | 2,433.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 8,410.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 1,682.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

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| | | | |
|-----------------|--------|-------|--------|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.30 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |

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| | | | |
|-----------------|--------------------|--------|--------|
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 6.54 |
| tblVehicleTrips | ST_TR | 2.49 | 6.72 |
| tblVehicleTrips | ST_TR | 0.42 | 1.21 |
| tblVehicleTrips | ST_TR | 1.49 | 3.76 |
| tblVehicleTrips | ST_TR | 1.64 | 11.23 |
| tblVehicleTrips | ST_TR | 49.97 | 41.99 |
| tblVehicleTrips | SU_TR | 5.86 | 6.54 |
| tblVehicleTrips | SU_TR | 0.73 | 6.72 |
| tblVehicleTrips | SU_TR | 0.04 | 1.21 |
| tblVehicleTrips | SU_TR | 0.62 | 3.76 |
| tblVehicleTrips | SU_TR | 0.76 | 11.23 |
| tblVehicleTrips | SU_TR | 25.24 | 41.99 |
| tblVehicleTrips | WD_TR | 6.65 | 6.54 |
| tblVehicleTrips | WD_TR | 6.83 | 6.72 |
| tblVehicleTrips | WD_TR | 1.23 | 1.21 |
| tblVehicleTrips | WD_TR | 3.82 | 3.76 |
| tblVehicleTrips | WD_TR | 11.42 | 11.23 |
| tblVehicleTrips | WD_TR | 42.70 | 41.99 |
| tblWoodstoves | NumberCatalytic | 104.08 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 104.08 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

2.1 Overall Construction

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 | | | | | |
| 2020 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2021 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2024 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2048 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2050 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Maximum | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | 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 |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|----------|--|--|
| | | Highest | | |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

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 | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |
| Energy | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | 0.9364 | 0.9364 | | 0.9364 | 0.9364 | 0.0000 | 26,716.4826 | 26,716.4826 | 2.7920 | 0.7704 | 27,015.8514 |
| Mobile | 21.6613 | 214.2812 | 268.0352 | 1.7910 | 182.6180 | 0.7371 | 183.3550 | 49.0574 | 0.6897 | 49.7471 | 0.0000 | 166,847.6155 | 166,847.6155 | 5.3648 | 0.0000 | 166,981.7361 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3,508.8003 | 0.0000 | 3,508.8003 | 207.3642 | 0.0000 | 8,692.9042 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 873.8905 | 1,112.5501 | 1,986.4406 | 89.9689 | 2.1632 | 4,880.3013 |
| Total | 98.8830 | 226.9993 | 316.0965 | 1.8675 | 182.6180 | 1.8952 | 184.5131 | 49.0574 | 1.8478 | 50.9052 | 4,382.6908 | 194,837.5593 | 199,220.2501 | 305.5527 | 2.9354 | 207,733.8072 |

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2.2 Overall Operational

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|-----------------|-----------------|---------------|-----------------|---------------|-----------------|----------------|---------------|----------------|-------------------|---------------------|---------------------|-----------------|---------------|---------------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |
| Energy | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | 0.9364 | 0.9364 | | 0.9364 | 0.9364 | 0.0000 | 26,716.4826 | 26,716.4826 | 2.7920 | 0.7704 | 27,015.8514 |
| Mobile | 17.8893 | 188.8580 | 199.0436 | 1.2858 | 126.0164 | 0.5291 | 126.5455 | 33.8523 | 0.4948 | 34.3471 | 0.0000 | 119,900.8603 | 119,900.8603 | 4.3288 | 0.0000 | 120,009.0809 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 526.3200 | 0.0000 | 526.3200 | 31.1046 | 0.0000 | 1,303.9356 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 742.8069 | 949.8460 | 1,692.6529 | 76.4744 | 1.8389 | 4,152.5035 |
| Total | 95.1111 | 201.5761 | 247.1049 | 1.3623 | 126.0164 | 1.6871 | 127.7035 | 33.8523 | 1.6529 | 35.5052 | 1,269.1269 | 147,728.0999 | 148,997.2269 | 114.7627 | 2.6111 | 152,644.3856 |

| | 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 | 3.81 | 11.20 | 21.83 | 27.05 | 30.99 | 10.98 | 30.79 | 30.99 | 10.55 | 30.25 | 71.04 | 24.18 | 25.21 | 62.44 | 11.05 | 26.52 |

3.0 Construction Detail

Construction Phase

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 2/24/2020 | 2/23/2020 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 9/4/2021 | 9/3/2021 | 5 | 0 | |
| 3 | Grading | Grading | 8/6/2022 | 8/5/2022 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 12/21/2024 | 12/20/2024 | 5 | 0 | |
| 5 | Paving | Paving | 9/26/2048 | 9/25/2048 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 6/4/2050 | 6/3/2050 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

3.7 Architectural Coating - 2050

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

Expand Transit Network

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

| | 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 | 17.8893 | 188.8580 | 199.0436 | 1.2858 | 126.0164 | 0.5291 | 126.5455 | 33.8523 | 0.4948 | 34.3471 | 0.0000 | 119,900.8603 | 119,900.8603 | 4.3288 | 0.0000 | 120,009.0809 |
| Unmitigated | 21.6613 | 214.2812 | 268.0352 | 1.7910 | 182.6180 | 0.7371 | 183.3550 | 49.0574 | 0.6897 | 49.7471 | 0.0000 | 166,847.6155 | 166,847.6155 | 5.3648 | 0.0000 | 166,981.7361 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|-------------------|-------------------|--------------------|--------------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 34,034.16 | 34,034.16 | 34034.16 | 115,212,438 | 79,502,917 |
| Industrial Park | 47,640.10 | 47,640.10 | 47640.10 | 161,271,253 | 111,286,032 |
| Junior College (2Yr) | 9,813.10 | 9,813.10 | 9813.10 | 33,219,306 | 22,923,148 |
| Manufacturing | 9,552.58 | 9,552.58 | 9552.58 | 32,337,397 | 22,314,582 |
| Office Park | 6,757.65 | 6,757.65 | 6757.65 | 22,876,005 | 15,785,701 |
| Regional Shopping Center | 36,427.16 | 36,427.16 | 36427.16 | 123,313,238 | 85,092,915 |
| Total | 144,224.75 | 144,224.75 | 144,224.75 | 488,229,638 | 336,905,295 |

4.3 Trip Type Information

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Industrial Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Junior College (2Yr) | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Manufacturing | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Office Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Regional Shopping Center | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

| | 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 | 13,304.0489 | 13,304.0489 | 2.5349 | 0.5245 | 13,523.7143 |
| Electricity Unmitigated | | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 13,304.0489 | 13,304.0489 | 2.5349 | 0.5245 | 13,523.7143 |
| NaturalGas Mitigated | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | | 0.9364 | 0.9364 | | 0.9364 | 0.0000 | 13,412.4337 | 13,412.4337 | 0.2571 | 0.2459 | 13,492.1371 |
| NaturalGas Unmitigated | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | | 0.9364 | 0.9364 | | 0.9364 | 0.0000 | 13,412.4337 | 13,412.4337 | 0.2571 | 0.2459 | 13,492.1371 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

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 Mid Rise | 4.49597e+007 | 0.2424 | 2.0717 | 0.8816 | 0.0132 | | 0.1675 | 0.1675 | | 0.1675 | 0.1675 | 0.0000 | 2,399.2207 | 2,399.2207 | 0.0460 | 0.0440 | 2,413.4781 |
| Industrial Park | 1.16052e+008 | 0.6258 | 5.6888 | 4.7786 | 0.0341 | | 0.4324 | 0.4324 | | 0.4324 | 0.4324 | 0.0000 | 6,192.9682 | 6,192.9682 | 0.1187 | 0.1135 | 6,229.7699 |
| Junior College (2Yr) | 8.54249e+006 | 0.0461 | 0.4188 | 0.3518 | 2.5100e-003 | | 0.0318 | 0.0318 | | 0.0318 | 0.0318 | 0.0000 | 455.8600 | 455.8600 | 8.7400e-003 | 8.3600e-003 | 458.5690 |
| Manufacturing | 6.70205e+007 | 0.3614 | 3.2853 | 2.7597 | 0.0197 | | 0.2497 | 0.2497 | | 0.2497 | 0.2497 | 0.0000 | 3,576.4691 | 3,576.4691 | 0.0686 | 0.0656 | 3,597.7223 |
| Office Park | 1.2709e+007 | 0.0685 | 0.6230 | 0.5233 | 3.7400e-003 | | 0.0474 | 0.0474 | | 0.0474 | 0.0474 | 0.0000 | 678.1985 | 678.1985 | 0.0130 | 0.0124 | 682.2287 |
| Regional Shopping Center | 2.05602e+006 | 0.0111 | 0.1008 | 0.0847 | 6.0000e-004 | | 7.6600e-003 | 7.6600e-003 | | 7.6600e-003 | 7.6600e-003 | 0.0000 | 109.7172 | 109.7172 | 2.1000e-003 | 2.0100e-003 | 110.3692 |
| Total | | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | 0.9364 | 0.9364 | | 0.9364 | 0.9364 | 0.0000 | 13,412.4337 | 13,412.4337 | 0.2571 | 0.2459 | 13,492.1371 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Mid Rise | 4.49597e+007 | 0.2424 | 2.0717 | 0.8816 | 0.0132 | | 0.1675 | 0.1675 | | 0.1675 | 0.1675 | 0.0000 | 2,399.2207 | 2,399.2207 | 0.0460 | 0.0440 | 2,413.4781 |
| Industrial Park | 1.16052e+008 | 0.6258 | 5.6888 | 4.7786 | 0.0341 | | 0.4324 | 0.4324 | | 0.4324 | 0.4324 | 0.0000 | 6,192.9682 | 6,192.9682 | 0.1187 | 0.1135 | 6,229.7699 |
| Junior College (2Yr) | 8.54249e+006 | 0.0461 | 0.4188 | 0.3518 | 2.5100e-003 | | 0.0318 | 0.0318 | | 0.0318 | 0.0318 | 0.0000 | 455.8600 | 455.8600 | 8.7400e-003 | 8.3600e-003 | 458.5690 |
| Manufacturing | 6.70205e+007 | 0.3614 | 3.2853 | 2.7597 | 0.0197 | | 0.2497 | 0.2497 | | 0.2497 | 0.2497 | 0.0000 | 3,576.4691 | 3,576.4691 | 0.0686 | 0.0656 | 3,597.7223 |
| Office Park | 1.2709e+007 | 0.0685 | 0.6230 | 0.5233 | 3.7400e-003 | | 0.0474 | 0.0474 | | 0.0474 | 0.0474 | 0.0000 | 678.1985 | 678.1985 | 0.0130 | 0.0124 | 682.2287 |
| Regional Shopping Center | 2.05602e+006 | 0.0111 | 0.1008 | 0.0847 | 6.0000e-004 | | 7.6600e-003 | 7.6600e-003 | | 7.6600e-003 | 7.6600e-003 | 0.0000 | 109.7172 | 109.7172 | 2.1000e-003 | 2.0100e-003 | 110.3692 |
| Total | | 1.3553 | 12.1883 | 9.3796 | 0.0739 | | 0.9364 | 0.9364 | | 0.9364 | 0.9364 | 0.0000 | 13,412.4337 | 13,412.4337 | 0.2571 | 0.2459 | 13,492.1371 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|-----------------|--------------------|---------------|---------------|--------------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 2.14839e+007 | 1,483.1811 | 0.2826 | 0.0585 | 1,507.6702 |
| Industrial Park | 1.26402e+008 | 8,726.3995 | 1.6627 | 0.3440 | 8,870.4826 |
| Junior College (2Yr) | 2.8003e+006 | 193.3233 | 0.0368 | 7.6200e-003 | 196.5153 |
| Manufacturing | 2.09852e+007 | 1,448.7496 | 0.2760 | 0.0571 | 1,472.6701 |
| Office Park | 1.17642e+007 | 812.1631 | 0.1548 | 0.0320 | 825.5729 |
| Regional Shopping Center | 9.27379e+006 | 640.2323 | 0.1220 | 0.0252 | 650.8033 |
| Total | | 13,304.0489 | 2.5349 | 0.5245 | 13,523.7143 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|-----------------|--------------------|---------------|---------------|--------------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 2.14839e+007 | 1,483.1811 | 0.2826 | 0.0585 | 1,507.6702 |
| Industrial Park | 1.26402e+008 | 8,726.3995 | 1.6627 | 0.3440 | 8,870.4826 |
| Junior College (2Yr) | 2.8003e+006 | 193.3233 | 0.0368 | 7.6200e-003 | 196.5153 |
| Manufacturing | 2.09852e+007 | 1,448.7496 | 0.2760 | 0.0571 | 1,472.6701 |
| Office Park | 1.17642e+007 | 812.1631 | 0.1548 | 0.0320 | 825.5729 |
| Regional Shopping Center | 9.27379e+006 | 640.2323 | 0.1220 | 0.0252 | 650.8033 |
| Total | | 13,304.0489 | 2.5349 | 0.5245 | 13,523.7143 |

6.0 Area Detail

6.1 Mitigation Measures Area

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

| | 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 | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |
| Unmitigated | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |

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 | 9.6354 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 65.0546 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 9.8500e-003 | 0.0842 | 0.0358 | 5.4000e-004 | | 6.8000e-003 | 6.8000e-003 | | 6.8000e-003 | 6.8000e-003 | 0.0000 | 97.4496 | 97.4496 | 1.8700e-003 | 1.7900e-003 | 98.0287 |
| Landscaping | 1.1667 | 0.4456 | 38.6459 | 2.0500e-003 | | 0.2149 | 0.2149 | | 0.2149 | 0.2149 | 0.0000 | 63.4615 | 63.4615 | 0.0610 | 0.0000 | 64.9856 |
| Total | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |

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6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|----------------|---------------|----------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|--------------------|-----------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 9.6354 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 65.0546 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 9.8500e-003 | 0.0842 | 0.0358 | 5.4000e-004 | | 6.8000e-003 | 6.8000e-003 | | 6.8000e-003 | 6.8000e-003 | 0.0000 | 97.4496 | 97.4496 | 1.8700e-003 | 1.7900e-003 | 98.0287 |
| Landscaping | 1.1667 | 0.4456 | 38.6459 | 2.0500e-003 | | 0.2149 | 0.2149 | | 0.2149 | 0.2149 | 0.0000 | 63.4615 | 63.4615 | 0.0610 | 0.0000 | 64.9856 |
| Total | 75.8665 | 0.5298 | 38.6817 | 2.5900e-003 | | 0.2217 | 0.2217 | | 0.2217 | 0.2217 | 0.0000 | 160.9110 | 160.9110 | 0.0628 | 1.7900e-003 | 163.0142 |

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|------------|---------|--------|------------|
| Category | MT/yr | | | |
| Mitigated | 1,692.6529 | 76.4744 | 1.8389 | 4,152.5035 |
| Unmitigated | 1,986.4406 | 89.9689 | 2.1632 | 4,880.3013 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

7.2 Water by Land Use

Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|--------------------|-------------------|----------------|---------------|-------------------|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 339.062 / 213.756 | 285.8773 | 11.0823 | 0.2679 | 642.7703 |
| Industrial Park | 1639.4 / 0 | 1,132.5172 | 53.5366 | 1.2855 | 2,854.0113 |
| Junior College (2Yr) | 17.3643 / 27.1596 | 18.5580 | 0.5683 | 0.0139 | 36.9002 |
| Manufacturing | 587.509 / 0 | 405.8582 | 19.1858 | 0.4607 | 1,022.7870 |
| Office Park | 106.951 / 65.5508 | 89.7222 | 3.4956 | 0.0845 | 202.2906 |
| Regional Shopping Center | 64.2594 / 39.3848 | 53.9076 | 2.1003 | 0.0508 | 121.5420 |
| Total | | 1,986.4406 | 89.9689 | 2.1632 | 4,880.3013 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

7.2 Water by Land Use

Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|--------------------|-------------------|----------------|---------------|-------------------|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 288.202 / 192.381 | 245.5782 | 9.4205 | 0.2278 | 548.9799 |
| Industrial Park | 1393.49 / 0 | 962.6397 | 45.5061 | 1.0927 | 2,425.9096 |
| Junior College (2Yr) | 14.7597 / 24.4436 | 16.1024 | 0.4831 | 0.0118 | 31.6987 |
| Manufacturing | 499.383 / 0 | 344.9795 | 16.3079 | 0.3916 | 869.3690 |
| Office Park | 90.9086 / 58.9957 | 77.0558 | 2.9714 | 0.0719 | 172.7520 |
| Regional Shopping Center | 54.6205 / 35.4463 | 46.2973 | 1.7853 | 0.0432 | 103.7944 |
| Total | | 1,692.6529 | 76.4744 | 1.8389 | 4,152.5035 |

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|------------|----------|--------|------------|
| | MT/yr | | | |
| Mitigated | 526.3200 | 31.1046 | 0.0000 | 1,303.9356 |
| Unmitigated | 3,508.8003 | 207.3642 | 0.0000 | 8,692.9042 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

8.2 Waste by Land Use

Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|-------------------|-----------------|---------------|-------------------|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 2393.84 | 485.9279 | 28.7175 | 0.0000 | 1,203.8658 |
| Industrial Park | 8790.73 | 1,784.4388 | 105.4573 | 0.0000 | 4,420.8715 |
| Junior College (2Yr) | 1480.08 | 300.4429 | 17.7557 | 0.0000 | 744.3345 |
| Manufacturing | 3150.32 | 639.4865 | 37.7926 | 0.0000 | 1,584.3007 |
| Office Park | 559.63 | 113.5998 | 6.7136 | 0.0000 | 281.4388 |
| Regional Shopping Center | 910.9 | 184.9045 | 10.9275 | 0.0000 | 458.0930 |
| Total | | 3,508.8003 | 207.3642 | 0.0000 | 8,692.9042 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

8.2 Waste by Land Use

Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|-----------------|----------------|---------------|-------------------|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 359.076 | 72.8892 | 4.3076 | 0.0000 | 180.5799 |
| Industrial Park | 1318.61 | 267.6658 | 15.8186 | 0.0000 | 663.1307 |
| Junior College (2Yr) | 222.012 | 45.0664 | 2.6634 | 0.0000 | 111.6502 |
| Manufacturing | 472.548 | 95.9230 | 5.6689 | 0.0000 | 237.6451 |
| Office Park | 83.9445 | 17.0400 | 1.0070 | 0.0000 | 42.2158 |
| Regional Shopping Center | 136.635 | 27.7357 | 1.6391 | 0.0000 | 68.7140 |
| Total | | 526.3200 | 31.1046 | 0.0000 | 1,303.9356 |

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Annual

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

INSP Update Proposed Plan (2040) with Mitigation
Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 5,204.00 | Dwelling Unit | 136.95 | 5,204,000.00 | 14883 |
| Industrial Park | 7,089.30 | 1000sqft | 162.75 | 7,089,300.00 | 0 |
| Junior College (2Yr) | 8,110.00 | Student | 8.13 | 354,019.64 | 0 |
| Manufacturing | 2,540.58 | 1000sqft | 58.32 | 2,540,580.00 | 0 |
| Office Park | 601.75 | 1000sqft | 13.81 | 601,750.00 | 0 |
| Regional Shopping Center | 867.52 | 1000sqft | 19.92 | 867,520.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2040 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 152.2 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

Project Characteristics - Intensity factor includes RPS benefit up to 2030.

Land Use - Future (2040) Proposed Plan land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match VMT resulting from implementation of the Proposed Plan.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - See Mitigation Measure GHG-1.

Mobile Land Use Mitigation - See Mitigation Measure GHG-1.

Water Mitigation - See Mitigation Measure GHG-1.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 5,726,585.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 17,179,754.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 3,512,700.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 10,538,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 6,200.00 | 0.00 |
| tblConstructionPhase | NumDays | 400.00 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

| | | | |
|----------------------|----------------------------|------------|------------|
| tblConstructionPhase | NumDays | 620.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 240.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/9/2052 | 6/3/2050 |
| tblConstructionPhase | PhaseEndDate | 9/25/2048 | 12/20/2024 |
| tblConstructionPhase | PhaseEndDate | 9/3/2021 | 2/23/2020 |
| tblConstructionPhase | PhaseEndDate | 12/20/2024 | 8/5/2022 |
| tblConstructionPhase | PhaseEndDate | 6/3/2050 | 9/25/2048 |
| tblConstructionPhase | PhaseEndDate | 8/5/2022 | 9/3/2021 |
| tblFireplaces | NumberWood | 884.68 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

| | | | |
|---------------------------|----------------------------|----------|--------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 152.2 |
| tblTripsAndVMT | VendorTripNumber | 2,433.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 8,410.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 1,682.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

| | | | |
|-----------------|--------|-------|--------|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.30 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

| | | | |
|-----------------|--------------------|--------|--------|
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 6.54 |
| tblVehicleTrips | ST_TR | 2.49 | 6.72 |
| tblVehicleTrips | ST_TR | 0.42 | 1.21 |
| tblVehicleTrips | ST_TR | 1.49 | 3.76 |
| tblVehicleTrips | ST_TR | 1.64 | 11.23 |
| tblVehicleTrips | ST_TR | 49.97 | 41.99 |
| tblVehicleTrips | SU_TR | 5.86 | 6.54 |
| tblVehicleTrips | SU_TR | 0.73 | 6.72 |
| tblVehicleTrips | SU_TR | 0.04 | 1.21 |
| tblVehicleTrips | SU_TR | 0.62 | 3.76 |
| tblVehicleTrips | SU_TR | 0.76 | 11.23 |
| tblVehicleTrips | SU_TR | 25.24 | 41.99 |
| tblVehicleTrips | WD_TR | 6.65 | 6.54 |
| tblVehicleTrips | WD_TR | 6.83 | 6.72 |
| tblVehicleTrips | WD_TR | 1.23 | 1.21 |
| tblVehicleTrips | WD_TR | 3.82 | 3.76 |
| tblVehicleTrips | WD_TR | 11.42 | 11.23 |
| tblVehicleTrips | WD_TR | 42.70 | 41.99 |
| tblWoodstoves | NumberCatalytic | 104.08 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 104.08 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Energy | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| Mobile | 132.4077 | 1,161.2803 | 1,560.6503 | 10.3183 | 1,041.6556 | 4.0500 | 1,045.7056 | 278.9375 | 3.7895 | 282.7270 | | 1,058,505.6713 | 1,058,505.6713 | 32.0366 | | 1,059,306.5855 |
| Total | 563.8248 | 1,248.1239 | 2,047.8728 | 10.8426 | 1,041.6556 | 12.7900 | 1,054.4456 | 278.9375 | 12.5294 | 291.4670 | 0.0000 | 1,159,580.2841 | 1,159,580.2841 | 34.7056 | 1.8388 | 1,160,995.8818 |

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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Energy | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| Mobile | 111.6349 | 1,028.7049 | 1,140.5827 | 7.4083 | 718.7997 | 2.9056 | 721.7053 | 192.4822 | 2.7173 | 195.1995 | | 760,806.3874 | 760,806.3874 | 25.6649 | | 761,448.0094 |
| Total | 543.0521 | 1,115.5486 | 1,627.8052 | 7.9326 | 718.7997 | 11.6456 | 730.4452 | 192.4822 | 11.4573 | 203.9395 | 0.0000 | 861,881.0002 | 861,881.0002 | 28.3339 | 1.8388 | 863,137.3057 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

| | 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 | 3.68 | 10.62 | 20.51 | 26.84 | 30.99 | 8.95 | 30.73 | 30.99 | 8.56 | 30.03 | 0.00 | 25.67 | 25.67 | 18.36 | 0.00 | 25.66 |

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 | 2/24/2020 | 2/23/2020 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 9/4/2021 | 9/3/2021 | 5 | 0 | |
| 3 | Grading | Grading | 8/6/2022 | 8/5/2022 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 12/21/2024 | 12/20/2024 | 5 | 0 | |
| 5 | Paving | Paving | 9/26/2048 | 9/25/2048 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 6/4/2050 | 6/3/2050 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

3.7 Architectural Coating - 2050

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 | 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

Expand Transit Network

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

| | 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 | 111.6349 | 1,028.7049 | 1,140.5827 | 7.4083 | 718.7997 | 2.9056 | 721.7053 | 192.4822 | 2.7173 | 195.1995 | | 760,806.3874 | 760,806.3874 | 25.6649 | | 761,448.0094 |
| Unmitigated | 132.4077 | 1,161.2803 | 1,560.6503 | 10.3183 | 1,041.6556 | 4.0500 | 1,045.7056 | 278.9375 | 3.7895 | 282.7270 | | 1,058,505.6713 | 1,058,505.6713 | 32.0366 | | 1,059,306.5855 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|------------|------------|-------------|-------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 34,034.16 | 34,034.16 | 34034.16 | 115,212,438 | 79,502,917 |
| Industrial Park | 47,640.10 | 47,640.10 | 47640.10 | 161,271,253 | 111,286,032 |
| Junior College (2Yr) | 9,813.10 | 9,813.10 | 9813.10 | 33,219,306 | 22,923,148 |
| Manufacturing | 9,552.58 | 9,552.58 | 9552.58 | 32,337,397 | 22,314,582 |
| Office Park | 6,757.65 | 6,757.65 | 6757.65 | 22,876,005 | 15,785,701 |
| Regional Shopping Center | 36,427.16 | 36,427.16 | 36427.16 | 123,313,238 | 85,092,915 |
| Total | 144,224.75 | 144,224.75 | 144,224.75 | 488,229,638 | 336,905,295 |

4.3 Trip Type Information

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Industrial Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Junior College (2Yr) | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Manufacturing | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Office Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Regional Shopping Center | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

| | 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 | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| NaturalGas Unmitigated | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

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 Mid Rise | 123177 | 1.3284 | 11.3516 | 4.8305 | 0.0725 | | 0.9178 | 0.9178 | | 0.9178 | 0.9178 | | 14,491.44 17 | 14,491.44 17 | 0.2778 | 0.2657 | 14,577.55 71 |
| Industrial Park | 317950 | 3.4289 | 31.1716 | 26.1841 | 0.1870 | | 2.3690 | 2.3690 | | 2.3690 | 2.3690 | | 37,405.911 7 | 37,405.911 7 | 0.7170 | 0.6858 | 37,628.19 63 |
| Junior College (2Yr) | 23404.1 | 0.2524 | 2.2945 | 1.9274 | 0.0138 | | 0.1744 | 0.1744 | | 0.1744 | 0.1744 | | 2,753.422 7 | 2,753.422 7 | 0.0528 | 0.0505 | 2,769.784 9 |
| Manufacturing | 183618 | 1.9802 | 18.0018 | 15.1215 | 0.1080 | | 1.3681 | 1.3681 | | 1.3681 | 1.3681 | | 21,602.09 52 | 21,602.09 52 | 0.4140 | 0.3960 | 21,730.46 57 |
| Office Park | 34819.1 | 0.3755 | 3.4136 | 2.8675 | 0.0205 | | 0.2594 | 0.2594 | | 0.2594 | 0.2594 | | 4,096.361 0 | 4,096.361 0 | 0.0785 | 0.0751 | 4,120.703 6 |
| Regional Shopping Center | 5632.94 | 0.0608 | 0.5523 | 0.4639 | 3.3100e-003 | | 0.0420 | 0.0420 | | 0.0420 | 0.0420 | | 662.6986 | 662.6986 | 0.0127 | 0.0122 | 666.6367 |
| Total | | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.93 09 | 81,011.93 09 | 1.5527 | 1.4852 | 81,493.34 43 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 123.177 | 1.3284 | 11.3516 | 4.8305 | 0.0725 | | 0.9178 | 0.9178 | | 0.9178 | 0.9178 | | 14,491.44 17 | 14,491.44 17 | 0.2778 | 0.2657 | 14,577.55 71 |
| Industrial Park | 317.95 | 3.4289 | 31.1716 | 26.1841 | 0.1870 | | 2.3690 | 2.3690 | | 2.3690 | 2.3690 | | 37,405.911 7 | 37,405.911 7 | 0.7170 | 0.6858 | 37,628.19 63 |
| Junior College (2Yr) | 23.4041 | 0.2524 | 2.2945 | 1.9274 | 0.0138 | | 0.1744 | 0.1744 | | 0.1744 | 0.1744 | | 2,753.422 7 | 2,753.422 7 | 0.0528 | 0.0505 | 2,769.784 9 |
| Manufacturing | 183.618 | 1.9802 | 18.0018 | 15.1215 | 0.1080 | | 1.3681 | 1.3681 | | 1.3681 | 1.3681 | | 21,602.09 52 | 21,602.09 52 | 0.4140 | 0.3960 | 21,730.46 57 |
| Office Park | 34.8191 | 0.3755 | 3.4136 | 2.8675 | 0.0205 | | 0.2594 | 0.2594 | | 0.2594 | 0.2594 | | 4,096.361 0 | 4,096.361 0 | 0.0785 | 0.0751 | 4,120.703 6 |
| Regional Shopping Center | 5.63294 | 0.0608 | 0.5523 | 0.4639 | 3.3100e-003 | | 0.0420 | 0.0420 | | 0.0420 | 0.0420 | | 662.6986 | 662.6986 | 0.0127 | 0.0122 | 666.6367 |
| Total | | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.93 09 | 81,011.93 09 | 1.5527 | 1.4852 | 81,493.34 43 |

6.0 Area Detail

6.1 Mitigation Measures Area

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

| | 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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Unmitigated | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

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 | 52.7968 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 356.4634 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.7678 | 15.1069 | 6.4285 | 0.0964 | | 1.2214 | 1.2214 | | 1.2214 | 1.2214 | 0.0000 | 19,285.4118 | 19,285.4118 | 0.3696 | 0.3536 | 19,400.0153 |
| Landscaping | 12.9630 | 4.9514 | 429.3993 | 0.0228 | | 2.3878 | 2.3878 | | 2.3878 | 2.3878 | | 777.2701 | 777.2701 | 0.7467 | | 795.9367 |
| Total | 423.9911 | 20.0583 | 435.8277 | 0.1193 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|-----------------|----------------|-----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 52.7968 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 356.4634 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.7678 | 15.1069 | 6.4285 | 0.0964 | | 1.2214 | 1.2214 | | 1.2214 | 1.2214 | 0.0000 | 19,285.4118 | 19,285.4118 | 0.3696 | 0.3536 | 19,400.0153 |
| Landscaping | 12.9630 | 4.9514 | 429.3993 | 0.0228 | | 2.3878 | 2.3878 | | 2.3878 | 2.3878 | | 777.2701 | 777.2701 | 0.7467 | | 795.9367 |
| Total | 423.9911 | 20.0583 | 435.8277 | 0.1193 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Summer

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

**INSP Update Proposed Plan (2040) with Mitigation
Alameda County, Winter**

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------|----------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 5,204.00 | Dwelling Unit | 136.95 | 5,204,000.00 | 14883 |
| Industrial Park | 7,089.30 | 1000sqft | 162.75 | 7,089,300.00 | 0 |
| Junior College (2Yr) | 8,110.00 | Student | 8.13 | 354,019.64 | 0 |
| Manufacturing | 2,540.58 | 1000sqft | 58.32 | 2,540,580.00 | 0 |
| Office Park | 601.75 | 1000sqft | 13.81 | 601,750.00 | 0 |
| Regional Shopping Center | 867.52 | 1000sqft | 19.92 | 867,520.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 63 |
| Climate Zone | 4 | | | Operational Year | 2040 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 152.2 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

Project Characteristics - Intensity factor includes RPS benefit up to 2030.

Land Use - Future (2040) Proposed Plan land use.

Construction Phase - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Off-road Equipment - No construction.

Grading - No construction.

Trips and VMT - No construction.

Architectural Coating - No construction.

Vehicle Trips - Scaled trip rate to match VMT resulting from implementation of the Proposed Plan.

Woodstoves - No woodstoves.

Energy Use -

Waste Mitigation - See Mitigation Measure GHG-1.

Mobile Land Use Mitigation - See Mitigation Measure GHG-1.

Water Mitigation - See Mitigation Measure GHG-1.

| Table Name | Column Name | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 5,726,585.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 17,179,754.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Exterior | 3,512,700.00 | 0.00 |
| tblArchitecturalCoating | ConstArea_Residential_Interior | 10,538,100.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 6,200.00 | 0.00 |
| tblConstructionPhase | NumDays | 400.00 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

| | | | |
|----------------------|----------------------------|------------|------------|
| tblConstructionPhase | NumDays | 620.00 | 0.00 |
| tblConstructionPhase | NumDays | 440.00 | 0.00 |
| tblConstructionPhase | NumDays | 240.00 | 0.00 |
| tblConstructionPhase | PhaseEndDate | 2/9/2052 | 6/3/2050 |
| tblConstructionPhase | PhaseEndDate | 9/25/2048 | 12/20/2024 |
| tblConstructionPhase | PhaseEndDate | 9/3/2021 | 2/23/2020 |
| tblConstructionPhase | PhaseEndDate | 12/20/2024 | 8/5/2022 |
| tblConstructionPhase | PhaseEndDate | 6/3/2050 | 9/25/2048 |
| tblConstructionPhase | PhaseEndDate | 8/5/2022 | 9/3/2021 |
| tblFireplaces | NumberWood | 884.68 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

| | | | |
|---------------------------|----------------------------|----------|--------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 152.2 |
| tblTripsAndVMT | VendorTripNumber | 2,433.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 8,410.00 | 0.00 |
| tblTripsAndVMT | WorkerTripNumber | 1,682.00 | 0.00 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TL | 7.30 | 9.30 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 88.60 | 100.00 |
| tblVehicleTrips | CC_TTP | 28.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 48.00 | 100.00 |
| tblVehicleTrips | CC_TTP | 64.70 | 100.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TL | 7.30 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 5.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 13.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CNW_TTP | 19.00 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

| | | | |
|-----------------|--------|-------|--------|
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TL | 9.50 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 6.40 | 0.00 |
| tblVehicleTrips | CW_TTP | 59.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 33.00 | 0.00 |
| tblVehicleTrips | CW_TTP | 16.30 | 0.00 |
| tblVehicleTrips | DV_TP | 11.00 | 0.00 |
| tblVehicleTrips | DV_TP | 19.00 | 0.00 |
| tblVehicleTrips | DV_TP | 7.00 | 0.00 |
| tblVehicleTrips | DV_TP | 5.00 | 0.00 |
| tblVehicleTrips | DV_TP | 15.00 | 0.00 |
| tblVehicleTrips | DV_TP | 35.00 | 0.00 |
| tblVehicleTrips | HO_TL | 5.70 | 0.00 |
| tblVehicleTrips | HO_TTP | 54.00 | 0.00 |
| tblVehicleTrips | HS_TL | 4.80 | 0.00 |
| tblVehicleTrips | HS_TTP | 15.00 | 0.00 |
| tblVehicleTrips | HW_TL | 10.80 | 9.30 |
| tblVehicleTrips | HW_TTP | 31.00 | 100.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 2.00 | 0.00 |
| tblVehicleTrips | PB_TP | 1.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 3.00 | 0.00 |
| tblVehicleTrips | PB_TP | 11.00 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

| | | | |
|-----------------|--------------------|--------|--------|
| tblVehicleTrips | PR_TP | 86.00 | 100.00 |
| tblVehicleTrips | PR_TP | 79.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 92.00 | 100.00 |
| tblVehicleTrips | PR_TP | 82.00 | 100.00 |
| tblVehicleTrips | PR_TP | 54.00 | 100.00 |
| tblVehicleTrips | ST_TR | 6.39 | 6.54 |
| tblVehicleTrips | ST_TR | 2.49 | 6.72 |
| tblVehicleTrips | ST_TR | 0.42 | 1.21 |
| tblVehicleTrips | ST_TR | 1.49 | 3.76 |
| tblVehicleTrips | ST_TR | 1.64 | 11.23 |
| tblVehicleTrips | ST_TR | 49.97 | 41.99 |
| tblVehicleTrips | SU_TR | 5.86 | 6.54 |
| tblVehicleTrips | SU_TR | 0.73 | 6.72 |
| tblVehicleTrips | SU_TR | 0.04 | 1.21 |
| tblVehicleTrips | SU_TR | 0.62 | 3.76 |
| tblVehicleTrips | SU_TR | 0.76 | 11.23 |
| tblVehicleTrips | SU_TR | 25.24 | 41.99 |
| tblVehicleTrips | WD_TR | 6.65 | 6.54 |
| tblVehicleTrips | WD_TR | 6.83 | 6.72 |
| tblVehicleTrips | WD_TR | 1.23 | 1.21 |
| tblVehicleTrips | WD_TR | 3.82 | 3.76 |
| tblVehicleTrips | WD_TR | 11.42 | 11.23 |
| tblVehicleTrips | WD_TR | 42.70 | 41.99 |
| tblWoodstoves | NumberCatalytic | 104.08 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 104.08 | 0.00 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Energy | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| Mobile | 118.1819 | 1,183.2762 | 1,525.6405 | 9.7504 | 1,041.6556 | 4.0612 | 1,045.7168 | 278.9375 | 3.8002 | 282.7377 | | 1,000,978.6065 | 1,000,978.6065 | 33.6213 | | 1,001,819.1383 |
| Total | 549.5991 | 1,270.1199 | 2,012.8631 | 10.2747 | 1,041.6556 | 12.8012 | 1,054.4568 | 278.9375 | 12.5402 | 291.4777 | 0.0000 | 1,102,053.2193 | 1,102,053.2193 | 36.2903 | 1.8388 | 1,103,508.4346 |

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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Energy | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| Mobile | 97.2108 | 1,039.2001 | 1,142.2901 | 6.9839 | 718.7997 | 2.9168 | 721.7165 | 192.4822 | 2.7280 | 195.2102 | | 717,601.0774 | 717,601.0774 | 27.2986 | | 718,283.5434 |
| Total | 528.6280 | 1,126.0437 | 1,629.5127 | 7.5082 | 718.7997 | 11.6568 | 730.4565 | 192.4822 | 11.4680 | 203.9502 | 0.0000 | 818,675.6902 | 818,675.6902 | 29.9677 | 1.8388 | 819,972.8397 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

| | 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 | 3.82 | 11.34 | 19.05 | 26.93 | 30.99 | 8.94 | 30.73 | 30.99 | 8.55 | 30.03 | 0.00 | 25.71 | 25.71 | 17.42 | 0.00 | 25.69 |

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 | 2/24/2020 | 2/23/2020 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 9/4/2021 | 9/3/2021 | 5 | 0 | |
| 3 | Grading | Grading | 8/6/2022 | 8/5/2022 | 5 | 0 | |
| 4 | Building Construction | Building Construction | 12/21/2024 | 12/20/2024 | 5 | 0 | |
| 5 | Paving | Paving | 9/26/2048 | 9/25/2048 | 5 | 0 | |
| 6 | Architectural Coating | Architectural Coating | 6/4/2050 | 6/3/2050 | 5 | 0 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 0 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 0 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 0 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 0 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 0 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 0 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 0 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Building Construction | Welders | 0 | 8.00 | 46 | 0.45 |

Trips and VMT

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

3.7 Architectural Coating - 2050

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 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Integrate Below Market Rate Housing

Provide Traffic Calming Measures

Expand Transit Network

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

| | 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 | 97.2108 | 1,039.200 1 | 1,142.290 1 | 6.9839 | 718.7997 | 2.9168 | 721.7165 | 192.4822 | 2.7280 | 195.2102 | | 717,601.0 774 | 717,601.0 774 | 27.2986 | | 718,283.5 434 |
| Unmitigated | 118.1819 | 1,183.276 2 | 1,525.640 5 | 9.7504 | 1,041.655 6 | 4.0612 | 1,045.716 8 | 278.9375 | 3.8002 | 282.7377 | | 1,000,978. 6065 | 1,000,978. 6065 | 33.6213 | | 1,001,819. 1383 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|--------------------------|-------------------------|------------|------------|-------------|-------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 34,034.16 | 34,034.16 | 34034.16 | 115,212,438 | 79,502,917 |
| Industrial Park | 47,640.10 | 47,640.10 | 47640.10 | 161,271,253 | 111,286,032 |
| Junior College (2Yr) | 9,813.10 | 9,813.10 | 9813.10 | 33,219,306 | 22,923,148 |
| Manufacturing | 9,552.58 | 9,552.58 | 9552.58 | 32,337,397 | 22,314,582 |
| Office Park | 6,757.65 | 6,757.65 | 6757.65 | 22,876,005 | 15,785,701 |
| Regional Shopping Center | 36,427.16 | 36,427.16 | 36427.16 | 123,313,238 | 85,092,915 |
| Total | 144,224.75 | 144,224.75 | 144,224.75 | 488,229,638 | 336,905,295 |

4.3 Trip Type Information

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 100 | 0 | 0 |
| Industrial Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Junior College (2Yr) | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Manufacturing | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Office Park | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |
| Regional Shopping Center | 0.00 | 9.30 | 0.00 | 0.00 | 100.00 | 0.00 | 100 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Industrial Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Junior College (2Yr) | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Manufacturing | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Office Park | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |
| Regional Shopping Center | 0.564354 | 0.034948 | 0.188156 | 0.101714 | 0.011079 | 0.005040 | 0.028641 | 0.055840 | 0.002376 | 0.001564 | 0.005216 | 0.000439 | 0.000633 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

| | 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 | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |
| NaturalGas Unmitigated | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.9309 | 81,011.9309 | 1.5527 | 1.4852 | 81,493.3443 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

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 Mid Rise | 123177 | 1.3284 | 11.3516 | 4.8305 | 0.0725 | | 0.9178 | 0.9178 | | 0.9178 | 0.9178 | | 14,491.44 17 | 14,491.44 17 | 0.2778 | 0.2657 | 14,577.55 71 |
| Industrial Park | 317950 | 3.4289 | 31.1716 | 26.1841 | 0.1870 | | 2.3690 | 2.3690 | | 2.3690 | 2.3690 | | 37,405.911 7 | 37,405.911 7 | 0.7170 | 0.6858 | 37,628.19 63 |
| Junior College (2Yr) | 23404.1 | 0.2524 | 2.2945 | 1.9274 | 0.0138 | | 0.1744 | 0.1744 | | 0.1744 | 0.1744 | | 2,753.422 7 | 2,753.422 7 | 0.0528 | 0.0505 | 2,769.784 9 |
| Manufacturing | 183618 | 1.9802 | 18.0018 | 15.1215 | 0.1080 | | 1.3681 | 1.3681 | | 1.3681 | 1.3681 | | 21,602.09 52 | 21,602.09 52 | 0.4140 | 0.3960 | 21,730.46 57 |
| Office Park | 34819.1 | 0.3755 | 3.4136 | 2.8675 | 0.0205 | | 0.2594 | 0.2594 | | 0.2594 | 0.2594 | | 4,096.361 0 | 4,096.361 0 | 0.0785 | 0.0751 | 4,120.703 6 |
| Regional Shopping Center | 5632.94 | 0.0608 | 0.5523 | 0.4639 | 3.3100e-003 | | 0.0420 | 0.0420 | | 0.0420 | 0.0420 | | 662.6986 | 662.6986 | 0.0127 | 0.0122 | 666.6367 |
| Total | | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.93 09 | 81,011.93 09 | 1.5527 | 1.4852 | 81,493.34 43 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 123.177 | 1.3284 | 11.3516 | 4.8305 | 0.0725 | | 0.9178 | 0.9178 | | 0.9178 | 0.9178 | | 14,491.44 17 | 14,491.44 17 | 0.2778 | 0.2657 | 14,577.55 71 |
| Industrial Park | 317.95 | 3.4289 | 31.1716 | 26.1841 | 0.1870 | | 2.3690 | 2.3690 | | 2.3690 | 2.3690 | | 37,405.911 7 | 37,405.911 7 | 0.7170 | 0.6858 | 37,628.19 63 |
| Junior College (2Yr) | 23.4041 | 0.2524 | 2.2945 | 1.9274 | 0.0138 | | 0.1744 | 0.1744 | | 0.1744 | 0.1744 | | 2,753.422 7 | 2,753.422 7 | 0.0528 | 0.0505 | 2,769.784 9 |
| Manufacturing | 183.618 | 1.9802 | 18.0018 | 15.1215 | 0.1080 | | 1.3681 | 1.3681 | | 1.3681 | 1.3681 | | 21,602.09 52 | 21,602.09 52 | 0.4140 | 0.3960 | 21,730.46 57 |
| Office Park | 34.8191 | 0.3755 | 3.4136 | 2.8675 | 0.0205 | | 0.2594 | 0.2594 | | 0.2594 | 0.2594 | | 4,096.361 0 | 4,096.361 0 | 0.0785 | 0.0751 | 4,120.703 6 |
| Regional Shopping Center | 5.63294 | 0.0608 | 0.5523 | 0.4639 | 3.3100e-003 | | 0.0420 | 0.0420 | | 0.0420 | 0.0420 | | 662.6986 | 662.6986 | 0.0127 | 0.0122 | 666.6367 |
| Total | | 7.4261 | 66.7854 | 51.3948 | 0.4051 | | 5.1308 | 5.1308 | | 5.1308 | 5.1308 | | 81,011.93 09 | 81,011.93 09 | 1.5527 | 1.4852 | 81,493.34 43 |

6.0 Area Detail

6.1 Mitigation Measures Area

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

| | 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 | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |
| Unmitigated | 423.9911 | 20.0583 | 435.8277 | 0.1192 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

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 | 52.7968 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 356.4634 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.7678 | 15.1069 | 6.4285 | 0.0964 | | 1.2214 | 1.2214 | | 1.2214 | 1.2214 | 0.0000 | 19,285.4118 | 19,285.4118 | 0.3696 | 0.3536 | 19,400.0153 |
| Landscaping | 12.9630 | 4.9514 | 429.3993 | 0.0228 | | 2.3878 | 2.3878 | | 2.3878 | 2.3878 | | 777.2701 | 777.2701 | 0.7467 | | 795.9367 |
| Total | 423.9911 | 20.0583 | 435.8277 | 0.1193 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|-----------------|----------------|-----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 52.7968 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 356.4634 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.7678 | 15.1069 | 6.4285 | 0.0964 | | 1.2214 | 1.2214 | | 1.2214 | 1.2214 | 0.0000 | 19,285.4118 | 19,285.4118 | 0.3696 | 0.3536 | 19,400.0153 |
| Landscaping | 12.9630 | 4.9514 | 429.3993 | 0.0228 | | 2.3878 | 2.3878 | | 2.3878 | 2.3878 | | 777.2701 | 777.2701 | 0.7467 | | 795.9367 |
| Total | 423.9911 | 20.0583 | 435.8277 | 0.1193 | | 3.6092 | 3.6092 | | 3.6092 | 3.6092 | 0.0000 | 20,062.6819 | 20,062.6819 | 1.1163 | 0.3536 | 20,195.9521 |

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

INSP Update Proposed Plan (2040) with Mitigation - Alameda County, Winter

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

CalEEMod Defaults

| VehicleTrips/LandUseSubType | Size | Size Metric | WkDy | Sat | Sun | Res H-W | Res H-S | Res H-O | Non Res C-C | Non Res C-W | Non Res C-NW | Primary | Diverted | Pass-By | Res H-W | Res H-S | Res H-O | Non Res C-C | Non Res C-W | Non Res C-NW |
|-----------------------------|---------|-------------|-------|-------|-------|---------|---------|---------|-------------|-------------|--------------|---------|----------|---------|---------|---------|---------|-------------|-------------|--------------|
| Office Park | 713.75 | TSF | 11.42 | 1.64 | 0.76 | 0 | 0 | 0 | 7.3 | 9.5 | 7.3 | 82 | 15 | 3 | 0 | 0 | 0 | 48 | 33 | 19 |
| Junior College (2Yr) | 7237 | Student | 1.23 | 0.42 | 0.04 | 0 | 0 | 0 | 7.3 | 9.5 | 7.3 | 92 | 7 | 1 | 0 | 0 | 0 | 86 | 6.4 | 5 |
| Industrial Park | 231.55 | TSF | 6.83 | 2.49 | 0.73 | 0 | 0 | 0 | 7.3 | 9.5 | 7.3 | 79 | 19 | 2 | 0 | 0 | 0 | 28 | 59 | 13 |
| Manufacturing | 2549.28 | TSF | 3.82 | 1.49 | 0.62 | 0 | 0 | 0 | 7.3 | 9.5 | 7.3 | 92 | 5 | 3 | 0 | 0 | 0 | 28 | 59 | 13 |
| Apartments Mid Rise | 1314 | DU | 6.65 | 6.39 | 5.86 | 10.8 | 4.8 | 5.7 | 0 | 0 | 0 | 86 | 11 | 3 | 31 | 15 | 54 | 0 | 0 | 0 |
| Regional Shopping Center | 902.98 | TSF | 42.7 | 49.97 | 25.24 | 0 | 0 | 0 | 7.3 | 9.5 | 7.3 | 54 | 35 | 11 | 0 | 0 | 0 | 64.7 | 13.3 | 19 |

Note:

CalEEMod User's Guide Appendix D: http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4

Existing (2013) Conditions

| Land Use Sub Type | Size | Size Metric | Trip Rate (/size/day) | | | Trip Length (mi) | | | | | | Trip Type (%) | | | Trip Type by Use (%) | | | | | |
|--------------------------|---------|-------------|-----------------------|-------|-------|------------------|---------|---------|-------------|-------------|--------------|---------------|----------|---------|----------------------|---------|---------|-------------|-------------|--------------|
| | | | WkDy | Sat | Sun | Res H-W | Res H-S | Res H-O | Non Res C-C | Non Res C-W | Non Res C-NW | Primary | Diverted | Pass-By | Res H-W | Res H-S | Res H-O | Non Res C-C | Non Res C-W | Non Res C-NW |
| Office Park | 713.75 | TSF | 11.36 | 11.36 | 11.36 | 0.0 | 0.0 | 0.0 | 9.2 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Junior College (2Yr) | 7237 | Student | 1.22 | 1.22 | 1.22 | 0.0 | 0.0 | 0.0 | 9.2 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Industrial Park | 231.55 | TSF | 6.80 | 6.80 | 6.80 | 0.0 | 0.0 | 0.0 | 9.2 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Manufacturing | 2549.28 | TSF | 3.80 | 3.80 | 3.80 | 0.0 | 0.0 | 0.0 | 9.2 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Apartments Mid Rise | 1314 | DU | 6.62 | 6.62 | 6.62 | 9.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 |
| Regional Shopping Center | 902.98 | TSF | 42.49 | 42.49 | 42.49 | 0.0 | 0.0 | 0.0 | 9.2 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |

Note:

See 2018 DEIR Appendix B

2025 With Plan Conditions

| Land Use Sub Type | Size | Size Metric | Trip Rate (/size/day) | | | Trip Length (mi) | | | | | | Trip Type (%) | | | Trip Type by Use (%) | | | | | |
|--------------------------|---------|-------------|-----------------------|-------|-------|------------------|---------|---------|-------------|-------------|--------------|---------------|----------|---------|----------------------|---------|---------|-------------|-------------|--------------|
| | | | WkDy | Sat | Sun | Res H-W | Res H-S | Res H-O | Non Res C-C | Non Res C-W | Non Res C-NW | Primary | Diverted | Pass-By | Res H-W | Res H-S | Res H-O | Non Res C-C | Non Res C-W | Non Res C-NW |
| Office Park | 335.25 | TSF | 9.08 | 9.08 | 9.08 | 0.0 | 0.0 | 0.0 | 9.4 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Junior College (2Yr) | 7237 | Student | 0.98 | 0.98 | 0.98 | 0.0 | 0.0 | 0.0 | 9.4 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Industrial Park | 5237 | TSF | 5.43 | 5.43 | 5.43 | 0.0 | 0.0 | 0.0 | 9.4 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Manufacturing | 5248.75 | TSF | 3.04 | 3.04 | 3.04 | 0.0 | 0.0 | 0.0 | 9.4 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Apartments Mid Rise | 2914 | DU | 5.29 | 5.29 | 5.29 | 9.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 |
| Regional Shopping Center | 549.5 | TSF | 33.95 | 33.95 | 33.95 | 0.0 | 0.0 | 0.0 | 9.4 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |

Note:

See 2018 DEIR Appendix B

Buildout (2040) Conditions

| Land Use Sub Type | Size | Size Metric | Trip Rate (/size/day) | | | Trip Length (mi) | | | | | | Trip Type (%) | | | Trip Type by Use (%) | | | | | |
|--------------------------|---------|-------------|-----------------------|-------|-------|------------------|---------|---------|-------------|-------------|--------------|---------------|----------|---------|----------------------|---------|---------|-------------|-------------|--------------|
| | | | WkDy | Sat | Sun | Res H-W | Res H-S | Res H-O | Non Res C-C | Non Res C-W | Non Res C-NW | Primary | Diverted | Pass-By | Res H-W | Res H-S | Res H-O | Non Res C-C | Non Res C-W | Non Res C-NW |
| Office Park | 601.75 | TSF | 11.23 | 11.23 | 11.23 | 0.0 | 0.0 | 0.0 | 9.3 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Junior College (2Yr) | 8110 | Student | 1.21 | 1.21 | 1.21 | 0.0 | 0.0 | 0.0 | 9.3 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Industrial Park | 7089.3 | TSF | 6.72 | 6.72 | 6.72 | 0.0 | 0.0 | 0.0 | 9.3 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Manufacturing | 2540.58 | TSF | 3.76 | 3.76 | 3.76 | 0.0 | 0.0 | 0.0 | 9.3 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Apartments Mid Rise | 5204 | DU | 6.54 | 6.54 | 6.54 | 9.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 |
| Regional Shopping Center | 867.52 | TSF | 41.99 | 41.99 | 41.99 | 0.0 | 0.0 | 0.0 | 9.3 | 0.0 | 0.0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |

Note:

See 2018 DEIR Appendix B

| | | |
|-----------------------------------|-----------|----------------|
| Existing Average Trip Length (mi) | 9.22 | From Kittelson |
| Existing Daily Weekday VMT: | 694,152 | From Kittelson |
| 2025 Average Trip Length (mi) | 9.39 | From Kittelson |
| 2025 Daily Weekday VMT: | 831,719 | From Kittelson |
| Buildout Average Trip Length (mi) | 9.3 | From Kittelson |
| Buildout Daily Weekday VMT: | 1,340,854 | From Kittelson |

Existing Conditions

| | | |
|----------|---|---|
| Remark 1 | 2013 PG&E pounds of CO2/MWh. | **427, see 2019 PG&E Corporate Responsibility and Sustainability Report (CRSR) available at http://www.pgecorp.com/corp_responsibility/reports/2019/assets/PGE_CRSR_2019.pdf |
| Remark 2 | No construction. | |
| Remark 3 | Scaled trip rate to match existing VMT from traffic data. | |
| Remark 4 | No woodstoves. | |
| Remark 5 | Based on the City's existing (2013) solid waste diversion rate. | **77%, see City of Livermore Fiscal Year 2017-2018 & 2018-2019 Two-Year Financial Plan Performance Measurement available at http://www.cityoflivermore.net/civica/filebank |

2025 With Project Conditions

| | | |
|----------|---|--|
| Remark 1 | Intensity factor includes RPS benefit up to 2025 | **291 |
| Remark 2 | No construction. | |
| Remark 3 | Scaled trip rate to match VMT resulting from implementation of the Proposed Plan. | |
| Remark 4 | No woodstoves. | |
| Remark 5 | Based on City's most recent solid waste diversion rate. | **75% as of 2015, see City of Livermore Fiscal Year 2017-2018 & 2018-2019 Two-Year Financial Plan Performance Measurement available at http://www.cityoflivermore.net/civ |

With Project Conditions

| | | |
|----------|---|--|
| Remark 1 | Intensity factor includes RPS benefit up to 2030 | **See calculation to the right. Use 152.2 lbs/MWh. |
| Remark 2 | No construction. | |
| Remark 3 | Scaled trip rate to match VMT resulting from implementation of the Proposed Plan. | |
| Remark 4 | No woodstoves. | |
| Remark 5 | Based on City's most recent solid waste diversion rate. | **75% as of 2015, see City of Livermore Fiscal Year 2017-2018 & 2018-2019 Two-Year Financial Plan Performance Measurement available at http://www.cityoflivermore.net/civ |

Demographic Data

Planning Area

2013 Population 4,187

Sources:

Growth Rates Based on Buildout:

| | 2013 | 2040 Project | | |
|-------------------------|-------------|---------------------|-------------|-------|
| | | Value | Rate | |
| Residential, population | 4,187 | 16,961 | 5.32% | |
| Jobs (All) | 10,484 | 20,039 | 2.43% | 9,555 |
| Service Population | 14,671 | 37,000 | 3.49% | |

| Year | Population |
|------|------------|
| 2013 | 4,187 |
| 2014 | 4,410 |
| 2015 | 4,644 |
| 2016 | 4,891 |
| 2017 | 5,151 |
| 2018 | 5,425 |
| 2019 | 5,714 |
| 2020 | 6,017 |
| 2021 | 6,337 |
| 2022 | 6,675 |
| 2023 | 7,029 |
| 2024 | 7,403 |
| 2025 | 7,797 |
| 2026 | 8,212 |
| 2027 | 8,648 |
| 2028 | 9,108 |
| 2029 | 9,592 |
| 2030 | 10,103 |
| 2031 | 10,640 |

| | |
|------|--------|
| 2032 | 11,206 |
| 2033 | 11,802 |
| 2034 | 12,429 |
| 2035 | 13,090 |
| 2036 | 13,786 |
| 2037 | 14,519 |
| 2038 | 15,291 |
| 2039 | 16,105 |
| 2040 | 16,961 |

Estimated Operational Energy Consumption

| <i>Analysis Year/Source</i> | <i>Million BTU/Year</i> |
|------------------------------------|-------------------------|
| 2013 | |
| Electricity | 193,522 |
| Natural Gas | 107,230 |
| Mobile (Gasoline and Diesel) | 1,771,980 |
| Total | 2,072,732 |
| 2040 | |
| Electricity | 657,551 |
| Natural Gas | 251,340 |
| Mobile (Gasoline and Diesel) | 2,295,213 |
| Total | 3,204,104 |
| Net Increase with Proposed Project | 1,131,372 |

Source: Dyett & Bhatia, 2020.

Estimated Energy Consumption Efficiency

| | <i>2013</i> | <i>2040</i> | <i>Net Proposed Project</i> |
|-------------------------------------|-------------|-------------|-----------------------------|
| Energy consumption (million BTUs) | 2,072,732 | 3,204,104 | 1,131,372 |
| Service population | 14,671 | 37,000 | 22,329 |
| Million BTUs per capita | 141 | 87 | 51 |
| <i>Percent change from Existing</i> | - | -39% | -64% |

Source: Dyett & Bhatia, 2020.

Conversions:

8.78 kg CO₂/gallon gasoline
 122,364 BTU/gallon gasoline
 10.21 kg CO₂/gallon diesel
 138,490 BTU/gallon diesel
 100,000 BTU/therm
 3,412 BTU/kWh

Proposed Plan with Mitigation Operational Energy Consumption

| <i>Analysis Year/Source</i> | <i>Million BTU/Year</i> |
|------------------------------------|-------------------------|
| 2013 | |
| Electricity | 193,522 |
| Natural Gas | 107,230 |
| Mobile (Gasoline and Diesel) | 1,771,980 |
| Total | 2,072,732 |
| 2040 Mitigated | |
| Electricity | 657,551 |
| Natural Gas | 251,340 |
| Mobile (Gasoline and Diesel) | 1,650,173 |
| Total | 2,559,064 |
| Net Increase with Proposed Project | 486,332 |

Source: Dyett & Bhatia, 2020.

Proposed Plan with Mitigation Estimated Energy Consumption Efficiency

| | <i>2013</i> | <i>2040</i> | <i>Net Proposed Project</i> |
|-------------------------------------|-------------|-------------|-----------------------------|
| Energy consumption (million BTUs) | 2,072,732 | 2,559,064 | 486,332 |
| Population | 4,187 | 16,961 | 12,774 |
| Million BTUs per capita | 495 | 151 | 38 |
| <i>Percent change from Existing</i> | – | -70% | -92% |

Source: Dyett & Bhatia, 2020.

2018

VMT Sum:

240,870,744

2040 Project

Natural Gas

| | |
|-----------|----------|
| VMT | 694,152 |
| Emissions | |
| CO2 (MT) | 5,722.21 |
| CH4 (MT) | 0.11 |
| N2O (MT) | 0.10 |
| CO2e (MT) | 5,756.21 |

Natural Gas

| | |
|-----------|--|
| VMT | |
| Emissions | |
| CO2 (MT) | |
| CH4 (MT) | |
| N2O (MT) | |
| CO2e (MT) | |

Electricity

| | |
|-----------|-----------|
| VMT | 694,152 |
| Emissions | |
| CO2 (MT) | 10,984.93 |
| CH4 (MT) | 0.75 |
| N2O (MT) | 0.15 |
| CO2e (MT) | 11,049.58 |

Electricity

| | |
|-----------|--|
| VMT | |
| Emissions | |
| CO2 (MT) | |
| CH4 (MT) | |
| N2O (MT) | |
| CO2e (MT) | |

Mobile

| | |
|-----------|------------|
| VMT | 694,152 |
| Emissions | |
| CO2 (MT) | 128,646.54 |
| CH4 (MT) | 8.84 |
| N2O (MT) | - |
| CO2e (MT) | 128,867.50 |

Mobile

| | |
|-----------|--|
| VMT | |
| Emissions | |
| CO2 (MT) | |
| CH4 (MT) | |
| N2O (MT) | |
| CO2e (MT) | |

Conversion Factors:

2000 lb/ton
 453.592 g/lb
 347 days/yr
 2204.62 lb/MT
 0.907185 MT/ton

GWPs

| | |
|-----|-----|
| CO2 | 1 |
| CH4 | 25 |
| N2O | 298 |

VMT Sum: 465,276,338

2040 Project with Mitigation

Natural Gas

1,340,854
13412.43
0.26
0.25
13492.14 Growth Rate: 104.35%

VMT 1,340,854
Emissions
CO2 (MT) 13,412.43
CH4 (MT) 0.26
N2O (MT) 0.25
CO2e (MT) **13,492.14**

Electricity

1,340,854
13,304.05
2.53
0.52
13,523.71 Growth Rate: 101.02%

VMT 1,340,854
Emissions
CO2 (MT) 13,304.05
CH4 (MT) 2.53
N2O (MT) 0.52
CO2e (MT) **13,523.71**

Mobile

1,340,854
166,785.64
5.36
-
166,919.72 Growth Rate: 101.30%

VMT 1,340,854
Emissions
CO2 (MT) 119,900.86
CH4 (MT) 4.33
N2O (MT) -
CO2e (MT) **120,009.08**

VMT Sum: 465,276,338

Growth Rate: 104.35%

Growth Rate: 101.02%

Growth Rate: 99.64%

Table 4.3-2: Transportation GHG Emission Estimates Comparison

| | <i>Proposed Project</i> |
|--|-------------------------|
| Annual VMT ¹ | 465,276,338 |
| Total Yearly Transportation Emissions ² | 166,920 |
| Service Population | 37,000 |
| Yearly Transportation Emissions (MTCO ₂ e) Per Service Population | 4.51 |

Planning Area

2013 Existing

TOTAL VMT 694,152

2013 to 2040 Growth Rate (Planning Area)

2.47%

2040 No Project

TOTAL VMT

2040 Proposed Plan

TOTAL VMT 1,340,854

From DKS

Estimated Proposed Plan Unmitigated Operational GHG Emissions

| Condition/Source | CO ₂ | CH ₄ | N ₂ O | CO ₂ e |
|---|-------------------|-----------------|------------------|-------------------|
| Existing (2013) | | | | |
| Area Sources | 40.75 | 0.0186 | 0.00 | 41.35 |
| Energy Sources | 16,707.14 | 0.8557 | 0.2593 | 16,805.79 |
| Mobile Sources | 128,646.54 | 8.8386 | 0 | 128,867.50 |
| Waste Generation | 326.13 | 19.2738 | 0 | 807.98 |
| Water Consumption | 1,414.03 | 30.6379 | 0.7373 | 2,399.70 |
| Total Existing^b | 147,134.60 | 59.6246 | 0.997 | 148,922.33 |
| 2040 With Proposed Plan | | | | |
| Area Sources | 161 | 0 | 0 | 163 |
| Energy Sources | 26,716 | 3 | 1 | 27,016 |
| Mobile Sources | 166,786 | 5 | 0 | 166,920 |
| Waste Generation | 877 | 52 | 0 | 2,173 |
| Water Consumption | 1,986 | 90 | 2 | 4,880 |
| Total 2040 With Proposed Plan^b | 196,527 | 150 | 3 | 201,152 |
| Existing (2013) Emissions | | | | |
| Mass Emissions | | | | 148,922 |
| Service Population ^c | | | | 14,671 |
| Emissions per Service Population | | | | 10.2 |
| Proposed Plan Emissions 2040 | | | | |
| Mass Emissions | | | | 201,152 |
| Net Mass Emissions (Over Existing Conditions) | | | | 52,230 |
| 2040 Service Population ^e | | | | 37,000 |
| Net Service Population (Over Existing Conditions) | | | | 22,329 |
| Emissions per Service Population | | | | 5.4 |
| Net Emissions per Net Service Population | | | | 2.3 |
| 2040 "Substantial Progress" Efficiency Metric (MT/Service Population) | | | | 1.7 |

Estimated Proposed Plan Mitigated Operational GHG Emissions

| Condition/Source | CO ₂ | CH ₄ | N ₂ O | CO ₂ e |
|---|-------------------|-----------------|------------------|-------------------|
| Existing (2013) | | | | |
| Area Sources | 40.75 | 0.0186 | 0.00 | 41.35 |
| Energy Sources | 16,707.14 | 0.8557 | 0.2593 | 16,805.79 |
| Mobile Sources | 128,646.54 | 8.8386 | 0 | 128,867.50 |
| Waste Generation | 326.13 | 19.2738 | 0 | 807.98 |
| Water Consumption | 1,414.03 | 30.6379 | 0.7373 | 2,399.70 |
| <i>Total Existing^b</i> | <i>147,134.60</i> | <i>59.6246</i> | <i>0.997</i> | <i>148,922.33</i> |
| 2040 With Mitigated Proposed Plan | | | | |
| Area Sources | 161 | 0 | 0 | 163 |
| Energy Sources | 26,716 | 3 | 1 | 27,016 |
| Mobile Sources | 119,901 | 4 | 0 | 120,009 |
| Waste Generation | 526 | 31 | 0 | 1,304 |
| Water Consumption | 1,693 | 76 | 2 | 4,153 |
| <i>Total 2040 With Mitigated Proposed Plan^b</i> | <i>148,997</i> | <i>115</i> | <i>3</i> | <i>152,644</i> |
| Existing (2013) Emissions | | | | |
| Mass Emissions | | | | 148,922.33 |
| Service Population ^c | | | | 14,671.00 |
| Emissions per Service Population | | | | 10.2 |
| Mitigated Proposed Plan Emissions 2040 | | | | |
| Mass Emissions | | | | 152,644 |
| Net Mass Emissions (Over Existing Conditions) | | | | 3,722 |
| 2040 Service Population ^e | | | | 37,000 |
| Net Service Population (Over Existing Conditions) | | | | 22,329 |
| Emissions per Service Population | | | | 4.1 |
| Net Emissions per Net Service Population | | | | 0.2 |
| 2040 "Substantial Progress" Efficiency Metric (MT/Service Population) | | | | 1.7 |

Estimated Proposed Plan Mitigated Operational GHG Emissions

| Condition/Source | CO ₂ | CH ₄ | N ₂ O | CO ₂ e |
|---|-----------------|-----------------|------------------|-------------------|
| Existing (2013) | | | | |
| Area Sources | 41 | 0 | 0 | 41 |
| Energy Sources | 16,707 | 1 | 0 | 16,806 |
| Mobile Sources | 128,647 | 9 | 0 | 128,868 |
| Waste Generation | 326 | 19 | 0 | 808 |
| Water Consumption | 1,414 | 31 | 1 | 2,400 |
| Total Existing^b | 147,135 | 60 | 1 | 148,922 |
| 2025 with Proposed Plan | | | | |
| Area Sources | 90 | 0 | 0 | 91 |
| Energy Sources | 35,742 | 2 | 1 | 36,013 |
| Mobile Sources | 120,007 | 4 | 0 | 120,109 |
| Waste Generation | 839 | 50 | 0 | 2,079 |
| Water Consumption | 2,909 | 89 | 2 | 5,775 |
| Total 2025 with Proposed Plan | 159,587 | 145 | 3 | 164,067 |
| Existing (2013) Emissions | | | | |
| Mass Emissions | | | | 148,922.33 |
| Service Population ^c | | | | 14,671.00 |
| Emissions per Service Population | | | | 10.2 |
| 2025 with Proposed Plan Emissions | | | | |
| Mass Emissions | | | | 164,067 |
| Net Mass Emissions (Over Existing Conditions) | | | | 15,145 |
| 2025 Service Population ^e | | | | 24,192 |
| Net Service Population (Over Existing Conditions) | | | | 9,521 |
| Emissions per Service Population | | | | 6.8 |
| Net Emissions per Net Service Population | | | | 1.6 |
| 2025 "Substantial Progress" Efficiency Metric (MT/Service Population) | | | | 3.7 |

Existing (2013)

| | NaturalGas Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|---------------------|----------------|-------------|-------------|----------------|
| Land Use | kBTU/yr | | | | |
| Apartments Mid Rise | 11352200.00 | 605.80 | 0.01 | 0.01 | 609.40 |
| Industrial Park | 3790470.00 | 202.27 | 0.00 | 0.00 | 203.48 |
| Junior College (2Yr) | 7622940.00 | 406.79 | 0.01 | 0.01 | 409.21 |
| Manufacturing | 67250000.00 | 3588.72 | 0.07 | 0.07 | 3610.04 |
| Office Park | 15074400.00 | 804.43 | 0.02 | 0.01 | 809.21 |
| Regional Shopping Center | 2140060.00 | 114.20 | 0.00 | 0.00 | 114.88 |
| Total | 107230070.00 | 5722.21 | 0.11 | 0.10 | 5756.21 |

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|--------------------|-----------------|-------------|-------------|-----------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 5424650.00 | 1050.67 | 0.07 | 0.01 | 1056.85 |
| Industrial Park | 4128540.00 | 799.63 | 0.05 | 0.01 | 804.34 |
| Junior College (2Yr) | 2498860.00 | 483.99 | 0.03 | 0.01 | 486.84 |
| Manufacturing | 21057100.00 | 4078.41 | 0.28 | 0.06 | 4102.42 |
| Office Park | 13953800.00 | 2702.63 | 0.18 | 0.04 | 2718.54 |
| Regional Shopping Center | 9652860.00 | 1869.60 | 0.13 | 0.03 | 1880.61 |
| Total | 56715810.00 | 10984.93 | 0.75 | 0.15 | 11049.58 |

| | Total CO2 | CH4 | N2O | CO2e |
|--------------|-------------------|----------------|--------------|-------------------|
| Category | | | | |
| Area | 40.751 | 0.0186 | 4.50E-04 | 41.3498 |
| Energy | 16,707.14 | 0.8557 | 0.2593 | 16,805.79 |
| Mobile | 128,646.54 | 8.8386 | 0 | 128,867.50 |
| Waste | 326.131 | 19.2738 | 0 | 807.9758 |
| Water | 1,414.03 | 30.6379 | 0.7373 | 2,399.70 |
| Total | 147,134.60 | 59.6246 | 0.997 | 148,922.33 |

2025 With Project

| | NaturalGas Use |
|--------------------------|---------------------|
| Land Use | kBTU/yr |
| Apartments Mid Rise | 25175400.00 |
| Industrial Park | 85729700.00 |
| Junior College (2Yr) | 7622940.00 |
| Manufacturing | 138198000.00 |
| Office Park | 7080480.00 |
| Regional Shopping Center | 1302320.00 |
| Total | 265108840.00 |

| | Electricity Use |
|--------------------------|---------------------|
| Land Use | kWh/yr |
| Apartments Mid Rise | 12030000.00 |
| Industrial Park | 93375700.00 |
| Junior College (2Yr) | 2498860.00 |
| Manufacturing | 43272100.00 |
| Office Park | 6554140.00 |
| Regional Shopping Center | 5874160.00 |
| Total | 163604960.00 |

| | Total CO2 |
|--------------|------------------|
| Category | |
| Area | 90.24 |
| Energy | 35742.32 |
| Mobile | 120006.55 |
| Waste | 839.36 |
| Water | 2908.93 |
| Total | 159587.41 |

| Total CO2 | CH4 | N2O | CO2e |
|-----------------|-------------|-------------|-----------------|
| 1343.45 | 0.03 | 0.02 | 1351.44 |
| 4574.86 | 0.09 | 0.08 | 4602.05 |
| 406.79 | 0.01 | 0.01 | 409.21 |
| 7374.78 | 0.14 | 0.14 | 7418.61 |
| 377.84 | 0.01 | 0.01 | 380.09 |
| 69.50 | 0.00 | 0.00 | 69.91 |
| 14147.23 | 0.27 | 0.26 | 14231.30 |

| Total CO2 | CH4 | N2O | CO2e |
|-----------------|-------------|-------------|-----------------|
| MT/yr | | | |
| 1587.91 | 0.16 | 0.03 | 1601.62 |
| 12325.16 | 1.23 | 0.25 | 12431.60 |
| 329.84 | 0.03 | 0.01 | 332.69 |
| 5711.71 | 0.57 | 0.12 | 5761.04 |
| 865.12 | 0.09 | 0.02 | 872.59 |
| 775.36 | 0.08 | 0.02 | 782.06 |
| 21595.10 | 2.15 | 0.45 | 21781.59 |

| CH4 | N2O | CO2e |
|---------------|-------------|------------------|
| 0.04 | 0.00 | 91.43 |
| 2.42 | 0.70 | 36012.88 |
| 4.09 | 0.00 | 120108.84 |
| 49.60 | 0.00 | 2079.48 |
| 89.10 | 2.14 | 5774.53 |
| 145.26 | 2.85 | 164067.17 |

Proposed Plan (2040)

| | Natural Gas Use | Total CO2 | CH4 |
|--------------------------|---------------------|-----------------|-------------|
| Land Use | kBTU/yr | | |
| Apartments Mid Rise | 44959700.00 | 2399.22 | 0.05 |
| Industrial Park | 116052000.00 | 6192.97 | 0.12 |
| Junior College (2Yr) | 8542490.00 | 455.86 | 0.01 |
| Manufacturing | 67020500.00 | 3576.47 | 0.07 |
| Office Park | 12709000.00 | 678.20 | 0.01 |
| Regional Shopping Center | 2056020.00 | 109.72 | 0.00 |
| Total | 251339710.00 | 13412.43 | 0.26 |

| | Electricity Use | Total CO2 | CH4 |
|--------------------------|---------------------|-----------------|-------------|
| Land Use | kWh/yr | MT/yr | |
| Apartments Mid Rise | 21483900.00 | 1483.18 | 0.28 |
| Industrial Park | 126402000.00 | 8726.40 | 1.66 |
| Junior College (2Yr) | 2800300.00 | 193.32 | 0.04 |
| Manufacturing | 20985200.00 | 1448.75 | 0.28 |
| Office Park | 11764200.00 | 812.16 | 0.15 |
| Regional Shopping Center | 9273790.00 | 640.23 | 0.12 |
| Total | 192709390.00 | 13304.05 | 2.53 |

| | Total CO2 | CH4 | N2O |
|--------------|------------------|---------------|-------------|
| Category | | | |
| Area | 160.91 | 0.06 | 0.00 |
| Energy | 26716.48 | 2.79 | 0.77 |
| Mobile | 166785.64 | 5.36 | 0.00 |
| Waste | 877.20 | 51.84 | 0.00 |
| Water | 1986.44 | 89.97 | 2.16 |
| Total | 196526.68 | 150.03 | 2.94 |

Mitigated Proposed Plan (2040)

| N2O | CO2e |
|-------------|-----------------|
| 0.04 | 2413.48 |
| 0.11 | 6229.77 |
| 0.01 | 458.57 |
| 0.07 | 3597.72 |
| 0.01 | 682.23 |
| 0.00 | 110.37 |
| 0.25 | 13492.14 |

| | Natural Gas Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|---------------------|-----------------|-------------|-------------|-----------------|
| Land Use | kBTU/yr | | | | |
| Apartments Mid Rise | 44959700.00 | 2399.22 | 0.05 | 0.04 | 2413.48 |
| Industrial Park | 116052000.00 | 6192.97 | 0.12 | 0.11 | 6229.77 |
| Junior College (2Yr) | 8542490.00 | 455.86 | 0.01 | 0.01 | 458.57 |
| Manufacturing | 67020500.00 | 3576.47 | 0.07 | 0.07 | 3597.72 |
| Office Park | 12709000.00 | 678.20 | 0.01 | 0.01 | 682.23 |
| Regional Shopping Center | 2056020.00 | 109.72 | 0.00 | 0.00 | 110.37 |
| Total | 251339710.00 | 13412.43 | 0.26 | 0.25 | 13492.14 |

| N2O | CO2e |
|-------------|-----------------|
| 0.06 | 1507.67 |
| 0.34 | 8870.48 |
| 0.01 | 196.52 |
| 0.06 | 1472.67 |
| 0.03 | 825.57 |
| 0.03 | 650.80 |
| 0.52 | 13523.71 |

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|---------------------|-----------------|-------------|-------------|-----------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 21483900.00 | 1483.18 | 0.28 | 0.06 | 1507.67 |
| Industrial Park | 126402000.00 | 8726.40 | 1.66 | 0.34 | 8870.48 |
| Junior College (2Yr) | 2800300.00 | 193.32 | 0.04 | 0.01 | 196.52 |
| Manufacturing | 20985200.00 | 1448.75 | 0.28 | 0.06 | 1472.67 |
| Office Park | 11764200.00 | 812.16 | 0.15 | 0.03 | 825.57 |
| Regional Shopping Center | 9273790.00 | 640.23 | 0.12 | 0.03 | 650.80 |
| Total | 192709390.00 | 13304.05 | 2.53 | 0.52 | 13523.71 |

| CO2e |
|------------------|
| 163.01 |
| 27015.85 |
| 166919.72 |
| 2173.23 |
| 4880.30 |
| 201152.11 |

| | Total CO2 | CH4 | N2O | CO2e |
|--------------|------------------|---------------|-------------|------------------|
| Category | | | | |
| Area | 160.91 | 0.06 | 0.00 | 163.01 |
| Energy | 26716.48 | 2.79 | 0.77 | 27015.85 |
| Mobile | 119900.86 | 4.33 | 0.00 | 120009.08 |
| Waste | 526.32 | 31.10 | 0.00 | 1303.94 |
| Water | 1692.65 | 76.47 | 1.84 | 4152.50 |
| Total | 148997.23 | 114.76 | 2.61 | 152644.39 |

Appendix D: Noise Data

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| ADT Volumes for analyzed segments | | Segment Volumes - AM and PM Peak Hour | | | | | | ADT (5 x AM peak + 5 x PM Peak) | | | Estimated DNL (dB) (at 50 ft for roadways and 150 ft from I580) | | | 2040 + Project and 2040 Without-Project Delta | | |
|-----------------------------------|---|---------------------------------------|-------------|------------|------------|-------------|-------------|---------------------------------|-------------|-------------------|---|---------|----------|---|--|----------|
| | | Existing | Existing PM | 2040 NP AM | 2040 NP PM | 2040 + P AM | 2040 + P AM | Existing ADT | 2040 NP ADT | 2040+ Project ADT | Existing | 2040 NP | 2040 + P | | | 2040 + P |
| North Canyons Parkway | West of Airway Boulevard | 76.00 | 159.00 | 1957.00 | 1311.00 | 1755.00 | 1069.00 | 1175.00 | 16340.00 | 14120.00 | 57.3 | 68.2 | 67.7 | | | -0.5 |
| North Canyons Parkway | East of Airway Boulevard | 1572.00 | 1538.00 | 2748.00 | 2675.00 | 2842.00 | 2834.00 | 15550.00 | 27115.00 | 28380.00 | 67.2 | 69.6 | 69.8 | | | 0.1 |
| North Canyons Parkway | West of Gateway Drive | 0.00 | 0.00 | 0.00 | 0.00 | 1780.00 | 1980.00 | 0.00 | 0.00 | 18800.00 | n/a | n/a | 68.2 | | | |
| North Canyons Parkway | East of Gateway Drive | 0.00 | 0.00 | 0.00 | 0.00 | 1267.00 | 1132.00 | 0.00 | 0.00 | 11995.00 | n/a | n/a | 66.3 | | | |
| North Canyons Parkway | West of Collier Canyon Road | 1325.00 | 1017.00 | 1565.00 | 1885.00 | 1491.00 | 1609.00 | 11710.00 | 17250.00 | 15500.00 | 66.5 | 68.0 | 67.3 | | | -0.7 |
| North Canyons Parkway | East of Collier Canyon Road | 1397.00 | 984.00 | 1399.00 | 1431.00 | 1667.00 | 1770.00 | 11905.00 | 14150.00 | 17185.00 | 66.7 | 66.8 | 67.7 | | | 0.9 |
| Portola Avenue | West of Road 1 | 0.00 | 0.00 | 0.00 | 0.00 | 1667.00 | 1770.00 | 0.00 | 0.00 | 17185.00 | n/a | n/a | 67.7 | | | |
| Portola Avenue | East of Road 1 | 0.00 | 0.00 | 0.00 | 0.00 | 1664.00 | 1800.00 | 0.00 | 0.00 | 17320.00 | n/a | n/a | 67.8 | | | |
| Portola Avenue | West of Road 2 | 0.00 | 0.00 | 0.00 | 0.00 | 1664.00 | 1800.00 | 0.00 | 0.00 | 17320.00 | n/a | n/a | 67.8 | | | |
| Portola Avenue | East of Road 2 | 0.00 | 0.00 | 0.00 | 0.00 | 1626.00 | 2111.00 | 0.00 | 0.00 | 18685.00 | n/a | n/a | 68.5 | | | |
| Portola Avenue | West of Main Street | 0.00 | 0.00 | 0.00 | 0.00 | 1626.00 | 2111.00 | 0.00 | 0.00 | 18685.00 | n/a | n/a | 68.5 | | | |
| Portola Avenue | East of Main Street | 0.00 | 0.00 | 0.00 | 0.00 | 1615.00 | 2109.00 | 0.00 | 0.00 | 18620.00 | n/a | n/a | 68.5 | | | |
| Portola Avenue | West of Montage Drive/Road 3 | 0.00 | 0.00 | 0.00 | 0.00 | 1615.00 | 2109.00 | 0.00 | 0.00 | 18620.00 | n/a | n/a | 68.5 | | | |
| Portola Avenue | East of Montage Drive/Road 3 | 0.00 | 0.00 | 0.00 | 0.00 | 1488.00 | 2230.00 | 0.00 | 0.00 | 18590.00 | n/a | n/a | 68.7 | | | |
| Portola Avenue | West of Road 4 | 0.00 | 0.00 | 0.00 | 0.00 | 1488.00 | 2230.00 | 0.00 | 0.00 | 18590.00 | n/a | n/a | 68.7 | | | |
| Portola Avenue | East of Road 4 | 0.00 | 0.00 | 0.00 | 0.00 | 1486.00 | 2245.00 | 0.00 | 0.00 | 18655.00 | n/a | n/a | 68.8 | | | |
| Portola Avenue | West of Isabel Avenue | 1484.00 | 1068.00 | 1485.00 | 1519.00 | 1574.00 | 2326.00 | 12760.00 | 15020.00 | 19500.00 | 67.0 | 67.1 | 68.9 | | | 1.9 |
| Portola Avenue | East of Isabel Avenue | 1268.00 | 896.00 | 1755.00 | 1851.00 | 1433.00 | 2108.00 | 10820.00 | 18030.00 | 17705.00 | 66.3 | 67.9 | 68.5 | | | 0.6 |
| Portola Avenue | West of Tranquility Circle | 1003.00 | 1097.00 | 1165.00 | 2092.00 | 1433.00 | 2108.00 | 10500.00 | 16285.00 | 17705.00 | 65.7 | 68.5 | 68.5 | | | 0.0 |
| Portola Avenue | East of Tranquility Circle | 884.00 | 822.00 | 965.00 | 1735.00 | 1210.00 | 1708.00 | 8530.00 | 13500.00 | 14590.00 | 64.7 | 67.6 | 67.6 | | | -0.1 |
| Portola Avenue | West of Sandalwood Drive | 884.00 | 822.00 | 884.00 | 822.00 | 1210.00 | 1708.00 | 8530.00 | 8530.00 | 14590.00 | 64.7 | 64.7 | 67.6 | | | 2.9 |
| Portola Avenue | East of Sandalwood Drive | 884.00 | 822.00 | 884.00 | 822.00 | 1258.00 | 1753.00 | 8530.00 | 8530.00 | 15055.00 | 64.7 | 64.7 | 67.7 | | | 3.0 |
| Portola Avenue | North of E. Airport Blvd | 1415.00 | 1052.00 | 1508.00 | 1992.00 | 1358.00 | 2134.00 | 12335.00 | 17500.00 | 17460.00 | 66.8 | 68.2 | 68.5 | | | 0.3 |
| Portola Avenue | South of Intersection w E. Airport Blvd | 1818.00 | 1562.00 | 1908.00 | 2464.00 | 2127.00 | 2825.00 | 16900.00 | 21860.00 | 24760.00 | 67.8 | 69.2 | 69.8 | | | 0.6 |
| Portola Avenue | West of Murrieta | 1818.00 | 1562.00 | 1876.00 | 2112.00 | 2122.00 | 2511.00 | 16900.00 | 19940.00 | 23165.00 | 67.8 | 68.5 | 69.2 | | | 0.8 |
| Portola Avenue | East of Murrieta | 1958.00 | 1881.00 | 2014.00 | 2421.00 | 2238.00 | 2769.00 | 19195.00 | 22175.00 | 25035.00 | 68.2 | 69.1 | 69.7 | | | 0.6 |
| Portola Avenue | West of Livermore Avenue | 1796.00 | 1851.00 | 2020.00 | 2523.00 | 2124.00 | 2770.00 | 18235.00 | 22715.00 | 24470.00 | 67.9 | 69.3 | 69.7 | | | 0.4 |
| Portola Avenue | East of Livermore Avenue | 1266.00 | 1150.00 | 1351.00 | 1427.00 | 1283.00 | 1738.00 | 12080.00 | 13890.00 | 15105.00 | 66.3 | 66.8 | 67.6 | | | 0.9 |
| Gateway Drive | North of North Canyons Parkway | 0.00 | 0.00 | 0.00 | 0.00 | 290.00 | 513.00 | 0.00 | 0.00 | 4015.00 | n/a | n/a | 61.7 | | | |
| Gateway Drive | South of North Canyons Parkway | 0.00 | 0.00 | 0.00 | 0.00 | 241.00 | 393.00 | 0.00 | 0.00 | 3170.00 | n/a | n/a | 60.6 | | | |
| Collier Canyon Road | North of N Canyons Pkwy | 357.00 | 472.00 | 581.00 | 779.00 | 317.00 | 308.00 | 4145.00 | 6800.00 | 3125.00 | 62.0 | 64.2 | 60.3 | | | -3.9 |
| Collier Canyon Road | South of N Canyons Pkwy | 283.00 | 203.00 | 329.00 | 425.00 | 373.00 | 531.00 | 2430.00 | 3770.00 | 4520.00 | 59.8 | 61.5 | 62.5 | | | 1.0 |
| Road 1 | North of Portola Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | n/a | n/a | n/a | | | |
| Road 1 | South of Portola Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 15.00 | 124.00 | 0.00 | 0.00 | 695.00 | n/a | n/a | 54.2 | | | |
| Road 2 | North of Portola Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 258.00 | 426.00 | 0.00 | 0.00 | 3420.00 | n/a | n/a | 59.6 | | | |
| Road 2 | South of Portola Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 554.00 | 823.00 | 0.00 | 0.00 | 6885.00 | n/a | n/a | 62.4 | | | |
| Main Street | North of Portola Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | n/a | n/a | n/a | | | |
| Main Street | South of Portola Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 31.00 | 234.00 | 0.00 | 0.00 | 1325.00 | n/a | n/a | 58.3 | | | |
| Montage Drive/Road 3 | North of Portola Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 259.00 | 429.00 | 0.00 | 0.00 | 3440.00 | n/a | n/a | 59.6 | | | |
| Montage Drive/Road 3 | South of Portola Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 486.00 | 726.00 | 0.00 | 0.00 | 6060.00 | n/a | n/a | 61.9 | | | |
| Road 4 | North of Portola Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | n/a | n/a | n/a | | | |
| Road 4 | South of Portola Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 8.00 | 61.00 | 0.00 | 0.00 | 345.00 | n/a | n/a | 51.1 | | | |

| | | | | | | | | | | | | | | |
|---|---|---------|---------|---------|---------|---------|---------|----------|----------|----------|------|------|------|------|
| Tranquility Circle (west of Sandalwood Dr.) | North of Portola Avenue (parking lot) | 0.00 | 84.00 | 0.00 | 84.00 | 0.00 | 84.00 | 420.00 | 420.00 | 420.00 | 52.5 | 52.5 | 52.5 | 0.0 |
| Tranquility Circle (west of Sandalwood Dr.) | South of Portola Avenue | 311.00 | 633.00 | 464.00 | 889.00 | 377.00 | 780.00 | 4720.00 | 6765.00 | 5785.00 | 61.3 | 62.8 | 62.2 | -0.6 |
| Sandalwood Drive | North of Portola Avenue (DNE) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | n/a | n/a | n/a | |
| Sandalwood Drive | South of Portola Avenue | 20.00 | 20.00 | 20.00 | 20.00 | 68.00 | 65.00 | 200.00 | 200.00 | 665.00 | 46.3 | 46.3 | 51.6 | 5.3 |
| Airway Boulevard | North of N Canyons Pkwy (DNE) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | n/a | n/a | n/a | |
| Airway Boulevard | South of N Canyons Pkwy | 1618.00 | 1641.00 | 2793.00 | 2324.00 | 2819.00 | 2507.00 | 16295.00 | 25585.00 | 26630.00 | 67.4 | 69.7 | 69.8 | 0.0 |
| Airway Boulevard | North of WB ramps | 1793.00 | 1788.00 | 2979.00 | 2487.00 | 3020.00 | 2666.00 | 17905.00 | 27330.00 | 28430.00 | 67.8 | 70.0 | 70.0 | 0.1 |
| Airway Boulevard | South of WB ramps | 1549.00 | 1254.00 | 1985.00 | 2100.00 | 2019.00 | 2200.00 | 14015.00 | 20425.00 | 21095.00 | 67.1 | 68.5 | 68.7 | 0.2 |
| Airway Boulevard | North of EB ramps | 1570.00 | 1259.00 | 1671.00 | 2135.00 | 1791.00 | 2310.00 | 14145.00 | 19030.00 | 20505.00 | 67.2 | 68.5 | 68.9 | 0.3 |
| Airway Boulevard | South of EB ramps | 981.00 | 840.00 | 1158.00 | 1507.00 | 1433.00 | 1703.00 | 9105.00 | 13325.00 | 15680.00 | 65.2 | 67.0 | 67.6 | 0.5 |
| Airway Blvd | West of Isabel Ave | 773.00 | 712.00 | 933.00 | 1159.00 | 1187.00 | 1044.00 | 7425.00 | 10460.00 | 12400.00 | 64.1 | 65.9 | 66.0 | 0.1 |
| Airway Blvd | East of Isabel Ave | 747.00 | 705.00 | 844.00 | 857.00 | 1397.00 | 808.00 | 7260.00 | 8505.00 | 14430.00 | 64.0 | 64.6 | 66.7 | 2.1 |
| Airway Boulevard | West of Rutan Drive | 593.00 | 1055.00 | 598.00 | 735.00 | 1451.00 | 1500.00 | 8240.00 | 6665.00 | 14755.00 | 65.5 | 63.9 | 67.0 | 3.1 |
| Airway Boulevard | East of Rutan Drive | 513.00 | 631.00 | 513.00 | 631.00 | 1287.00 | 1337.00 | 5720.00 | 5720.00 | 13120.00 | 63.2 | 63.2 | 66.5 | 3.3 |
| E. Airway Boulevard | West of Bart Access | 0.00 | 0.00 | 0.00 | 0.00 | 1287.00 | 1337.00 | 0.00 | 0.00 | 13120.00 | n/a | n/a | 66.5 | |
| E. Airway Boulevard | East of Bart Access | 0.00 | 0.00 | 0.00 | 0.00 | 1140.00 | 1044.00 | 0.00 | 0.00 | 10920.00 | n/a | n/a | 65.8 | |
| E. Airway Boulevard | West of Stealth Street | 0.00 | 0.00 | 0.00 | 0.00 | 1140.00 | 1044.00 | 0.00 | 0.00 | 10920.00 | n/a | n/a | 65.8 | |
| E. Airway Boulevard | East of Stealth Street | 0.00 | 0.00 | 0.00 | 0.00 | 964.00 | 808.00 | 0.00 | 0.00 | 8860.00 | n/a | n/a | 65.1 | |
| E. Airway Boulevard | West of Sutter Street | 437.00 | 509.00 | 477.00 | 510.00 | 964.00 | 808.00 | 4730.00 | 4935.00 | 8860.00 | 62.3 | 62.3 | 65.1 | 2.8 |
| E. Airway Boulevard | East of Sutter Street | 376.00 | 461.00 | 416.00 | 462.00 | 1000.00 | 895.00 | 4185.00 | 4390.00 | 9475.00 | 61.9 | 61.9 | 65.2 | 3.4 |
| E. Airway Boulevard | West/N of Portola Avenue | 427.00 | 542.00 | 442.00 | 580.00 | 1358.00 | 2134.00 | 4845.00 | 5110.00 | 17460.00 | 62.6 | 62.9 | 68.5 | 5.7 |
| E. Airway Boulevard | East of Portola Avenue (DNE) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | n/a | n/a | n/a | |
| Rutan Drive | North of E. Airway Blvd (DNE) | 0.00 | 0.00 | 0.00 | 0.00 | 363.00 | 373.00 | 0.00 | 0.00 | 3680.00 | n/a | n/a | 60.4 | |
| Rutan Drive | South of E. Airway Blvd | 120.00 | 464.00 | 125.00 | 144.00 | 131.00 | 188.00 | 2920.00 | 1345.00 | 1595.00 | 61.3 | 56.2 | 57.4 | 1.2 |
| Bart Access Road | North of E. Airway Boulevard | 0.00 | 0.00 | 0.00 | 0.00 | 542.00 | 533.00 | 0.00 | 0.00 | 5375.00 | n/a | n/a | 60.6 | |
| BART Access & E. Airway Boulevard | South of E. Airway Boulevard | 0.00 | 0.00 | 0.00 | 0.00 | 515.00 | 682.00 | 0.00 | 0.00 | 5985.00 | n/a | n/a | 61.6 | |
| Stealth Street | North of E. Airway Boulevard | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | n/a | n/a | n/a | |
| Stealth Street | South of E. Airway Boulevard | 0.00 | 0.00 | 0.00 | 0.00 | 366.00 | 544.00 | 0.00 | 0.00 | 4550.00 | n/a | n/a | 60.6 | |
| Sutter Street | North of E. Airway Boulevard (DNE) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | n/a | n/a | n/a | |
| Sutter Street | South of E. Airway Boulevard | 105.00 | 122.00 | 105.00 | 122.00 | 170.00 | 281.00 | 1135.00 | 1135.00 | 2255.00 | 54.1 | 54.1 | 57.8 | 3.6 |
| Murrieta Boulevard | North of Portola Avenue | 11.00 | 17.00 | 11.00 | 17.00 | 11.00 | 17.00 | 140.00 | 140.00 | 140.00 | 47.6 | 47.6 | 47.6 | 0.0 |
| Murrieta Boulevard | South of Portola Avenue | 703.00 | 782.00 | 715.00 | 1092.00 | 823.00 | 1379.00 | 7425.00 | 9035.00 | 11010.00 | 64.2 | 65.6 | 66.6 | 1.0 |
| Livermore Avenue | North of Portola Avenue | 1695.00 | 2392.00 | 2210.00 | 3191.00 | 2177.00 | 3555.00 | 20435.00 | 27005.00 | 28660.00 | 69.0 | 70.3 | 70.8 | 0.5 |
| Livermore Avenue | South of Portola Avenue | 1341.00 | 1601.00 | 1703.00 | 2191.00 | 1684.00 | 2619.00 | 14710.00 | 19470.00 | 21515.00 | 67.3 | 68.7 | 69.4 | 0.8 |
| INP Road | West of Isabel Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 568.00 | 725.00 | 0.00 | 0.00 | 6465.00 | n/a | n/a | 63.2 | |
| INP Road | East of Isabel Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 154.00 | 0.00 | 0.00 | 1170.00 | n/a | n/a | 56.5 | |
| Isabel Avenue | North of Portola Avenue | 580.00 | 658.00 | 741.00 | 965.00 | 456.00 | 429.00 | 6190.00 | 8530.00 | 4425.00 | 66.9 | 68.6 | 65.4 | -3.3 |
| Isabel Avenue | South of Portola Avenue | 1458.00 | 1364.00 | 2049.00 | 1927.00 | 1383.00 | 1403.00 | 14110.00 | 19880.00 | 13930.00 | 70.4 | 71.9 | 70.2 | -1.6 |
| Isabel Avenue | North of INP Road | 0.00 | 0.00 | 0.00 | 0.00 | 1114.00 | 1317.00 | 0.00 | 0.00 | 12155.00 | n/a | n/a | 70.0 | |
| Isabel Avenue | South of INP Road | 0.00 | 0.00 | 0.00 | 0.00 | 1618.00 | 1854.00 | 0.00 | 0.00 | 17360.00 | n/a | n/a | 71.4 | |
| Isabel Avenue | North of BART Parking Road/Access (North) | 0.00 | 0.00 | 0.00 | 0.00 | 1618.00 | 1854.00 | 0.00 | 0.00 | 17360.00 | n/a | n/a | 71.4 | |
| Isabel Avenue | South of BART Parking Road/Access (North) | 0.00 | 0.00 | 0.00 | 0.00 | 2650.00 | 2943.00 | 0.00 | 0.00 | 27965.00 | n/a | n/a | 73.5 | |
| Isabel Ave | North of Airway Blvd | 2563.00 | 2864.00 | 2859.00 | 2905.00 | 2801.00 | 2946.00 | 27135.00 | 28820.00 | 28735.00 | 73.3 | 73.4 | 73.5 | 0.1 |

| | | | | | | | | | | | | | | |
|----------------------------------|--|---------|---------|---------|---------|---------|---------|-----------|-----------|----------|------|------|------|------|
| Isabel Ave | South of Airway Blvd | 2859.00 | 3017.00 | 3282.00 | 3553.00 | 3419.00 | 3784.00 | 29380.00 | 34175.00 | 36015.00 | 73.6 | 74.3 | 74.5 | 0.3 |
| Isabel Avenue | North of WB ramps | 1457.00 | 1281.00 | 2129.00 | 2061.00 | 2783.00 | 2802.00 | 13690.00 | 20950.00 | 27925.00 | 70.4 | 72.0 | 73.2 | 1.2 |
| Isabel Avenue | South of WB ramps | 1519.00 | 1538.00 | 1814.00 | 1776.00 | 2447.00 | 2410.00 | 15285.00 | 17950.00 | 24285.00 | 70.6 | 71.4 | 72.7 | 1.3 |
| Isabel Avenue | North of EB ramps (which are S. of I-580) | 1970.00 | 2026.00 | 2330.00 | 2487.00 | 2804.00 | 2910.00 | 19980.00 | 24085.00 | 28570.00 | 71.8 | 72.7 | 73.4 | 0.7 |
| Isabel Avenue | South of EB ramps (which are S. of I-580) | 2486.00 | 2544.00 | 2698.00 | 2692.00 | 2770.00 | 3073.00 | 25150.00 | 26950.00 | 29215.00 | 72.8 | 73.1 | 73.6 | 0.6 |
| Isabel Avenue | No. of Jack London Boulevard | 2536.00 | 2919.00 | 3098.00 | 3568.00 | 3186.00 | 3810.00 | 27275.00 | 33330.00 | 34980.00 | 73.4 | 74.3 | 74.6 | 0.3 |
| Isabel Avenue | So. of Jack London Boulevard | 2189.00 | 2595.00 | 3193.00 | 3929.00 | 3222.00 | 4167.00 | 23920.00 | 35610.00 | 36945.00 | 72.9 | 74.7 | 75.0 | 0.3 |
| BART Parking Road/Access (North) | West of Isabel Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 1104.00 | 1360.00 | 0.00 | 0.00 | 12320.00 | n/a | n/a | 64.6 | |
| BART Parking Road/Access (North) | East of Isabel Avenue | 0.00 | 0.00 | 0.00 | 0.00 | 180.00 | 305.00 | 0.00 | 0.00 | 2425.00 | n/a | n/a | 58.1 | |
| Jack London Boulevard | West of Isabel Avenue | 1357.00 | 1272.00 | 1839.00 | 1668.00 | 1628.00 | 1802.00 | 13145.00 | 17535.00 | 17150.00 | 66.6 | 67.9 | 67.8 | -0.1 |
| Jack London Boulevard | East of Isabel Avenue | 1434.00 | 1706.00 | 2012.00 | 2671.00 | 1896.00 | 2429.00 | 15700.00 | 23415.00 | 21625.00 | 67.6 | 69.5 | 69.1 | -0.4 |
| I-580 | From Fallon Road to Airway Blvd | | | | | | | 173928.00 | 177320.00 | ##### | 76.9 | 76.9 | 76.9 | 0.0 |
| I-580 | Between Airway Blvd Ramps (under the overpass) | | | | | | | 160492.00 | 178123.00 | ##### | 76.5 | 77.0 | 76.7 | -0.2 |
| I-580 | From Airway Blvd to Isabel Avenue | | | | | | | 147056.00 | 178925.00 | ##### | 76.1 | 77.0 | 76.9 | -0.1 |
| I-580 | Between Isabel Avenue Ramps (under the overpass) | | | | | | | 150967.00 | 181924.00 | ##### | 76.2 | 77.0 | 76.9 | -0.1 |
| I-580 | From Isabel Avenue to North Livermore Avenue | | | | | | | 154877.00 | 184923.00 | ##### | 76.3 | 77.1 | 77.1 | 0.0 |

ADT Values calculated by multiplying AM and PM peak hour volumes by 5 and adding, per direction from/consultation with Kittleson

ADT drops due to project attracting trips off the freeway

ADT drops due to project attracting trips off the freeway

ADT drops due to project attracting trips off the freeway

City of Livermore Downtown Isabel - Traffic Noise Analysis Summary
Salter Project No. 20-0029 (20 March 2020)

| # | Roadway | Segment | Existing Noise Level at 50' (DNL in dB) | Future Noise Level at 50' (DNL in dB) | Projected Increase (dB) | Future: Distance from Centerline to DNL 70 dB | Future: Distance from Centerline to DNL 65 dB | Future: Distance from Centerline to DNL 60 dB |
|----|-----------------------|---|---|---------------------------------------|-------------------------|---|---|---|
| 1 | North Canyons Parkway | West of Airway Boulevard | 57 | 68 | 11 | <50 | 80 | 160 |
| 2 | North Canyons Parkway | East of Airway Boulevard | 67 | 70 | 3 | 50 | 100 | 220 |
| 3 | North Canyons Parkway | West of Gateway Drive | n/a | 68 | | <50 | 80 | 180 |
| 4 | North Canyons Parkway | East of Gateway Drive | n/a | 66 | | <50 | 60 | 130 |
| 5 | North Canyons Parkway | West of Collier Canyon Road | 66 | 67 | 1 | <50 | 70 | 150 |
| 6 | North Canyons Parkway | East of Collier Canyon Road | 67 | 68 | 1 | <50 | 80 | 160 |
| 7 | Portola Avenue | West of Road 1 | n/a | 68 | | <50 | 80 | 160 |
| 8 | Portola Avenue | East of Road 1 | n/a | 68 | | <50 | 80 | 170 |
| 9 | Portola Avenue | West of Road 2 | n/a | 68 | | <50 | 80 | 170 |
| 10 | Portola Avenue | East of Road 2 | n/a | 68 | | <50 | 90 | 180 |
| 11 | Portola Avenue | West of Main Street | n/a | 68 | | <50 | 90 | 180 |
| 12 | Portola Avenue | East of Main Street | n/a | 68 | | <50 | 90 | 180 |
| 13 | Portola Avenue | West of Montage Drive/Road 3 | n/a | 68 | | <50 | 90 | 180 |
| 14 | Portola Avenue | East of Montage Drive/Road 3 | n/a | 69 | | <50 | 90 | 190 |
| 15 | Portola Avenue | West of Road 4 | n/a | 69 | | <50 | 90 | 190 |
| 16 | Portola Avenue | East of Road 4 | n/a | 69 | | <50 | 90 | 190 |
| 17 | Portola Avenue | West of Isabel Avenue | 67 | 69 | 2 | <50 | 90 | 200 |
| 18 | Portola Avenue | East of Isabel Avenue | 66 | 68 | 2 | <50 | 90 | 180 |
| 19 | Portola Avenue | West of Tranquility Circle | 66 | 68 | 2 | <50 | 90 | 180 |
| 20 | Portola Avenue | East of Tranquility Circle | 65 | 68 | 3 | <50 | 70 | 160 |
| 21 | Portola Avenue | West of Sandalwood Drive | 65 | 68 | 3 | <50 | 70 | 160 |
| 22 | Portola Avenue | East of Sandalwood Drive | 65 | 68 | 3 | <50 | 80 | 160 |
| 23 | Portola Avenue | North of E. Airport Blvd | 67 | 69 | 2 | <50 | 90 | 190 |
| 24 | Portola Avenue | South of Intersection w E. Airport Blvd | 68 | 70 | 2 | 50 | 100 | 220 |
| 25 | Portola Avenue | West of Murrieta | 68 | 69 | 1 | <50 | 100 | 210 |
| 26 | Portola Avenue | East of Murrieta | 68 | 70 | 2 | 50 | 100 | 220 |
| 27 | Portola Avenue | West of Livermore Avenue | 68 | 70 | 2 | 50 | 100 | 220 |
| 28 | Portola Avenue | East of Livermore Avenue | 66 | 68 | 2 | <50 | 80 | 160 |
| 29 | Gateway Drive | North of North Canyons Parkway | n/a | 62 | | <50 | <50 | 70 |
| 30 | Gateway Drive | South of North Canyons Parkway | n/a | 61 | | <50 | <50 | 50 |
| 31 | Collier Canyon Road | North of N Canyons Pkwy | 62 | 60 | <1 | <50 | <50 | 50 |
| 32 | Collier Canyon Road | South of N Canyons Pkwy | 60 | 63 | 3 | <50 | <50 | 70 |
| 33 | Road 1 | North of Portola Avenue | n/a | n/a | | 0 | 0 | 0 |
| 34 | Road 1 | South of Portola Avenue | n/a | 54 | | <50 | <50 | <50 |

| | | | | | | | | |
|----|---|---------------------------------------|-----|-----|----|-----|-----|-----|
| 35 | Road 2 | North of Portola Avenue | n/a | 60 | | <50 | <50 | 50 |
| 36 | Road 2 | South of Portola Avenue | n/a | 62 | | <50 | <50 | 70 |
| 37 | Main Street | North of Portola Avenue | n/a | n/a | | 0 | 0 | 0 |
| 38 | Main Street | South of Portola Avenue | n/a | 58 | | <50 | <50 | <50 |
| 39 | Montage Drive/Road 3 | North of Portola Avenue | n/a | 60 | | <50 | <50 | 50 |
| 40 | Montage Drive/Road 3 | South of Portola Avenue | n/a | 62 | | <50 | <50 | 70 |
| 41 | Road 4 | North of Portola Avenue | n/a | n/a | | 0 | 0 | 0 |
| 42 | Road 4 | South of Portola Avenue | n/a | 51 | | <50 | <50 | <50 |
| 43 | Tranquility Circle (west of Sandalwood Dr.) | North of Portola Avenue (parking lot) | 53 | 53 | <1 | <50 | <50 | <50 |
| 44 | Tranquility Circle (west of Sandalwood Dr.) | South of Portola Avenue | 61 | 62 | 1 | <50 | <50 | 70 |
| 45 | Sandalwood Drive | North of Portola Avenue (DNE) | n/a | n/a | | 0 | 0 | 0 |
| 46 | Sandalwood Drive | South of Portola Avenue | 46 | 52 | 6 | <50 | <50 | <50 |
| 47 | Airway Boulevard | North of N Canyons Pkwy (DNE) | n/a | n/a | | 0 | 0 | 0 |
| 48 | Airway Boulevard | South of N Canyons Pkwy | 67 | 70 | 3 | 50 | 100 | 220 |
| 49 | Airway Boulevard | North of WB ramps | 68 | 70 | 2 | 50 | 110 | 230 |
| 50 | Airway Boulevard | South of WB ramps | 67 | 69 | 2 | <50 | 90 | 190 |
| 51 | Airway Boulevard | North of EB ramps | 67 | 69 | 2 | <50 | 90 | 200 |
| 52 | Airway Boulevard | South of EB ramps | 65 | 68 | 3 | <50 | 70 | 160 |
| 53 | Airway Blvd | West of Isabel Ave | 64 | 66 | 2 | <50 | 60 | 130 |
| 54 | Airway Blvd | East of Isabel Ave | 64 | 67 | 3 | <50 | 60 | 140 |
| 55 | Airway Boulevard | West of Rutan Drive | 65 | 67 | 2 | <50 | 70 | 150 |
| 56 | Airway Boulevard | East of Rutan Drive | 63 | 67 | 4 | <50 | 60 | 140 |
| 57 | E. Airway Boulevard | West of Bart Access | n/a | 67 | | <50 | 60 | 140 |
| 58 | E. Airway Boulevard | East of Bart Access | n/a | 66 | | <50 | 60 | 120 |
| 59 | E. Airway Boulevard | West of Stealth Street | n/a | 66 | | <50 | 60 | 120 |
| 60 | E. Airway Boulevard | East of Stealth Street | n/a | 65 | | <50 | 50 | 110 |
| 61 | E. Airway Boulevard | West of Sutter Street | 62 | 65 | 3 | <50 | 50 | 110 |
| 62 | E. Airway Boulevard | East of Sutter Street | 62 | 65 | 3 | <50 | 50 | 110 |
| 63 | E. Airway Boulevard | West/N of Portola Avenue | 63 | 69 | 6 | <50 | 90 | 190 |
| 64 | E. Airway Boulevard | East of Portola Avenue (DNE) | n/a | n/a | | 0 | 0 | 0 |
| 65 | Rutan Drive | North of E. Airway Blvd (DNE) | n/a | 60 | | <50 | <50 | 50 |
| 66 | Rutan Drive | South of E. Airway Blvd | 61 | 57 | <1 | <50 | <50 | <50 |
| 67 | Bart Access Road | North of E. Airway Boulevard | n/a | 61 | | <50 | <50 | 50 |
| 68 | BART Access & E. Airway Boulevard | South of E. Airway Boulevard | n/a | 62 | | <50 | <50 | 60 |
| 69 | Stealth Street | North of E. Airway Boulevard | n/a | n/a | | 0 | 0 | 0 |
| 70 | Stealth Street | South of E. Airway Boulevard | n/a | 61 | | <50 | <50 | 60 |
| 71 | Sutter Street | North of E. Airway Boulevard (DNE) | n/a | n/a | | 0 | 0 | 0 |
| 72 | Sutter Street | South of E. Airway Boulevard | 54 | 58 | 4 | <50 | <50 | <50 |
| 73 | Murrieta Boulevard | North of Portola Avenue | 48 | 48 | <1 | <50 | <50 | <50 |
| 74 | Murrieta Boulevard | South of Portola Avenue | 64 | 67 | 3 | <50 | 60 | 140 |
| 75 | Livermore Avenue | North of Portola Avenue | 69 | 71 | 2 | 60 | 120 | 260 |

| | | | | | | | | |
|-----|----------------------------------|--|-----|----|----|-----|-----|------|
| 76 | Livermore Avenue | South of Portola Avenue | 67 | 69 | 2 | 50 | 100 | 210 |
| 77 | INP Road | West of Isabel Avenue | n/a | 63 | | <50 | <50 | 80 |
| 78 | INP Road | East of Isabel Avenue | n/a | 57 | | <50 | <50 | <50 |
| 79 | Isabel Avenue | North of Portola Avenue | 67 | 65 | <1 | <50 | 50 | 110 |
| 80 | Isabel Avenue | South of Portola Avenue | 70 | 70 | <1 | 50 | 110 | 240 |
| 81 | Isabel Avenue | North of INP Road | n/a | 70 | | 50 | 110 | 230 |
| 82 | Isabel Avenue | South of INP Road | n/a | 71 | | 60 | 130 | 290 |
| 83 | Isabel Avenue | North of BART Parking Road/Access (North) | n/a | 71 | | 60 | 130 | 290 |
| 84 | Isabel Avenue | South of BART Parking Road/Access (North) | n/a | 73 | | 80 | 180 | 390 |
| 85 | Isabel Ave | North of Airway Blvd | 73 | 73 | <1 | 90 | 180 | 390 |
| 86 | Isabel Ave | South of Airway Blvd | 74 | 75 | 1 | 100 | 220 | 470 |
| 87 | Isabel Avenue | North of WB ramps | 70 | 73 | 3 | 80 | 180 | 380 |
| 88 | Isabel Avenue | South of WB ramps | 71 | 73 | 2 | 80 | 160 | 350 |
| 89 | Isabel Avenue | North of EB ramps (which are S. of I-580) | 72 | 73 | 1 | 80 | 180 | 390 |
| 90 | Isabel Avenue | South of EB ramps (which are S. of I-580) | 73 | 74 | 1 | 90 | 190 | 410 |
| 91 | Isabel Avenue | No. of Jack London Boulevard | 73 | 75 | 2 | 100 | 220 | 470 |
| 92 | Isabel Avenue | So. of Jack London Boulevard | 73 | 75 | 2 | 110 | 230 | 500 |
| 93 | BART Parking Road/Access (North) | West of Isabel Avenue | n/a | 65 | | <50 | 50 | 100 |
| 94 | BART Parking Road/Access (North) | East of Isabel Avenue | n/a | 58 | | <50 | <50 | <50 |
| 95 | Jack London Boulevard | West of Isabel Avenue | 67 | 68 | 1 | <50 | 80 | 170 |
| 96 | Jack London Boulevard | East of Isabel Avenue | 68 | 69 | 1 | <50 | 90 | 200 |
| 97 | I-580 | From Fallon Road to Airway Blvd | 84 | 84 | <1 | 440 | 940 | 2020 |
| 98 | I-580 | Between Airway Blvd Ramps (under the overpass) | 84 | 84 | <1 | 420 | 910 | 1950 |
| 99 | I-580 | From Airway Blvd to Isabel Avenue | 83 | 84 | 1 | 430 | 930 | 2000 |
| 100 | I-580 | Between Isabel Avenue Ramps (under the overpass) | 83 | 84 | 1 | 430 | 940 | 2020 |
| 101 | I-580 | From Isabel Avenue to North Livermore Avenue | 84 | 84 | <1 | 450 | 960 | 2070 |

Definition:

DNL (Day-Night Average Sound Level) – A descriptor for a 24-hour A-weighted average noise level. DNL accounts for the increased acoustical sensitivity of people to noise during the nighttime hours. DNL penalizes sound levels by 10 dB during the hours from 10 PM to 7 AM. For practical purposes, the DNL and CNEL are usually interchangeable. DNL is sometimes written as the symbol "Ldn."

Comments/Assumptions

- 1) Street traffic volumes are per traffic engineer data received 24 Feb 2020
- 2) Highway traffic volumes are per published Caltrans data (2017)
- 3) Truck % assumed to be 2% for all roadways
- 4) Speeds are estimated per posting and adjusted per site observation/measurement
- 5) Existing is "Existing no project" and Future is "Future with project" conditions