U.S. Department of Housing and Urban Development
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Environmental Assessment
Determinations and Compliance Findings for HUD-assisted Projects
24 CFR Part 58

This is a suggested format that may be used by Responsible Entities to document completion of an Environmental Assessment.

Project Information

Project Name:	The Orion
Responsible Entity:	OC Housing & Community Development 1501 E. Saint Andrew Place, First Floor Santa Ana, California 92705
Grant Recipient (if different than Responsible Entity):	
State/Local Identifier:	CA/059
Preparer:	Suzanne Harder, OC Housing and Community Development
Certifying Officer Name and Title:	Julia Bidwell, Director OC Housing & Community Development
Grant Recipient (if different than Responsible Entity):	
Consultant (if applicable):	Jonathan Rigg, Dudek 605 NE 21st Street, Suite 200 Portland, Oregon 97232 503.956.1444
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Project Location:

The Orion (project or proposed project), is located at 1800 E. La Veta, Orange, California 92866 (see **Figure 1**). The project site consists of 3.85 acres on an H-shaped lot and is currently occupied by the former campus of the Rehabilitation Institute of Southern California and associated parking and landscaped areas. A 1,300-square-foot house previously located on the project site was demolished in 2022 due to extensive fire damage. The site is located on Assessor's Parcel Number 390-322-15 and is currently zoned as Residential Multiple Family (R-3) by the City of Orange (City). The proposed project site is bordered by commercial and multifamily housing to the south and by multifamily housing to the north, east, and west. The proposed project site is located near markets, restaurants, healthcare, retail, and other services along South Tustin Avenue to the East and East Chapman Avenue to the North.

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

The proposed project is a partnership between USA Properties Fund, Inc. and Riverside Charitable Corporation (Developers), the City of Orange (City) and the County of Orange (County). The proposed project would demolish the existing Rehabilitation Institute of Southern California campus, which is currently unoccupied, and construct a new affordable housing community with 166 units. The new housing development would be reserved for seniors aged 62 years and older earning between 30 to 70% of the area mean income (AMI). Of the 166 total units, approximately 111 apartments would have a 1-bedroom floor plan and 55 apartments would have a 2--bedroom floor plan, with unit sizes ranging from 537 to 700 square feet. Eight 1-bedroom units would be restricted to Mental Health Services Act (MHSA) eligible seniors experiencing homelessness or at-risk of homelessness with rents set at 30% AMI that would be subsidized with Orange County Housing Authority Housing Choice Project-Based Vouchers. Two of the 2--bedroom units would be reserved for property management staff living on site. Residential units and shared community spaces would be split between three separate buildings, two 4-story buildings and one 2-4-story building, totaling approximately 145,716 gross square feet (see **Attachment 1**). The new buildings would reflect the mid-century architectural style of neighboring properties with a contemporary twist. Clean lines and a nostalgic color palette would blend the project into the existing community. Exterior finishes and materials include painted stucco, a black aluminum storefront system, and metal rail panels and awnings at balconies. Project design would also include sustainable features consistent with the California Green Building Standards Code (CALGreen), including but not limited to supplying equipment to facilitate future installation of electric vehicle (EV) parking spaces and water-efficient landscaping. In addition, the project would utilize energy efficient appliances and low flow plumbing faucets and fixtures.

Site access would be provided from existing driveways located along La Veta Avenue and East Fairway Drive. Neither driveway would be gated. An existing 6 -foot sidewalk wraps around the northern, western, and southern edges of the project site. Proposed pedestrian and bicycle gates would allow resident access to all street frontages as well as to the Santiago Creek Trail and bike path to the north. The project would include 172 parking stalls in a surface lot on site. Approximately 5 parking stalls would be reserved for the leasing area and unloading/loading zones, with the remaining 167 available for resident use. Other on-site amenities include elevators in each building, a 1,318-square-foot club room, computer room, fitness center, food storage lockers, laundry rooms, and bike stalls. The project would also include approximately 17,914 square feet of outdoor courtyard space with several barbeque and outdoor bench and picnic seating areas, a resident-tended garden, and a fenced dog park.

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:

As demand increases for County services and as the County's population increases, the need for additional housing and access to government services has also increased.

The proposed project's objectives are as follows:

- Create new affordable, safe, attractive, and service-enriched residences for low-income seniors (aged 62 years and older) earning between 30-70% of the area mean income.
- Create 8 supportive housing for seniors experiencing homelessness or at-risk of homelessness who meet MHSA eligibility criteria.
- Create a housing community that fits into and improves the existing neighborhood in style, texture, scale, and relation to the street.

Existing Conditions and Trends [24 CFR 58.40(a)]:
The project site is currently occupied by the vacant Rehabilitation Institute of Southern California building. The building is 2 stories tall and contains approximately 107,586 square feet. The project site also includes an indoor swimming pool, playground, asphalt-paved parking areas, and landscaping. Based on a review of historical resources in the Phase I Environmental Assessment (ESA) for the project site completed by AEI Consultants in September 2023, the project site consisted of a small house and unimproved land in 1896, then was used for agricultural production from 1938 until 1961. The existing commercial building was constructed in 1966, with additions to the initial structure completed in 1979 and 1987. The small house remained on the property until 2022 when it was demolished after fire damaged the structure. Areas adjacent to the project site are developed with commercial and residential uses, as follows:

- **North:** Residential (multi-family housing); East La Veta Avenue,
- **East:** Residential (multi-family housing),
- **South:** Residential (multi-family housing) and Commercial (7-Eleven/Tustin 76 Station); East Fairway Drive,
- **West:** Residential (multi-family housing); South Tustin Street (see **Figure 2**).

Funding Information

Grant Number	HUD Program	Funding Amount
(No grant number for vouchers)	8 Orange County Housing Authority Housing Choice Project-Based Vouchers	$2,935,680

Estimated Total HUD Funded Amount: $2,935,680

Other Funding (non-HUD): City of Orange Low- and Moderate-Income Housing Asset Fund ($2,200,000)

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**: $61,630,309**

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	HUD's policy is to apply standards to prevent incompatible development around civil airports or military airfields, consistent with Title 24 of the Code of Federal Regulations (CFR), Part 51, Subpart D. According to the U.S. Environmental Protection Agency's (EPA) NEPAssist tool (https://nepassisttool.epa.gov//.aspx), there are no military airports within 15,000 feet of the subject property, or civilian airports within 2,500 feet of the subject property. The nearest civilian airport is John Wayne Airport (approximately 8.8 miles southwest of the project site) and the closest military airport is Los Alamitos Army Airfield Base Operations (about 12.4 miles west of the project site). Therefore, the project is in compliance with airport hazards requirements (see **Attachment 2**; see **Environmental Review Record [ERR] 1**).
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	According to Coastal Barrier Resources System (CBRS) information (https://fwsprimary.wim.usgs.gov/v2/), there are no units of the CBRS in California, and the project site is not within a CBRS unit (USFWS 2019). Therefore, the project is in compliance with the Coastal Barrier Resources Act (see **Attachment 3**; see **ERR 2**).
Flood Insurance	Yes ☐ No ☒	The Flood Disaster Protection Act of 1973 (42 USC 4012a) requires that projects receiving federal assistance and located in an area

Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]		identified by FEMA as being within a Special Flood Hazard Area (SFHA) be covered by flood insurance under the National Flood Insurance Program (NFIP). SFHAs are hazard areas that are subject to inundation by the base flood (1%-annual-chance flood) and are labeled on flood maps as zones starting with the letters A or V. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map No. 06059C0164J, effective December 3, 2009 (https://msc.fema.gov/portal/home), the project site is located within unshaded Zone X, in an area outside of the 100- and 500- year flood zones where the flood potential is minimal. The project site is not within a SFHA. According to the NFIP Community Status Book (https://www.fema.gov/flood-insurance/work-with-nfip/community-status-book), the project site is in Community ID 060228# for the City of Orange, which is a participating community in the NFIP in good standing. Therefore, the project is in compliance with flood insurance requirements (see **Attachment 4**; see **ERR 3**).
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☒ No ☐	The Clean Air Act was implemented to remedy the damaging effects that bad air quality can have on human health and the environment and was most recently revised in 1990, when major changes were enacted. The Clean Air Act is administered by the EPA, which sets National Ambient Air Quality Standards (NAAQS). NAAQS are limits on certain "criteria" air pollutants, including limits on how much of the pollutants can be in the air anywhere in the U.S. Geographic areas that are in compliance with the NAAQS are called "attainment areas," while areas that do not meet the standards are called "nonattainment" areas. Areas that were previously designated as nonattainment areas but have now met the standard (with EPA approval of a suitable air quality plan) are called "maintenance" areas.

		The proposed project falls under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) within the South Coast Air Basin. Orange County is currently in a nonattainment zone for federal ozone (8-hour ozone) and particulate matter from greenhouse gases (fine particulate matter [$PM_{2.5}$]). Federal ozone in Orange County has been classified as extreme, and $PM_{2.5}$ has been classified as serious (EPA 2024). According to NEPAssist, which uses the EPA's Office of Air and Radiation data, Orange County is in a maintenance zone for coarse particulate matter (PM_{10}), carbon monoxide (CO), and nitrogen dioxide (NO_2). Orange County is in attainment for all other criteria pollutants. To meet HUD air quality guidelines, the proposed project must follow the State Implementation Plan, which describes how an area will meet the NAAQS. State Implementation Plan guidelines require the proposed project to keep its criteria pollutant emissions below SCAQMD's significance thresholds (SCAQMD 2023). The project site's location close to public transportation is consistent with regional efforts to improve transit availability and would reduce the level of emissions ($PM_{2.5}$) associated with motor vehicle travel. By developing affordable housing consistent with the growth anticipated by the City's Housing Element and existing zoning and land use designations, the proposed project is in compliance with the Regional Air Quality Strategy, State Implementation Plan, and Air Quality Management Plan for this locality. Air quality at the project site could be negatively impacted by fugitive dust (PM_{10}) and other particulate air pollutants ($PM_{2.5}$) released during construction-related activities, such as land clearing and grading. Exhaust emissions (oxides of nitrogen [NO_x] and CO) released by heavy construction vehicles could also temporarily impact air quality. Adverse impacts to air quality during construction would be managed by implementing mitigation measures for fugitive dust control in compliance with SCQAMD Rule 403. This guideline identifies measures to reduce fugitive dust that are required to be implemented

		at all construction sites within the South Coast Air Basin (SCAQMD 2005) (**Mitigation Measure [MM]-AIR-1**; see section below for all mitigation measures). The California Emissions Estimator Model (CalEEMod) was used to estimate annual criteria air pollutant emissions during the construction and operational phases for the proposed project. Pollutant estimates, including for $PM_{2.5}$, PM_{10}, NOx, volatile organic compounds, and CO, found that all would be below de minimis thresholds during the construction and operational phases. Estimated annual construction emissions for the proposed project, assuming construction would occur in 2024–2025, are approximately 610.08 metric tons (30-year amortized emissions would reduce this to 20.34 metric tons). Estimated annual emissions during the operational phase are approximately 718.89 metric tons. In total, the proposed project is estimated to produce 739.23 metric tons of emissions per year. Daily emissions from the proposed project would not exceed the SCAQMD's regional construction or operation emissions thresholds (see **Attachment 5**; see **ERR 4**).
Coastal Zone Management Coastal Zone Management Act, sections 307the & (d)	Yes ☐ No ☒	According to the California Coastal Commission's Coastal Zone boundary maps (https://www.coastal.ca.gov//czb/), the project site is not within the Coastal Zone (CCC 2019). Therefore, the project is in compliance with the Coastal Zone Management Act (**see Attachment 6; see ERR 5**).
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☒ No ☐	HUD policy, as described in Section 50.3(i) and Section 58.5(i)(2), states the following: (1)... all property proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gasses, and radioactive substances, where a hazard could affect the health and safety of occupants or conflict with the intended utilization of the property. (2) HUD environmental review of multifamily and non-residential properties shall include evaluation of previous uses of the site and other evidence of contamination on or near the site, to assure that occupants of proposed sites are not adversely affected by the hazards.

		(3) Particular attention should be given to any proposed site on or in the general proximity of such areas as dumps, landfills, industrial sites, or other locations that contain, or may have contained, hazardous wastes. (4) The responsible entity shall use current techniques by qualified professionals to undertake investigations determined necessary. Sites known or suspected to be contaminated by toxic chemicals or radioactive materials include, but are not limited to, sites: (i) listed on an EPA Superfund National Priorities or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) List, or equivalent State list; (ii) located within 3,000 feet of a toxic or solid waste landfill site; or (iii) with an underground storage tank (UST) (which is not a residential fuel tank). A Phase I ESA conducted by AEI in September 2023 found no recognized environmental conditions (RECs), historical RECs, or controlled RECs on the project site (**Attachment 7**). No evidence of aboveground storage tanks or underground storage tanks were observed on site. Small quantities of general cleaning and maintenance supplies and waste oil/hydraulic fluid were observed on site during the site visit. Cleaning supplies and detergents were packaged in consumer quantities and are not expected to represent an environmental concern. Maintenance supplies, including spray paints and laminates, were observed on the first floor. Containers appeared to be properly labeled and stored at the time of the assessment with no signs of leaks, stains, or spills. The storage and use of maintenance supplies would not pose a significant threat to the environmental condition of the proposed project site. Additionally, no spills, stains, or other indications of a leakage were observed on site. Waste oil and hydraulic fluid in a 5-gallon container was observed on site in the elevator equipment room. A second unlabeled 5-gallon container, closed and in good condition, was also observed in the elevator equipment room. Though not labeled, the container was presumed to similarly contain waste oil/hydraulic fluid given its location in the elevator equipment room. Typical pool treatment chemicals, such as muriatic acid and chlorine

		were not observed, but were presumed to have previously been on site to maintain the indoor swimming pool on the proposed project site. The prior storage and use of pool cleaning chemicals on site does not represent an environmental concern. Toxic polychlorinated biphenyls (PCBs) have been historically used in electric equipment, though their use outside of totally enclosed equipment was prohibited in 1977. Transformers installed prior to 1977 may contain PCBs, while transformers installed after 1977 are unlikely to contain PCBs. Three pole-mounted transformers belonging to Southern California Edison were observed on site. Since the building was constructed prior to 1978, the potential exists that hydraulic fluid within the transformers contains PCBs. Federal Regulations (40 CFR 761 Subpart G) requires any release of material containing >50 ppm PCB and occurring after May 4, 1987, to be cleaned up by the transformer owner following the EPA's PCB spill cleanup policy. The transformers appeared to be in good condition, without leaks or stains, and do not represent an environmental concern at this time. Since the existing building on site was constructed prior to 1978, PCBs could also be present in hydraulic fluid used to power two hydraulic elevators and two wheelchair lifts at the proposed project site. No leaks or stains were observed at the base of the equipment during the site reconnaissance. While this equipment does not represent an environmental concern, any oil and associated material should be handled and disposed of in accordance with regulatory guidelines when this equipment is removed as part of the planned project site redevelopment. Several floor drains were observed in the kitchens, maintenance closets, and indoor pool area on site. Hazardous substances and petroleum products were not observed in the vicinity of the drains and no staining indicative of improper discharge of hazardous substances or petroleum products was apparent near the drains. As a result, the floor drains do not represent an environmental concern. A single gas tank labeled as containing Helium was observed

		on site. However, since Helium is not considered a toxic substance or gas according to the Specific Hazardous Substances list (Appendix I to Subpart C of Part 51), the tank does not represent an environmental concern. A dryer-type transformer was also observed on site. Since dry-type transformers do not utilize oils for dielectric fluid, this transformer does not represent an environmental concern. T Radon is a radioactive gas which has been identified as a human carcinogen. The EPA recommends that homeowners in areas with radon screening levels greater than 4 Picocuries per liter (pCi/L) conduct mitigation of radon gas to reduce exposure. In compliance with HUD's radon policy notice published in January 2024, indoor radon testing at the new affordable housing community will occur after construction is complete and before residents move in. If testing determines that indoor radon levels are or may be above 4pCi/L, then the County must document and implement a mitigation plan. The mitigation plan must identify the radon level onsite, describe the radon reduction system that will be installed, establish an ongoing maintenance plan, establish a reasonable timeframe for system implementation, and require post-installation testing by a licensed radon professional (**MM-TOX-1**). The Phase I ESA completed by AEI should not be construed as a mold survey or inspection. However, during the site reconnaissance, AEI observed interior areas of the existing building on site to identify the presence of mold. This activity was not designed to discover all areas which may be affected by mold growth, but intended to provide indication if significant mold growth was present on site. Obvious visible signs of mold growth or conditions conducive for suspect mold growth were observed in the utility closet on the second floor (near the stairs) of the existing building. Additionally, multiple water-stained ceiling tiles were observed throughout the project site. Since the presence of suspect mold may pose a health and safety concern to construction workers during future demolition activities, AEI recommends a mold and water intrusion assessment for the proposed project site if renovation of the existing building

		were to occur. However, since the proposed project involves demolition of the existing building and then new construction of the affordable housing community, a mold and water intrusion assessment is not required. A Pre-Renovation Asbestos and Lead Assessment for the project site was completed by EFI Global in August 2020. The purpose of the assessment was to identify whether asbestos-containing materials (ACMs) and/or lead-based paint (LBP) were present so that they may be properly managed prior to demolition of the structure. The scope of the ACM assessment included reviewing building and/or previous investigation records, visually identifying homogenous sample areas, collecting bulk samples of building materials suspected to contain asbestos, recording the friability and condition of suspect building materials, interpreting laboratory results, and producing a written report of findings and determinations. ACMs were identified in multiple areas throughout the existing building. All ACMs were found to be in good condition at the time of the assessment. See Tables 2 and 3 in the Pre-Renovation Asbestos and Lead Assessment (**Attachment 8**) for a list of ACM Homogenous Materials, their locations, and approximate quantities. Materials found to contain asbestos and/or presumed to contain asbestos that could be impacted during demolition activities, by law, must first be abated and properly disposed of by a licensed asbestos abatement contractor prior to such work (**MM-TOX-2**). LBP testing at the proposed project site was conducted in accordance with Chapter 7 of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. A total of 500 XRF readings were collected to test painted and coated surfaces on site for LBP. Materials were considered as containing LBP if they exceeded the Los Angeles County threshold of 0.7mg/cm^2 (Title 11, 11.28.010). Orange County shares the same lead standards as Los Angeles County. LBP was detected in ceramic wall tiles and other ceramic furnishings throughout the existing building on the proposed

		project site. Please refer to the XRF Results Table located in Appendix III of the Pre-Renovation Asbestos and Lead Assessment (Attachment 8) for the individual readings obtained during LBP testing. All lead-laden components identified would be demolished or abated by certified lead trained personnel in accordance with all applicable federal, state, and local regulations. In addition, all suspected lead-laden components need to undergo paint film stabilization before components are removed by manual intact methods. LBP that would be impacted by hot work (welding, torch cutting, etc.) must be removed from the component by lead abatement workers to allow a minimum of 6 inches clearance on either side of the location of the hot work to prevent the volatilization of lead into the air (**MM-TOX-2**) (see **Attachments 7 and 8**; see **ERR 6**).
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☐ No ☒	The Endangered Species Act of 1973, as amended, and its implementing regulations are designed to protect and recover species in danger of extinction and the ecosystems that they depend upon. When passed, the Endangered Species Act spoke specifically to the value—tangible and intangible—of conserving species for future generations. In passing the Endangered Species Act, Congress recognized a key fact that subsequent scientific understanding has only confirmed: the best way to protect species is to conserve their habitat. According to HUD guidance, the environmental review of a proposed project must consider potential impacts to endangered and threatened species and critical habitats. A No Effect determination can be made if none of the activities involved in the project have potential to affect species or habitats. Due to the urban and commercial setting surrounding the project site, no federally listed special-status plant or wildlife species are expected to be present on site. The USFWS offers consultation on threatened and endangered wildlife and plant species, as well as critical habitats, on a project-by-project basis. According to the USFWS Environmental Conservation Online System (ECOS) Information for Planning and Consultation (IPaC) service

		(**https://ipac.ecosphere.fws.gov/**), six threatened or endangered species potentially occur on the project site, listed as follows (USFWS 2020a): • **Birds:** Coastal California gnatcatcher (*Polioptila californica californica*), Least Bell's Vireo (*Vireo bellii pusillus*), Southwestern Willow Flycatcher (*Empidonax traillii extimus*) • **Fishes:** Santa Ana Sucker (*Catostomus santaanae*) • **Insects:** Monarch butterfly (*Danaus plexippus*) • **Reptiles:** Southwestern Pond Turtle (*Actinemys pallida*) As stated in the IPaC report and confirmed through NEPAssist mapping of the project site, although the general habitat ranges of these six species overlap with the project location, their critical habitat areas do not intersect with the project site (USFWS 2020a). Given the urbanized nature of the project site and scarcity of on-site native vegetation, it is unlikely that any special-status species would occur on site due to a lack of suitable habitat. As such, the project would not result in potential substantial adverse effects to plant and wildlife species or their habitats protected under the Endangered Species Act. Therefore, the project is in compliance with the Endangered Species Act (**see Attachment 9; see ERR 7**).
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	Regulations set forth in 24 CFR Part 51 Subpart C require HUD-assisted projects to be separated from hazardous facilities that store, handle, or process hazardous substances by a distance based on the contents and volume of the facilities' aboveground storage tank (AST), or to implement mitigation measures. The requisite distances are necessary, because project sites that are too close to facilities handling, storing, or processing conventional fuels, hazardous gases, or chemicals of an explosive or flammable nature may expose occupants or end-users of a

		project to the risk of injury in the event of a fire or an explosion. Explosive or flammable hazardous materials would not be present at the project site, which would provide 164 affordable housing units and two manager's units. The Phase I ESA did not identify any hazardous materials on the project site. An EDR Radius Report was obtained for the proposed project site to identify aboveground storage tanks (ASTs) within a 1-mile radius of the project area. The report identified three sites with ASTs but did not provide details on the size and content of all ASTs listed within 1-mile of the project site. The three sites include California Highway Patrol 675 Santa Ana Area (2031 East Santa Clara Avenue, Santa Ana, CA 92705), Selman Chevrolet (1800 East Chapman Avenue, Orange, CA 92867), and Caltrans-Orange (691 South Tustin Street, Orange, CA 92866). The CalEPA Regulated Site Portal website was then used to identify and evaluate the type and amounts of chemicals stored at each site identified as having an AST by the EDR report. Chemicals listed for each site were compared to a list of hazardous substances provided in Appendix I to Subpart C of Part 51 (§ 51.201). Chemicals not listed in § 51.201 were considered non-hazardous. HUD's Acceptable Separation Distance (ASD) Assessment Tool was used to calculate the acceptable separation distance between the project site and the CalEPA sites that contained hazardous materials. All sites exceeded HUD's required minimum ASD for the quantities of chemicals present. As such, the proposed project would not expose residents or the surrounding community to the risk of injury in the event of a fire or an explosion. Therefore, the proposed project is in compliance with 24 CFR Part 51 Subpart C (see **Attachment 10**; see **ERR 8**).
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	The importance of farmlands to the national and local economy requires the consideration of the impact of activities on land adjacent to prime or unique farmlands. The purpose of the Farmland Protection Policy Act (7 USC Section 4201 et seq, implementing regulations 7 CFR Part 658, of the Agriculture and Food Act of 1981, as

		amended) is to minimize the effect of federal programs on the unnecessary and irreversible conversion of farmland to nonagricultural uses. According to the California Department of Conservation (DOC) California Important Farmland Finder, the entire project site is designated as "Urban and Built-up Land." The areas adjacent to the project site share the same land type designation. The DOC defines Urban and Built-up Land as land that is "used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes." As such, the project site does not contain farmland and the proposed project would not facilitate the conversion of farmland to a non-agricultural use. Therefore, the project is in compliance with the Farmland Protection Policy Act **(see Attachment 11; see ERR 9)**.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	The provisions of Executive Order (EO) 11988, Floodplain Management, require federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable. HUD's regulations in 24 CFR Part 55 outline HUD's procedures for complying with EO 11988. As indicated above, the project site is not located within a floodplain. According to the FEMA Flood Insurance Rate Map No. 06059C0164J, effective December 3, 2009 (https://msc.fema.gov/portal/home), the project site is located within unshaded Zone X, in an area outside of the 100- and 500- year flood zones where the flood potential is minimal. Therefore, the project is in compliance with EO 11988 and 24 CFR Part 55 (**see Attachment 4; see ERR 10**).
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	The National Historic Preservation Act (NHPA) (16 USC 470 et seq.) directs each federal agency, and those tribal, State, and local governments that assume federal agency responsibilities, to protect historic properties and to avoid, minimize, or mitigate possible harm that may result from agency actions. The review process, known as Section 106 review, is detailed in 36

		CFR Part 800. Early consideration of historic places in project planning and full consultation with interested parties are key to effective compliance with Section 106. The State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO) are primary consulting parties in the process. Architectural Resources Group conducted an historic resources assessment of the direct APE in 2020. The assessment included a search of California's Built Environment Resource Directory and Historic Resources Inventory and a built environment site visit. The study identified and evaluated two historic-era properties built between 1960 and 1987 within the direct APE. These properties include a single-family residence (585 S. Tustin Street) and a rehabilitation center (1800 E. La Veta Avenue). Both resources were evaluated and recommended ineligible for inclusion in the NRHP and the CRHR (Architectural Resources Group 2020). ASM Affiliates conducted a cultural resources study of the direct APE in 2021. The study included a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search, a records search at the South Central Coastal Information Center (SCCIC), a review of historic aerial and topographic imagery, and a pedestrian survey. This cultural resources study did not identify any archaeological resources within the direct APE. No built environmental resources were evaluated (Andrews 2021). In 2023, Kleinfelder conducted a review of the proposed Project for indirect effects, extending the APE to include an indirect APE that consisted of one parcel in all directions of the undertaking. Two additional historic-era properties were identified. These include the Castilian Park Apartments (1622 and 1625 East Fairway Drive) and the Fairway Park Apartments (1844 E. Fairway Drive). Both resources were evaluated and recommended ineligible for inclusion in the NRHP and the CRHR (Neals and Castells 2023).

		Orange County Housing & Community Development reviewed the documentation for the Project and the potential for Project implementation to affect historic properties within the APE and determined that no historic properties will be affected in the APE for the subject undertaking. Therefore, Orange County Housing & Community Development has reached a determination of "No Historic Properties Affected" by the project. Pursuant to 36 CFR Part 800, regulations implementing Section 106, the County has requested SHPO concurrence on their determination of "No Historic Properties Affected." Pursuant to 36 Code of Federal Regulations (CFR) 800.3(c)(4), SHPO did not respond within 30 days of receiving the County's request for a finding or determination. As a result, the County's consultation requirements with the SHPO are complete (see **Attachments 12 and 13**; see **ERR 11**). Historic resources are not anticipated to be discovered during construction of the proposed project since no ground-disturbing activities would occur.
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☒ No ☐	According to HUD's noise standards set forth in 24 CFR Part 51, Subpart B, all sites whose environmental or community noise exposure exceeds the day night average sound level (DNL) of 65 decibels (dB) are considered noise-impacted areas. HUD guidance includes screening criteria to assist in evaluating a project's consistency with the foregoing standard. Pursuant to HUD guidance, potentially significant noise generators within the vicinity of a project include major roadways, if within 1,000 feet of a project site, railroads, if within 3,000 feet, and military or Federal Aviation Administration-regulated (FAA) airfields, if within 15 miles. Documentation that a project is not within the applicable distances to the foregoing noise generators demonstrates compliance with HUD's noise standard. If within the aforementioned distance, a project may show the noise level is at or below 65 dB to demonstrate consistency with the Noise Control Act of 1972. Dudek completed a Technical Noise Memorandum for the proposed project in February 2024 to evaluate the project's consistency with HUD's noise standards. The

		project site is within the screening threshold distances of noise generators in the vicinity (1,000 feet from a major road, 3,000 feet from a railroad, or 15 miles from an airport). The project site is less than 1,000 feet from the State Route (SR)-22 and SR-55 freeways, and the nearest airport, Santa Ana/John Wayne Airport, is located approximately 6.8 miles away. The primary noise source in the project vicinity is motor vehicle traffic. The eastern façades of the proposed residential units would face the southbound lanes of the SR-55 freeway, while the southern façades would face the SR-22 freeway. Both the eastern and the southern facades would be separated from these two freeways by several rows of residential homes and an existing noise barrier (i.e., a soundwall) approximately 14 feet in height constructed at the California Department of Transportation (Caltrans) right-of-way (ROW). In addition, the northern façades of the proposed residential units would face La Veta Avenue and the western facades would face South Tustin Street. The other nearby roads are minor "feeder" streets which would have a negligible contribution to the on-site noise environment. An initial noise analysis of traffic noise from the SR-55, the SR-22, La Veta Avenue and South Tustin Street carried out using HUD's DNL Calculator indicated that worst-case exterior building façade noise levels would be approximately 73 A-weighted decibels (dBA) DNL. However, because the DNL Calculator does not account for site conditions such as the intervening building rows and the existing freeway soundwall, in addition to the proposed upper-floor residential units, this modeled noise level was determined to likely be an overestimate and a more detailed traffic noise model was used. The Federal Highway Administration's (FHWA) Traffic Noise Model (TNM) version 2.5 (FWHA 2004) was used to conduct a more detailed noise analysis for the project site. The TNM traffic noise prediction model calculates the noise levels based on specific information including traffic volumes, vehicle fleet mix, speed limits, roadway geometrics, receiver elevations,

		intervening structures and lateral distances between the noise receivers and the roadways. Exposure from traffic noise would exceed the HUD exterior noise standard of 65 dBA DNL by up to 6 dB at the façade of units closest to the SR-22 freeway and South Tustin Street, putting those units in HUD's "normally unacceptable" noise range. The noise levels at the other modeled building façade receivers on the project site, except for the northern façade of Building 1, also would exceed the HUD exterior noise standard of 65 dBA DNL to varying degrees. At the modeled outdoor use areas, the modeled traffic noise levels would not exceed the HUD exterior noise standard. Detailed results of the noise analysis are summarized in Table 2 of the Noise Memorandum (see **Attachment 14**). As described above, 24 CFR Part 51, Subpart B states that sites at which environmental or community noise exposure exceeds the DNL of 65 dBA are considered to be noise-impacted. Approvals in the "normally unacceptable" noise zone require a minimum of 5 dB of additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 dBA but does not exceed 70 dBA, or a minimum of 10 dB of additional sound attenuation if the day-night average sound level is greater than 70 dBA but does not exceed 75 dBA. Typical new construction of multi-family homes with windows closed provides a minimum of 25 dB exterior to interior noise reduction. All residential units will be equipped with a forced-air heating ventilation air conditioning (HVAC) unit that allows for a "windows closed" condition (i.e., windows do not need to be left open for ventilation). As such, the interiors of the proposed habitable rooms with doors or windows facing west, toward South Tustin Street and SR-22 are anticipated to have noise levels of approximately 46 dBA DNL (i.e. 71 dBA exterior – 25 dBA attenuation = 46 dBA interior), which exceeds HUD's interior noise standard of 45 dBA DNL. The interiors of the other modeled receivers are anticipated to have noise levels of 43 dBA DNL (i.e. 68 dBA exterior – 25 dBA attenuation = 43 dBA interior) or less.

		To ensure compliance with 24 CFR Part 51, Subpart B and that the HUD noise standard of 45 dBA DNL is not exceeded, the detailed architectural plans for the proposed project should include the following noise mitigation: All windows and exterior doors in the east-facing residential units on floors 2-4 of Building 1 shall have a Sound Transmission Class (STC) rating of 30 or greater (**MM-NOI-1**); all windows and exterior doors in the south- and east-facing residential units on floors 2-4 of Building 2 shall have an STC rating of 30 or greater (**MM-NOI-2**); all windows and exterior doors in the west-facing residential units of floors 1-4 of Building 3 shall have an STC rating of 35 or greater (**MM-NOI-3**); and all windows and exterior doors in the north- and south-facing residential units on floors 1-4 of Building 3 shall have an STC rating of 30 or greater (**MM-NOI-4**). With implementation of these mitigation measures, ambient noise levels at the proposed project site would not exceed HUD's exterior noise threshold of 65 dBA DNL. Therefore, the proposed project would be in compliance with 24 CFR Part 51, Subpart B (see **Attachment 14**; see **ERR 12**).
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly sectiothe424(e); 40 CFR Part 149	Yes ☐ No ☒	Aquifers and surface water are drinking water systems that may be impacted by development. The Safe Drinking Water Act of 1974 requires protection of drinking water systems that are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health. The EPA's Map of Sole Source Aquifer Locations (https://www.epa.gov/dwssa/map-sole-source-aquifer-locations) was used to identify sole-source aquifers in the vicinity of the project site (EPA 2023b). There are no sole source aquifers in Orange County and the project site is not located within an area designated by the EPA as being supported by a sole source aquifer. The Campo/Cottonwood Creek Aquifer, approximately 96 miles south of the project site, is the nearest sole source aquifer. As such, no impact on sole source aquifers would occur. Therefore, the project is in compliance with the Safe Drinking Water Act of 1974, as amended (see **Attachment 15**; see **ERR 13**).

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	According to the EPA, wetlands are characterized by hydrology, soils, and vegetation. The U.S. Fish and Wildlife Service's National Wetland Inventory (NWI) mapper (https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper) was used to identify wetlands on or near the project site. According to the NWI Mapper, aquatic resources do not occur on the project site. The nearest wetland feature is Santiago Creek, a riverine feature located approximately 175 feet northwest of the project site. Therefore, the proposed project is in compliance with EO 11990 (see **Attachment 16**; see **ERR 14**).
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	The EPA's NEPAssist interactive map (https://nepassisttool.epa.gov/nepassist/nepamap.aspx) was used to determine the location of designated Wild and Scenic Rivers in the vicinity of the project site. There are no designated Wild and Scenic Rivers on or near the project site (EPA 2023b). The closest designated Wild and Scenic River is Bautista Creek, approximately 57.5 miles east of the project site. Therefore, the proposed project is in compliance with the Wild and Scenic Rivers Act (see **Attachment 17**; see **ERR 15**).
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	Environmental justice means ensuring that the environment and human health are protected fairly for all people regardless of race, color, national origin, or income. EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires certain federal agencies, including HUD, to consider how federally assisted projects may have disproportionately high and adverse human health or environmental effects on minority and low-income populations. The EPA's EJScreen tool was used to evaluate environmental and demographic data for the project site and determine whether the project would have disproportionate adverse environmental impacts on future residents and/or the surrounding community. Environmental factors are measured using 11 environmental indicators (EI), and demographic factors are measured using seven demographic indicators

		(DI). An EJScreen report for the subject property was run using a 0.125-mile-radius centered around the project site (study area). According to the demographic data obtained from EJScreen, which reflects American Community Survey statistics collected by the U.S. Census Bureau from 2017 through 2021, the total population within this study area is 722. Approximately 61% of the study area's population is non-white (Hispanic). The remaining 39% of the population is White. Results of the EJScreen assessment further indicate that 52% of the study area population is low-income. The proposed project would not have any aggregate environmental justice issues based on the factors evaluated by the EJScreen tool. As discussed throughout this EA, substantial adverse effects related to various environmental topic areas would not occur. Thus, the proposed project, which is an infill site surrounded by multi-family and commercial uses, would not introduce new uses that could result in disproportionately high and adverse human health or environmental effects on existing minority and low-income populations in the project vicinity, nor would the project induce population growth in an area subject to health risks due to poor environmental conditions. In addition, the affordable housing project would have a beneficial impact on populations protected by environmental justice by increasing the supply of affordable housing units in the study area. Therefore, the project is in compliance with EO 12898 (**see Attachment 18; see ERR 16**).

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

Impact Codes: Use an impact code from the following list to make the determination of impact for each factor.

(1) Minor beneficial impact
(2) No impact anticipated
(3) Minor Adverse Impact – May require mitigation
(4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
LAND DEVELOPMENT		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	The project would include demolition of the former Rehabilitation Institute campus and construction of a new affordable housing community, which would change the existing property use from commercial to residential. The project site currently has a zoning and General Plan Land Use Designation of R-3 for Residential Multiple Family. According to the City's General Plan, Senior Housing Developments are conditionally permitted in the R-3 land use designation. The City's Planning Commission approved the Conditional Use Permit, major Site Plan Review, Design Review, and density bonus for the proposed project on March 7, 2022. State Density Bonus Law allows 100% affordable housing projects to utilize the 80% density bonus increase and up to four concessions/incentives from the City's development standards. Per state law, the density bonus is not a discretionary approval, and the City must grant it, if requested and if the project qualifies. The maximum allowable density within the R-3 zoning district is usually 24 dwelling units per acre; however, the project has received an 80% density bonus from the City, increasing the maximum allowable dwelling units per acre to 43. Therefore, the project would be consistent with local land use plans and regulations and no adverse impacts to existing and future land use would occur.
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	**Soil Suitability.** According to the Phase I ESA, which obtained soils data from the U.S. Department of Agriculture's Web Soil Survey tool, the project site consists of three soil types: San Emigdio fine sandy loam on 0 to 2 percent slopes, River wash, which consists of gravelly sand and stratified gravelly coarse sand to sandy loam below depths of six inches, and Soboba gravelly loamy sand on 0 to 5 percent slopes. **Slope and Drainage.** Slope measurements for the project site were obtained through analysis of the USGS 7.5 Minute Topographic Map for Orange, CA in the Phase I ESA. According to this review, the proposed project site slopes towards the west-southwest. **Erosion and Stormwater Runoff.** Erosion due to stormwater runoff at the project site would be minimized by the lack of exposed soils. The project would result in an increase of

		impervious surface area onsite since the greenspace at the northwest corner of the project site would be converted into a parking area. Water would flow into stormwater drains located on the project site or on surrounding rights-of-way, which are connected to the municipal owned and maintained stormwater system. Project construction would include ground disturbance, which could result in increased potential for erosion. The State Water Resources Control Board (SWRCB) has implemented a National Pollutant Discharge Elimination System (NPDES) Construction General Permit for the State of California for projects disturbing 1 or more of acres of soil, requiring dischargers to obtain coverage under the General Permit, file a Notice of Intent (NOI), and prepare a stormwater pollution prevention plan (SWPPP) prior to commencement of construction. Because the project footprint is greater than 1 acre, it would be subject to the NPDES permit requirements for construction site stormwater discharges and would comply with those requirements. A SWPPP is required to be prepared and implemented under these requirements, which includes appropriate erosion-control and water-quality-control best management practices (BMPs) during site preparation, grading, construction, and post-construction. Implementation of the SWPPP for the project would minimize short-term impacts related to erosion and stormwater runoff. Therefore, the project would not have adverse impacts related to erosion and stormwater runoff.
Hazards and Nuisances including Site Safety and Noise	3	**Hazardous Materials.** Explosive or flammable hazardous materials would not be present at the project site, which would provide approximately 164 affordable housing units and two manager's units. The Phase I ESA conducted by AEI in September 2023 did not identify any hazardous materials or petroleum on the project site. **Site Safety.** The proposed project would not create a risk of explosion, release of hazardous substances, or other dangers to public health. The project site is not near any hazardous operations. The project would provide a safe place for employees and residents. Although no site safety hazards or nuisances are currently present at the project site, it is possible that during construction of the project, construction traffic, noise, dust, and erosion, could be considered a nuisance to the construction crew or immediate neighbors. As discussed in the Air Quality section above, **MM-AIR-1** would be implemented to control fugitive dust emissions from project construction, and the project would also include implementation of a SWPPP and BMPs in compliance with the NPDES Construction General Permit to minimize erosion and stormwater runoff. Furthermore, as

		discussed in the Contamination and Toxic Materials section above, asbestos containing materials and lead-based paint would be abated and properly disposed of by a licensed asbestos abatement contractor prior to such work prior to demolition activities (**MM-TOX-2**). **Noise.** Construction of the project would generate noise associated with the operation of heavy construction equipment and construction-related activities in the vicinity of the project site. This would result in temporary, intermittent increases in ambient noise levels which would fluctuate depending on the particular construction phase. Pursuant to Chapter 8.24, Noise Control, of the City's Code of Ordinances, noise associated with construction is exempt from the provisions of the noise ordinance, provided that activities take place between the hours of 7:00 a.m. and 8:00 p.m. on any day except for Sunday or a federal holiday. The project would not require nighttime construction or construction on weekends or holidays, and therefore construction noise would not be subject to the City's noise standards identified in Table 8.24.040. Noise generated from project operation would be required to comply with the City's noise standards. Operation of the project would result in a residential use on the project site. Operational noise would result from project-generated traffic and use of the outdoor areas on site by future project occupants. Operation of the project would not result in substantial generation of noise and would generally be similar to and consistent with existing uses in the project vicinity and would not be distinct from the ambient noise environment created by surrounding uses.

Environmental Assessment Factor	Impact Code	Impact Evaluation
SOCIOECONOMIC		
Employment and Income Patterns	1	Project construction would generate a limited number of temporary construction jobs, and operation would generate a nominal number of permanent jobs (e.g., management, clerical, and janitorial jobs), which could result in a minor increase in per-capita income. Construction activities could result in direct economic effects related to increased spending on construction materials, equipment, and services. The magnitude of the economic benefits of construction spending to the City's economy would depend on the proportion of employment, goods, and services procured from local residents and businesses, and would likely have a relatively minor benefit on the City's economy.
Demographic Character Changes, Displacement	2	The proposed project would have an overall beneficial impact on the City of Orange by converting the existing vacant Rehabilitation Institute of Southern California building into

		affordable housing for seniors with amenities for residents. Because design of the proposed project would be consistent with the architectural style of neighboring buildings, this new affordable housing community would not adversely affect community character. The new buildings would reflect the mid-century architectural style of neighboring properties with a contemporary twist. Clean lines and a nostalgic color palette would blend the project into the existing community. Exterior finishes and materials include painted stucco, a black aluminum storefront system, and metal rail panels and awnings at balconies. Residents of the new affordable housing community would likely be transplants from within the City or from neighboring areas within Orange County. The proposed project, which is an infill site converting a commercial facility into multi-family housing, would remain consistent with surrounding multi-family land uses and support infill development goals outlined in the City's Housing Element. Multifamily housing adjacent to the proposed project site, including the Casa Del Rio Apartments (1740 East La Veta Avenue) and the Chestnut Place Senior Apartments (1745 East Fairway Drive), can be viewed in **Figure 2**. The proposed project would increase the availability of affordable housing for seniors aged 62 years and older in the City and County while avoiding the displacement of existing businesses or residences since the project site is currently vacant. Demographics for the study area analyzed in the EJScreen report for the proposed project would change as seniors (aged 62+) moved into the completed affordable housing community. Currently, seniors account for 14% (approximately 101 people) of the study area population of 722 people. Since the proposed development would only allow seniors aged 62 years and older as residents, the percentage of seniors within the study area would increase following completion of the project. Increasing affordable housing units for seniors supports the housing priorities detailed in the City's Housing Element. The inclusion of 8 units for seniors experiencing homelessness or at-risk of homelessness also supports the regional Housing Funding Strategy to produce 2,396 supportive housing units by 2029 to address homelessness in Orange County. According to 2019 American Community Survey data, approximately 12.2% (17,076 people) of the City's population is composed of seniors (aged 65+). Currently the City has eight affordable housing developments for senior residents. Overall, the proposed project would have a positive impact on community character while remaining compliant with existing land use designations and design.
Environmental Justice	2	According to the City's Housing Element, the senior population tends to have fixed income, experience higher average healthcare costs, have mobility and self-care limitations, be transit dependent, and live alone (City of Orange 2022). The proposed

		project, once complete, would contribute 164 new affordable housing units for seniors, and 2 manager's units, to the City's housing stock including supportive housing units for homeless/ at-risk of homeless seniors. Units would be a mixture of 1-bedroom and 2-bedroom apartments reserved for seniors (aged 62+) and earning between 30-70% AMI. The proposed development would be located near public transit and healthcare, minimizing the need to independently travel long distances to obtain access to grocery stores, restaurants, healthcare, and other services. Increasing affordable housing units for seniors supports the housing priorities detailed in the City's Housing Element. The proposed project, which is an infill site converting a commercial facility into multifamily housing, would not result in any disproportionately high or adverse impacts to minority or low-income populations.

Environmental Assessment Factor	Impact Code	Impact Evaluation
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	2	Given the availability of educational institutions in the area, as well as the project's target population of only seniors (aged 62+), adverse impacts to schools near the proposed project are not anticipated because the project is specifically for senior citizens. The project is near multiple educational facilities, as follows: • La Veta Elementary School, approximately 0.8 miles east of the project site • Palmyra Elementary School, about 0.7 miles northwest of the project site • TLC Charter School, approximately 0.9 miles northeast of the project site • The Open School, about 0.6 miles south of the project site • Camelot Academy, approximately 1.9 miles east of the project site Cultural facilities include publicly accessible buildings, structures, and establishments that are used primarily for the performance, exhibition, or benefit of arts and heritage activities, including, but not limited to, performing arts, visual arts, heritage and cultural endeavors. Numerous cultural facilities would be accessible to project occupants in the immediate project area and beyond within the City of Orange, including cinemas, galleries, libraries, museums, theaters, and stadiums. Cultural facilities near the project site include the Hilbert Museum of California Art approximately 2 miles to the northwest and the Bowers Museum approximately 3.3 miles to the southwest. The Discovery Cube located at 2500 North Main

		Street in Santa Ana is about 2.8 miles southwest of the project site. The project would result in an incremental increase in demand for cultural facilities. However, as an affordable housing project, the project would be expected to serve existing area residents by addressing existing unmet needs for rental assistance in the project area, rather than result in an influx of new residents. Furthermore, due to the relatively small project size, any incremental increase in demand would not exceed the capacity of existing facilities. There are adequate cultural facilities in the City and surrounding areas of the County to accommodate any potential increased usage generated by the project. Impacts to educational and cultural facilities would be less than significant.
Commercial Facilities	2	No adverse impacts to adjacent commercial facilities are anticipated. The project is primarily bordered by multifamily residential units. According to the Phase I ESA, a 7-Eleven store and 76 gas station along the southwestern border of the project site, across East Fairway Drive, is the closest commercial land use to the proposed project site. Developing housing across the street from the 7-Eleven and 76 gas station could increase business due to an increase in the population with vehicles. Construction of affordable housing could result in an incremental beneficial impact to local businesses since placing residents in more affordable housing provides more disposable income for spending on non-housing related goods and services.
Health Care and Social Services	2	Adverse impacts to healthcare and social services are not anticipated due to the availability of service providers near the project site. The project is near numerous healthcare facilities, including the following: • Sunrise Multispecialist Medical Center, approximately 0.4 miles south of the project site at 867 S Tustin St, Orange, CA 92866 • Nellie Gail Urgent Care- Orange, about 1.1 miles north of the project site at 315 S Tustin St, Orange, CA 92866 • St. Joseph Heritage Medical Group Urgent care, approximately 1.2 miles northeast of the project site at 2501 E Chapman Ave Suite 101, Orange, CA 92869 • Chapman Global Medical Center, about 1.2 miles northeast of the project site at 2601 E Chapman Ave, Orange, CA 92869 • Orange County Global Medical Center, approximately 1.7 miles south of the project site at 1001 N Tustin Ave, Santa Ana, CA 92705 *HealthBridge Orange Pediatric Hospital was not included on this list since residents of the proposed development would not include children.

Solid Waste Disposal / Recycling	2	The City of Orange's trash, recyclables, and organics (green waste and food waste) are collected by CR&R Environmental Services (City of Orange 2024c). Multifamily dwelling units of five or more are required to arrange for recycling services per Mandatory Commercial Recycling Law AB 341. Multifamily dwelling units of five or more are also required to provide recycling containers that are visible, accessible, and adjacent to each trash container (City of Orange 2024b). A construction waste recycling program would be implemented during demolition and construction phases to minimize waste to the extent practicable. All waste generated during the construction and operational phases of the project would be properly disposed of and recycled where possible. The amount of solid waste generated by the proposed project during the construction and operational phases would be a fraction of the throughput taken in by CR&R daily. Adverse impacts from solid waste disposal associated with the proposed project are not anticipated.
Waste Water / Sanitary Sewers	2	The City of Orange supplies wastewater and sewage disposal/treatment services to the proposed project site. The City of Orange maintains over 1.6 million lineal feet or 308 miles of sewer pipeline. Maintenance includes annual cleaning of sewer lines and periodic videotaping to search for trouble spots. Keeping the sewer system clean helps limit potential sewage overflows that threaten public health and water quality (City of Orange 2024a). Sewage is treated by the Orange County Sanitation District, a public agency that provides wastewater collection, treatment, and disposal services for approximately 2.6 million people in central and northwest Orange County (OC Sanitation District, 2024). The project would connect to existing wastewater and sanitary sewer facilities. The project does not include the construction or use of a septic system. The proposed project would not require construction of additional sewage infrastructure. Adverse impacts to wastewater systems and sanitary sewers servicing the project site are not anticipated.
Water Supply	2	The City of Orange supplies potable water to the proposed project site. The Water Division is responsible for providing a clean, safe, potable water supply to the City of Orange. The Division designs, constructs, and maintains wells, water lines, booster pumps, and reservoirs that serve residents and businesses with water for domestic use and fire protection. The City obtains approximately 75% of its water from groundwater sources via 12 active wells managed by the Orange County Water District. The City also imports water from the Colorado River and Northern California from the Metropolitan Water District of Southern California through the Municipal Water District of Orange County (City of Orange, 2024d). The project would connect to existing water infrastructure and would result in an incremental demand for water. Adverse impacts to the City's water supply are not anticipated.

Public Safety - Police, Fire and Emergency Medical	2	The Orange Police Department provides law enforcement services to the City of Orange. The City's Police Department's offices are located at 1107 N Batavia St, Orange, CA 92867, approximately 3.5 miles northwest of the project site. The proposed project site is located near three fire stations in the cities of Santa Ana and Orange in Orange County. Orange City Fire Department Station #1 is the closest fire station to the project site and is at 1176 E Chapman Ave, Orange, CA 92866, approximately 1 mile northwest of the project site. Orange County Fire Authority Station #70, approximately 1.7 miles southwest of the project site at 2301 Old Grand St, Santa Ana, CA 92705, could also provide emergency services. Finally, Orange City Fire Department Station #4, about 2.1 miles east of the proposed project site at 210 S Esplanade St, Orange, CA 92869, could administer emergency services if needed. The proposed project would not create a noticeable increase in demand for police, fire, and emergency medical services from nearby areas since the proposed project would attract residents from the surrounding community. Additionally, the proposed project would be required to comply with all applicable codes for fire safety and emergency access. Therefore, the project would not have adverse impacts on public safety.
Parks, Open Space and Recreation	2	Public recreational spaces in proximity to the project site include the following: • Hart Park, approximately 1.2 miles west of the project site at 701 S Glassell St, Orange, CA 92866 • Pitcher Park, about 1.1 miles northwest of the project site at 204 S Cambridge St, Orange, CA 92866 • Portola Park, approximately 1.8 miles southwest of the project site at Portola Park, Santa Ana, CA 92705 • Grijalva Park, about 1.8 miles northeast of the project site at 368 N Prospect St, Orange, CA 92866 • El Modena Park, approximately 2 miles east of the project site at 4343 E Jordan Ave, Orange, CA 92869 The project would result in an incremental increase in demand for public parks that could be absorbed by existing open spaces near the project site. Site plans for the proposed project include three outdoor courtyards with picnic tables, planter boxes, and barbeque areas where residents can enjoy the outdoors without visiting surrounding parks. Therefore, the project would not have adverse impacts on parks, open space, and recreation.
Transportation and Accessibility	2	Crain & Associates completed a preliminary traffic analysis for the proposed project in January 2020 to determine whether an additional transportation analysis is needed. The traffic analysis

		determined the proposed project's projected trip generation using trip generation rates from the Institute of Transportation Engineers *Trip Generation manual (10th Edition)* and by collecting empirical driveway counts at the project site's driveways. To determine the trip generation of the rehabilitation center use, comprehensive trip generation surveys of vehicle traffic entering and existing the parking and loading areas of the project site were collected. Trip counts had to be adjusted to remove trips associated with the adjacent senior apartments building since it shares the same driveway accesses with the project site. Results of the trip count survey determined that the proposed project is not anticipated to generate more than 100 net vehicle trips during the morning and evening peak hours and the project would not add 1,600 daily trips to the arterial network or add 51 or more trips to nearby intersections during peak hours. Therefore, per the *City of Orange Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (July 2020), the proposed project does not require further level of service analysis. In addition, since the proposed project consists entirely of affordable housing, the project is expected to result in a less-than-significant vehicle miles traveled (VMT) impact and is screened from conducting further VMT analysis (see **Attachment 19**). Pre-existing urban development and readily available public transit near the project site would further minimize transportation and accessibility issues associated with the project, such as traffic. The nearest bus stop to the project site is located at the intersection of South Tustin Street and East La Veta Avenue, at the northwest corner of the project site. The proposed project site is located near markets, restaurants, healthcare, retail, and other services along South Tustin Avenue to the East and East Chapman Avenue to the North. The proposed project would be accessed via two driveways located along La Veta Avenue and East Fairway Drive. Neither driveway would be gated. The existing driveways at the northeast, southwest, and southeast corners of the project site would be removed as part of the new construction plan. Existing pedestrian and bicycle gates would allow resident access to all street frontages as well as to the Santiago Creek Trail and bike path to the north. The project would include 172 parking stalls in a surface lot on site. Approximately 5 parking stalls would be reserved for the leasing area and unloading/loading zones, with the remaining 167 available for resident use.

Environmental Assessment Factor	Impact Code	Impact Evaluation
NATURAL FEATURES		

Unique Natural Features, Water Resources	2	The project site, which is located within a developed area and currently occupied by the former campus of the Rehabilitation Institute of Southern California and associated parking and landscaped areas, does not encompass any unique natural features. Federally protected natural resources, such as rivers, wetlands, coastal zones, and endangered species, are not present on the project site or adjacent properties. Therefore, the proposed project would not result in the alteration of any waterways, unique features, or critical habitat, nor would in result in the loss of any federally listed species.
Vegetation, Wildlife	2	Although the proposed project is within the ranges of six endangered or threatened species, none are likely to occur on site due to a lack of suitable habitat. Results from the U.S. Fish and Wildlife Service's IPaC analysis of the area similarly state that the project site is situated outside of critical habitat areas for the endangered or threatened species that overlap with the project area (USFWS 2020a) (see **Attachment 8**).
Other Factors		None.

Environmental Assessment Factor	Impact Code	Impact Evaluation
CLIMATE AND ENERGY		
Climate Change Impacts	2	Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes, and drought; and increased levels of air pollution. As discussed above, the project site is not within a flood zone (see Attachment 4). The project site is not within a coastal community or low-lying area and would not be impacted by sea level rise (see Figure 1). The project site is in an urbanized area that is not subject to wildfire hazards (CAL FIRE, 2024) (**Attachment 20**). As previously discussed, the project site is not in an area that relies on a sole-source aquifer. No substantial issues related to air quality, soil suitability, stormwater, wastewater systems, or water supply have been identified in the preceding analyses. Thus, the project would not lead to potential

		climate-change-related impacts that would substantially adversely affect residents. The Climate Mapping for Resilience and Adaptation (CMRA) tool (https://livingatlas.arcgis.com/assessment-tool/explore/map) provided by the U.S. Climate Resilience Toolkit was used to assess the impact of five common climate-related hazards, extreme heat, drought, wildfires, flooding, and coastal inundation (sea level rise), on the proposed project site. Analysis was conducted for the census tract is located in. Based on the results of the CMRA tool analysis, the project site is most susceptible to climate change impacts related to extreme heat and drought. Currently, this area of the County only receives approximately 14 inches of precipitation annually and experiences approximately 23 days annually where temperatures are greater than 90 degrees Fahrenheit. Though this area currently experiences temperatures greater than 100 degrees Fahrenheit less than five days per year, this number is expected to increase to up to 30 days by the end of this century. Additionally, the project site is not located within a census tract designated as a Disadvantaged Community according to the Climate and Economic Justice Screening Tool (CMRA, 2024) (**Attachment 21**). The project would comply with the California Green Building Standards (CALGreen) Code, which would ensure the project incorporates various measures to reduce greenhouse gas (GHG) emissions. The project is located adjacent to a bus line and approximately 2 miles southeast of the Orange Rail Station, which would serve to reduce the GHG emissions associated with motor vehicle travel. As previously discussed, criteria air pollutant emissions from project construction and operation would be below *de minimis* thresholds, and daily emissions from the proposed project would not exceed the SCAQMD's regional construction or operation emissions thresholds (see Attachment 5). Therefore, the proposed project would not contribute substantially to climate change impacts.
Energy Efficiency	2	Project design would include sustainable features consistent with CALGreen standards, including but not limited to supplying equipment to facilitate future installation of EV parking spaces and water-efficient landscaping. In addition, the project would utilize energy efficient appliances and low flow plumbing faucets and fixtures. Therefore, the project would not have an adverse impact related to energy efficiency.

Additional Studies Performed:

- *Historic Resources Assessment*, Prepared by Architectural Resources Group, November 2020.
- *Phase I Environmental Site Assessment*, Prepared by AEI Consultants, September 2023.
- *Pre-Renovation Asbestos and Lead Assessment*, Prepared by EFI Global, Inc., August 2020.

- *The Orion HUD EA Noise Assessment*, Prepared by Dudek, February 2024.

Field Inspection (Date and completed by)**:**

- *Phase I Environmental Site Assessment*, Prepared by AEI Consultants, September 2023. Field Inspection completed on September 6, 2023.
- *Pre-Renovation Asbestos and Lead Assessment*, Prepared by EFI Global, Inc., August 2020. Field Inspection completed on August 7 and August 8, 2020.

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]**:**

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SCAQMD (South Coast Air Quality Management District). 2005. Rule 403: Fugitive Dust. As amended through June 3, 2005. https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf?sfvrsn=4.

SCAQMD. 2023. "South Coast AQMD Air Quality Significance Thresholds." March 2023. Accessed December 2023. https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25.

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List of Permits Obtained:

Public Outreach [24 CFR 50.23 & 58.43]**:**
The Draft Environmental Assessment will be made available for public review and comment beginning on March 21, 2024 and concluding on April 5, 2024.

Cumulative Impact Analysis [24 CFR 58.32]**:**
The proposed project would not contribute to a significant cumulative impact under the National Environmental Policy Act because it would consist of an urban development project, consistent with the site's General Plan land use and zoning designations and would be near existing transit services. State and local planning guidelines encourage the development of urban housing in areas served by transit and near commercial and cultural amenities because this type of development contributes less to cumulative effects on the environment in comparison to development of previously undisturbed sites in more remote locations with fewer transit connections, many of which contain native vegetation and wildlife species.

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]
Site identification has proven to be a major obstacle in providing affordable housing units. Residential sites available at reasonable cost are extremely limited, and sites that do not meet cost and land use criteria are generally eliminated as alternatives. The developer identifies potential properties for affordable housing based on feasibility, location, affordability, and ownership/site control of a potential project site. In addition to the developer's site selection criteria, physical and social constraints are also considered in identifying and rejecting alternatives. Based on the developer's site selection criteria and constraints that limit identification of alternative affordable housing project sites, no other build alternatives are analyzed or included in this environmental document.

No Action Alternative [24 CFR 58.40(e)]:
Under the No Action Alternative, the project would not be constructed, and no new affordable housing would be provided at the project site. The existing vacant commercial building on site would remain. There would be no benefits to the physical or human environment by not taking the federal action associated with this project. Physical impacts to the environment would occur in urban areas whether units are subsidized with federal funds or built at market rates. If an affordable project were not constructed on this site, the social benefits of providing new affordable housing opportunities on an urban infill parcel would not occur.

The proposed project must acquire all required permits and approvals prior to construction; therefore, the proposed project would be consistent with all land use plans, policies, and regulations for the project site. Not building on this infill site could potentially result in more housing constructed outside of the urban area in agricultural and undeveloped areas, contributing to urban sprawl, regional traffic congestion, and regional air quality issues.

Summary of Findings and Conclusions:
USA Properties Fund, Inc., in partnership with the City and County, is proposing the demolition of the existing former campus of the Rehabilitation Institute of Southern California and the new construction of a 166-unit affordable housing community, including two manager's units. The new housing development would be reserved for seniors aged 62 years and older and earning between 30-70% AMI. The proposed project would contribute to the increased density and availability of low-income housing in an area that would encourage multi-modal activity. Furthermore, the proposed project, which is an infill site converting a commercial facility into multi-family housing, would remain consistent with surrounding multi-family land uses and support infill development goals outlined in the City's Housing Element. The proximity of existing transit options to the project site would reduce long-term air pollutant emissions and energy use associated with motor vehicle travel.

Because the project site is within a developed urban area, the project would be adequately served by utilities and public services. The project would conform to all applicable federal, state, and regional regulations associated with land use compatibility, air pollutant emissions, water quality, geologic hazards, and related environmental resources addressed herein. Based on the analyses of environmental issues contained in this document, the proposed project is not expected to have significant environmental impacts.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]
Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible

for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Air Quality – Fugitive Dust

MM-AIR-1 The project shall implement the following, as applicable to the project:

- **Backfilling**: Stabilize backfill material when not actively handling, stabilize backfill material during handling, and stabilize soil at completion of activity.
- **Clearing and Grubbing**: Maintain stability of soil through pre-watering of site prior to clearing and grubbing, stabilize soil during clearing and grubbing activities, and stabilize soil immediately after clearing and grubbing activities.
- **Clearing Forms**: Use water spray, sweeping and water spray, or a vacuum system to clear forms.
- **Crushing**: Stabilize surface soils prior to operation of support equipment and stabilize material after crushing.
- **Cut and Fill**: Pre-water soils prior to cut and fill activities, and stabilize soil during and after cut and fill activities.
- **Demolition** – **Mechanical/Manual:** Stabilize wind-erodible surfaces to reduce dust, stabilize surface soil where support equipment and vehicles will operate, stabilize loose soil and demolition debris, and comply with Air Quality Management District Rule 1403.
- **Disturbed Soil**: Stabilize disturbed soil throughout the construction site, and stabilize disturbed soil between structures.
- **Earth-Moving Activities**: Pre-apply water to depth of proposed cuts, re-apply water as necessary to maintain soil in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction, and stabilize soil once earth-moving activities are complete.
- **Importing/Exporting of Bulk Materials**: Stabilize material while loading to reduce fugitive dust emissions, maintain at least 6 inches of freeboard on haul vehicles, stabilize material while transporting and unloading to reduce fugitive dust emissions, and comply with California Vehicle Code (CVC) Section 23114.
- **Landscaping**: Stabilize soils, materials, slopes.
- **Road Shoulder Maintenance:** Apply water to unpaved shoulders prior to clearing, and apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.
- **Screening:** Pre-water material prior to screening, limit fugitive dust emissions to opacity and plume length standards, and stabilize material immediately after screening.
- **Staging Areas:** Stabilize staging areas during use, and stabilize staging area soils at project completion.
- **Stockpiles/Bulk Material Handling:** Stabilize stockpiled materials. Stockpiles within 100 yards of off-site occupied buildings must not be greater than 8 feet in height, or must have a road bladed to the top to

allow water truck access, or must have an operational water irrigation system that is capable of complete stockpile coverage.

- **Traffic Areas for Construction Activities:** Stabilize all off-road traffic and parking areas, stabilize all haul routes, and direct construction traffic over established haul routes.
- **Trenching:** Stabilize surface soils where trencher or excavator and support equipment will operate, and stabilize soils at the completion of trenching activities.
- **Truck Loading:** Pre-water material prior to loading and ensure that freeboard exceeds 6 inches (CVC Section 23114).
- **Turf Overseeding:** Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards, and cover haul vehicles prior to exiting the site.
- **Unpaved Roads/Parking Lots:** Stabilize soils to meet the applicable performance standards and limit vehicular travel to established unpaved roads (haul routes) and parking lots.
- **Vacant Land:** In instances where vacant lots are 0.10 acres or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and off-road-vehicle trespassing, parking, and access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees, or other effective control measures.

Contamination and Toxic Substances

MM-TOX-1 In compliance with HUD's radon policy notice published in January 2024, indoor radon testing at the new affordable housing community will occur after construction is complete and before residents move in. If testing determines that indoor radon levels are or may be above 4pCi/L, then the County must document and implement a mitigation plan. The mitigation plan must identify the radon level onsite, describe the radon reduction system that will be installed, establish an ongoing maintenance plan, establish a reasonable timeframe for system implementation, and require post-installation testing by a licensed radon professional.

MM-TOX-2

If materials found to contain asbestos and/or presumed to contain asbestos may be impacted during renovation or demolition activities, by law, they must first be abated and properly disposed of by a licensed asbestos abatement contractor prior to such work. Contractors are licensed for asbestos-related work by the California Department of Industrial Relations (DIR) Department of Occupational Safety and Health (DOSH). A list of contractors with current licenses may be found at: https://www.dir.ca.gov/databases/doshacru/acrusearch.html.

Any suspect materials, that are not identified above and may be impacted during work activities, must be presumed to contain asbestos until laboratory analysis of an adequate number of samples proves otherwise. It is highly recommended that abatement monitoring be performed by the asbestos consultant if asbestos abatement is to be performed while non-abatement persons (employees, tenants, other building occupants, or general public) are present in adjacent areas. Abatement monitoring includes the collection of air samples in adjacent areas to demonstrate that asbestos fibers are not migrating out of the regulated areas. In addition to air sampling, the monitoring includes oversight of the abatement contractor to ensure that the work is being conducted in compliance with all applicable regulations and in accordance with the scope of work and abatement specifications. Such abatement monitoring services can reduce risk and limit the legal liabilities of the building owner.

MM-TOX-3

All lead laden components identified in this report shall be demolished or abated by certified lead trained personnel in accordance with all applicable federal, state and local regulations. All suspected lead laden components shall undergo paint film stabilization before components are removed by manual intact methods. LBP that will be impacted by hot work (welding, torch cutting, etc.) must be removed from the component by lead abatement workers to allow a minimum of 6 inches clearance on either side of the location of the hot work to prevent the volatilization of lead into the air.

Paint / surface coatings that were tested and found to have lead concentrations below the LBP threshold (i.e. 0.7 mg/cm$_2$) may still contain detectable concentrations of lead. Thus, work impacting those surfaces are subject to the Cal/OSHA Lead in Construction Standard 1532.1. This standard requires that respiratory protection and containment is used when performing “trigger tasks” until results of personal air monitoring indicate that workers are not exposed to lead above the action level or permissible exposure level. Additionally, the demolition or removal of lead or components with lead coatings is subject to Title 17, Division 1, Chapter 8 of the California Code of Regulations.

Should the contractor choose not to remove the identified LBP materials and demolish the structure in its entirety with the lead-paint components in place, it is recommended that the contractor stabilize the LBP components prior to demolition and then collect samples representative of the entire mass of the prospective waste stream. These samples should then be analyzed according to the United States Environmental Protection Agency (EPA) and the California Department of Toxic Substances Control (DTSC) prior to disposal facility acceptance.

Historic Preservation (Cultural Resources)

MM-CUL-1 In the event that previously unidentified cultural resources are encountered during ground-disturbing activities associated with project construction, work in the immediate area must halt, and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology shall be contacted immediately to evaluate the find. If the discovery proves to be significant under the National Environmental Policy Act, additional work, such as data recovery excavation, may be warranted to mitigate potential adverse effects.

Noise Abatement and Control

MM-NOI-1 All windows and exterior doors in the east-facing residential units on floors 2-4 of Building 1 shall have a Sound Transmission Class (STC) rating of 30 or greater.

MM-NOI-2 All windows and exterior doors in the south- and east-facing residential units on floors 2-4 of Building 2 shall have a Sound Transmission Class (STC) rating of 30 or greater.

MM-NOI-3 All windows and exterior doors in the west-facing residential units on floors 1-4 of Building 3 shall have a Sound Transmission Class (STC) rating of 35 or greater.

MM-NOI-4 All windows and exterior doors in the north- and south-facing residential units on floors 1-4 of Building 3 shall have a Sound Transmission Class (STC) rating of 30 or greater.

Determination:

☒ **Finding of No Significant Impact** [24 CFR 58.40(g)(1); 40 CFR 1508.27]
The project will not result in a significant impact on the quality of the human environment.

☐ **Finding of Significant Impact** [24 CFR 58.40(g)(2); 40 CFR 1508.27]
The project may significantly affect the quality of the human environment.

Preparer Signature: Suzanne Harder Date: 3.14.24

Name/Title/Organization: Suzanne Harder, Community Development Compliance and Environmental Coordinator, Orange County Housing and Community Development

Certifying Officer Signature: Julia Bidwell Date: 3-19-2024

Name/Title: Director, Housing & Community Development

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

ENVIRONMENTAL REVIEW RECORDS (ERRS)

ERR No. 1. Airport Hazards

OMB No. 2506-0177
(exp.2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Airport Hazards (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/airport-hazards

1. **To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?**

   ☒No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.*

   ☐Yes → *Continue to Question 2.*

2. **Is your project located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ)?**

   ☐Yes, project is in an APZ → *Continue to Question 3.*

   ☐Yes, project is an RPZ/CZ → *Project cannot proceed at this location.*

   ☐No, project is not within an APZ or RPZ/CZ

   →*If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within either zone.*

3. **Is the project in conformance with DOD guidelines for APZ?**

   ☐Yes, project is consistent with DOD guidelines without further action.

   →*If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

   ☐No, the project cannot be brought into conformance with DOD guidelines and has not been approved.

   →*Project cannot proceed at this location.*

If mitigation measures have been or will be taken, explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Click here to enter text.

→*Work with the RE/HUD to develop mitigation measures. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

Worksheet Summary

The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport.
The nearest municipal airport is the John Wayne Airport, approximately 8.9 miles southeast of the project site.

See Attachment 2.

ERR No. 2. Coastal Barrier Resources

OMB No. 2506-0177
(exp.2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Coastal Barrier Resources (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/coastal-barrier-resources

Projects located in the following states must complete this form.

Alabama	Georgia	Massachusetts	New Jersey	Puerto Rico	Virgin Islands
Connecticut	Louisiana	Michigan	New York	Rhode Island	Virginia
Delaware	Maine	Minnesota	North Carolina	South Carolina	Wisconsin
Florida	Maryland	Mississippi	Ohio	Texas	

1. Is the project located in a CBRS Unit?

☒No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a CBRS Unit.*

☐Yes → *Continue to 2.*

> Federal assistance for most activities may not be used at this location. You must either choose an alternate site or cancel the project. In very rare cases, federal monies can be spent within CBRS units for certain exempted activities (e.g., a nature trail), after consultation with the Fish and Wildlife Service (FWS) (see 16 USC 3505 for exceptions to limitations on expenditures).

2. Indicate your recommended course of action for the RE/HUD

☐ Consultation with the FWS

☐ Cancel the project

Worksheet Summary

According to Coastal Barrier Resources System (CBRS) information accessed at https://fwsprimary.wim.usgs.gov/CBRSMapper-v2/, there are no units of the CBRS in California, and the project site is not located within a CBRS Unit. Therefore, the project is in compliance with HUD's CBRS regulations, and no mitigation is warranted. This project is in compliance with the Coastal Barrier Resources Act.

See Attachment 2.

ERR No. 3. Flood Insurance

OMB No. 2506-0177
(exp.2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Flood Insurance (CEST and EA)

General requirements	Legislation	Regulation
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b).
Reference		
https://www.hudexchange.info/environmental-review/flood-insurance		

1. **Does this project involve mortgage insurance, refinance, acquisition, repairs, construction, or rehabilitation of a structure, mobile home, or insurable personal property?**

   ☐No. This project does not require flood insurance or is excepted from flood insurance. →*Continue to the Worksheet Summary.*

   ☒Yes → *Continue to Question 2.*

2. **Provide a FEMA/FIRM map showing the site.**

   The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

   Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?

   ☒No → *Continue to the Worksheet Summary.*

   ☐Yes → *Continue to Question 3.*

3. Is the community participating in the National Flood Insurance Program *or* has less than one year passed since FEMA notification of Special Flood Hazards?

☐Yes, the community is participating in the National Flood Insurance Program.

For loans, loan insurance or loan guarantees, flood insurance coverage must be continued for the term of the loan. For grants and other non-loan forms of financial assistance, flood insurance coverage must be continued for the life of the building irrespective of the transfer of ownership. The amount of coverage must equal the total project cost or the maximum coverage limit of the National Flood Insurance Program, whichever is less.

Provide a copy of the flood insurance policy declaration or a paid receipt for the current annual flood insurance premium and a copy of the application for flood insurance.

→ *Continue to the Worksheet Summary.*

☐Yes, less than one year has passed since FEMA notification of Special Flood Hazards.

If less than one year has passed since notification of Special Flood Hazards, no flood Insurance is required.

→ *Continue to the Worksheet Summary.*

☐No. The community is not participating, or its participation has been suspended.

Federal assistance may not be used at this location. Cancel the project at this location.

Worksheet Summary

According to FEMA FIRM # 06059C0164J, both effective on December 3, 2009 and accessed at https://msc.fema.gov/portal/home, the project site is within Zone X - Unshaded (Area of minimal flood hazard) (FEMA 2012). The project site is designated as an area outside the 100-year base flood zone and the 500-year flood zone. According to the National Flood Insurance Program's (NFIP) Community Status Book (https://www.fema.gov/flood-insurance/work-with-nfip/community-status-book), the project site is in Community ID 060228#, which is a participating community in the NFIP. However, because no structures or insurable properties are within a Special Flood Hazard Area, flood insurance is not required under the NFIP. Although flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the NFIP. The project is in compliance with flood insurance requirements.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

ERR No. 4. Air Quality

OMB No. 2506-0177
(exp.2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Air Quality (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/air-quality

1. **Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?**

   ☒ Yes → *Continue to Question 2.*

   ☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide any documents used to make your determination.*

2. **Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?**
   Follow the link below to determine compliance status of project county or air quality management district:
   http://www.epa.gov/oaqps001/greenbk/

   ☐ No, project's county or air quality management district is in attainment status for all criteria pollutants
   → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

   ☒ Yes, project's management district or county is in non-attainment or maintenance status for one or more criteria pollutants. → *Continue to Question 3.*

3. **Determine the estimated emissions levels of your project for each of those criteria pollutants that are in non-attainment or maintenance status on your project area. Will your project exceed any of the *de minimis or threshold* emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?**

   ☒ No, the project will not exceed *de minimis* or threshold emissions levels or screening levels
   → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Explain how you determined that the project would not exceed de minimis or threshold emissions.*

☐ Yes, the project exceeds *de minimis* emissions levels or screening levels.

→ *Continue to Question 4. Explain how you determined that the project would not exceed de minimis or threshold emissions in the Worksheet Summary.*

4. **For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**
   Click here to enter text.

Worksheet Summary

CalEEMod was used to model emissions during the construction and operational phases of the proposed project. Results of the model indicate that the proposed project would not exceed the South Coast Air Quality Management District's emissions thresholds during the construction or operational phases. Estimated annual construction emissions for the proposed project, assuming construction would occur in 2024–2025, are approximately 610.08 metric tons (30-year amortized emissions would reduce this to 20.34 metric tons). Estimated annual emissions during the operational phase are approximately 718.89 metric tons. In total, the proposed project is estimated to produce 739.23 metric tons of emissions per year. Daily emissions from the proposed project would not exceed the SCAQMD's regional construction or operation emissions thresholds.

See Attachment 5.

ERR No. 5. Coastal Zone Management Act

OMB No. 2506-0177
(exp.2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Coastal Zone Management Act (CEST and EA)

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930
References		
https://www.onecpd.info/environmental-review/coastal-zone-management		

Projects located in the following states must complete this form.

Alabama	Florida	Louisiana	Mississippi	Ohio	Texas
Alaska	Georgia	Maine	New Hampshire	Oregon	Virgin Islands
American Samona	Guam	Maryland	New Jersey	Pennsylvania	Virginia
California	Hawaii	Massachusetts	New York	Puerto Rico	Washington
Connecticut	Illinois	Michigan	North Carolina	Rhode Island	Wisconsin
Delaware	Indiana	Minnesota	Northern Mariana Islands	South Carolina	

1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

☐Yes → *Continue to Question 2.*

☒No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a Coastal Zone.*

2. Does this project include activities that are subject to state review?

☐Yes → *Continue to Question 3.*

☐No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.*

3. **Has this project been determined to be consistent with the State Coastal Management Program**?

☐Yes, with mitigation. → *Continue to Question 4.*

☐Yes, without mitigation. → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.*

☐No, project must be canceled.

Project cannot proceed at this location.

4. **Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the State Coastal Management Program letter of consistency) and any other documentation used to make your determination.*

Worksheet Summary

The proposed project site is not within the California Coastal Zone. Therefore, the proposed undertaking is in compliance with HUD's Coastal Zone Management Act regulations, and no mitigation is warranted. The project is in compliance with the Coastal Zone Management Act (**see Attachment 6**).

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

ERR No. 6. Contamination and Toxic Substances (Multifamily and Non-Residential Properties)

OMB No. 2506-0177
(exp. 2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Contamination and Toxic Substances (Multifamily and Non-Residential Properties) – PARTNER

https://www.hudexchange.info/programs/environmental-review/site-contamination

1. **How was site contamination evaluated?** [1] **Select all that apply.**

   ☒ ASTM Phase I ESA
   ☐ ASTM Phase II ESA
   ☐ Remediation or clean-up plan
   ☐ ASTM Vapor Encroachment Screening
   ☐ None of the above

   → *Provide documentation and reports and include an explanation of how site contamination was evaluated in the Worksheet Summary.*
   Continue to Question 2.

2. **Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)**

   ☒ No → **Explain below.**

   The proposed project site is currently vacant. A Phase I Environmental Site Assessment (ESA) conducted by AEI Consultants (AEI) in September 2023 did not find any recognized environmental conditions (RECs), controlled RECs, or historical RECs on the project site. A Pre-Renovation Asbestos and Lead Assessment for the project site completed by EFI Global in August 2020 identified asbestos containing materials and lead-based paint in the existing building onsite. Though the Phase I ESA should not be construed as a mold survey and inspection. However, during the site reconnaissance for the Phase I, the obvious visible signs of mold growth or conditions conducive for suspect mold growth were observed.

[1] HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site. For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD's toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

☐ Yes → *Describe the findings, including any recognized environmental conditions (RECs), in Worksheet Summary below. Continue to Question 3.*

3. **Can adverse environmental impacts be mitigated?**

   ☐ Adverse environmental impacts cannot feasibly be mitigated → HUD assistance may not be used for the project at this site. Project cannot proceed at this location.

   ☐ Yes, adverse environmental impacts can be eliminated through mitigation.
   → *Provide all mitigation requirements*[2] *and documents. Continue to Question 4.*

4. **Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls**[3]**, or use of institutional controls**[4]**.**

   Click here to enter text.

   If a remediation plan or clean-up program was necessary, which standard does it follow?

   ☐ Complete removal

   ☐ Risk-based corrective action (RBCA)

   → *Continue to the Worksheet Summary.*

Worksheet Summary

A Phase I Environmental Site Assessment (ESA) conducted by Partner Engineering, Inc. (Partner) in September 2023 did not find any recognized environmental conditions (RECs), controlled RECs, or historical RECs on the project site. A Pre-Renovation Asbestos and Lead Assessment for the project site completed by EFI Global in August 2020 identified asbestos containing materials and lead-based paint in the existing building onsite. All asbestos containing materials (ACMs) and lead-based paint (LBP) was found to be in good condition at the time of the assessment. Mitigation for ACMs and LBP has been included in the environmental assessment. Materials found to contain asbestos and/or presumed to contain asbestos that could be impacted during renovation or demolition activities, by law, must first be abated and properly disposed of by a licensed asbestos abatement contractor prior to such work (**MM-TOX-1**).

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[2] Mitigation requirements include all clean-up actions required by applicable federal, state, tribal, or local law. Additionally, provide, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

[3] Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, without limitation, caps, covers, dikes, trenches, leachate collection systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, without limitation, slurry walls and ground water pumping systems.

[4] Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.

In addition, LBP that would be impacted by hot work (welding, torch cutting, etc.) must be removed from the component by lead abatement workers to allow a minimum of 6 inches clearance on either side of the location of the hot work to prevent the volatilization of lead into the air (**MM-TOX-2**).

Though the Phase I ESA should not be construed as a mold survey and inspection. However, during the site reconnaissance for the Phase I, the obvious visible signs of mold growth or conditions conducive for suspect mold growth were observed.

See Attachments 7 and 8.

ERR No. 7. Endangered Species Act

OMB No. 2506-0177
(exp.2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Endangered Species Act (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/endangered-species

1. Does the project involve any activities that have the potential to affect species or habitats?

☐No, the project will have No Effect due to the nature of the activities involved in the project.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

☐No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office.

Explain your determination:

Click here to enter text.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

☒Yes, the activities involved in the project have the potential to affect species and/or habitats. → *Continue to Question 2.*

2. Are federally listed species or designated critical habitats present in the action area?

Obtain a list of protected species from the Services. This information is available on the FWS Website.

☒No, the project will have No Effect due to the absence of federally listed species and designated critical habitat.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation may include letters from the Services, species lists from the Services' websites, surveys or other documents and analysis showing that there are no species in the action area.*

☐Yes, there are federally listed species or designated critical habitats present in the action area. → *Continue to Question 3.*

3. **Recommend one of the following effects that the project will have on federally listed species or designated critical habitat:**

☐No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.*

☐May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

→ Partner entities should not contact the Services directly. *If the RE/HUD agrees with this recommendation, they will have to complete Informal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.*

☐Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

→ Partner entities should not contact the Services directly. *If the RE/HUD agrees with this recommendation, they will have to complete Formal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.*

Worksheet Summary

The U.S. Fish and Wildlife Service IPaC database was used to identify federally protected species at the project site. Six species classified as endangered or threatened were identified as possibly occurring on the project site. However, given the urban and commercial setting of the site and of the surrounding project area, no federally listed special-status plant or wildlife species are expected to be present due to the lack of suitable habitat.

See Attachment 9.

ERR No. 8. Explosive and Flammable Hazards

OMB No. 2506-0177
(exp.2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Explosive and Flammable Hazards (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities

1. **Does the proposed HUD-assisted project include a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?**

   ☒ No
   → *Continue to Question 2.*

   ☐ Yes
   Explain:
   Click here to enter text.
   → *Continue to Question 5.*

2. **Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?**

   ☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☒ Yes → *Continue to Question 3.*

3. **Within 1 mile of the project site, are there any current *or planned* stationary aboveground storage containers:**
   - Of more than 100-gallon capacity, containing common liquid industrial fuels OR
   - Of any capacity, containing hazardous liquids or gases that are not common liquid industrial fuels?

   ☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.*

   ☒ Yes → *Continue to Question 4.*

4. **Is the Separation Distance from the project acceptable based on standards in the Regulation?**
   Please visit HUD's website for information on calculating Acceptable Separation Distance.

   ☒ Yes
   → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the "assessed tank."

☐ No

→ *Continue to Question 6.*

Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the "assessed tank."

5. **Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?**

Please visit HUD's website for information on calculating Acceptable Separation Distance.

☐ Yes

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

☐ No

→ *Continue to Question 6.*

Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

6. **For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to make the Separation Distance acceptable, including the timeline for implementation. If negative effects cannot be mitigated, cancel the project at this location.**

Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an unacceptable separation distance, provide approval from a licensed professional engineer.

Click here to enter text.

Worksheet Summary

The following resources were reviewed to identify aboveground storage tank (AST) locations, contents, volumes, and distance from subject property:

- EDR Radius Report for the project site with a 1-mile radius buffering the site
- California Environmental Protection Agency (CalEPA) Regulated Site Portal at https://siteportal.calepa.ca.gov/nsite/map/help
- Appendix I to Subpart C of Parts 51- Specific Hazardous Substances at https://www.ecfr.gov/current/title-24/subtitle-A/part-51/subpart-C
- HUD Acceptable Separation Distance (ASD) Electronic Assessment Tool at https://www.hudexchange.info/programs/environmental-review/asd-calculator/

An EDR Radius Report was obtained for the proposed project site to identify aboveground storage tanks (ASTs) within a 1-mile radius of the project area. The report identified three sites with ASTs but did not provide details on the size and content of all ASTs listed within 1-mile of the project site. The CalEPA Regulated Site Portal website was then used to identify and evaluate the type and amounts of chemicals stored at each site identified as having an AST by the EDR report. Chemicals listed for each site were compared to a list of hazardous substances provided in Appendix I to Subpart C of Part 51 (§ 51.201). Chemicals not listed in § 51.201 were considered non-hazardous. HUD's Acceptable Separation Distance (ASD) Assessment Tool was used to calculate the acceptable separation distance between the project site and the CalEPA sites that contained hazardous materials.

All three sites identified as potentially storing hazardous or flammable materials in ASTs were adequately separated from the project site for thermal radiation for people. Maps and ASD calculations for the sites that contain materials listed 24 CFR 51C are provided in **Attachment 10**.

ERR No. 9. Farmlands Protection

OMB No. 2506-0177
(exp.2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Farmlands Protection (CEST and EA)

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	7 CFR Part 658
Reference		
https://www.hudexchange.info/environmental-review/farmlands-protection		

1. **Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?**

   ☐Yes → *Continue to Question 2.*

   ☒No

   Explain how you determined that agricultural land would not be converted:

   The California Department of Conservation's California Important Farmland Finder, accessed at https://maps.conservation.ca.gov/dlrp/ciff/, was used to identify Important Farmlands in the project area.

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting your determination.*

2. **Does "important farmland," including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?**

   You may use the links below to determine important farmland occurs on the project site:

   - Utilize USDA Natural Resources Conservation Service's (NRCS) Web Soil Survey http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm
   - Check with your city or county's planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)

- Contact NRCS at the local USDA service center http://offices.sc.egov.usda.gov/locator/app?agency=nrcs or your NRCS state soil scientist http://soils.usda.gov/contact/state_offices/ for assistance

☒No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

☐Yes → *Continue to Question 3.*

3. **Consider alternatives to completing the project on important farmland and means of avoiding impacts to important farmland.**
   - Complete form **AD-1006**, "Farmland Conversion Impact Rating" http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045394.pdf and contact the state soil scientist before sending it to the local NRCS District Conservationist. (NOTE: for corridor type projects, use instead form **NRCS-CPA-106**, "Farmland Conversion Impact Rating for Corridor Type Projects: http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045395.pdf.)
   - Work with NRCS to minimize the impact of the project on the protected farmland. When you have finished with your analysis, return a copy of form AD-1006 (or form NRCS-CPA-106 if applicable) to the USDA-NRCS State Soil Scientist or his/her designee informing them of your determination.

Document your conclusion:

☐Project will proceed with mitigation.

Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

☐Project will proceed without mitigation.

Explain why mitigation will not be made here:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

Worksheet Summary

The California Department of Conservation's California Important Farmland Finder, accessed at https://maps.conservation.ca.gov/dlrp/ciff/, was used to identify Important Farmlands in the project area. The project site is on land designated as Urban and Built-Up Land. Furthermore, the proposed project would be built above an existing garage, and no ground-disturbing activities are required. There are no Important Farmlands on the project site or in adjacent areas (**see Attachment 11**). The project is in compliance with the Farmland Protection Policy.

ERR No. 10. Floodplain Management

OMB No. 2506-0177
(exp. 2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Floodplain Management (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/floodplain-management

1. **Does 24 CFR 55.12(c) exempt this project from compliance with HUD's floodplain management regulations in Part 55?**

   ☐ Yes

   Provide the applicable citation at 24 CFR 55.12(c) here. If project is exempt under 55.12(c)(6) or (8), provide supporting documentation.

   Click here to enter text.

   → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Continue to the Worksheet Summary.*

   ☒ No → *Continue to Question 2.*

2. **Provide a FEMA/FIRM map showing the site.**

   The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs).

   Does your project occur in a floodplain?

   ☒ No → *Continue to the Worksheet Summary below.*

   ☐ Yes

   Select the applicable floodplain using the FEMA map or the best available information:

   ☐ Floodway → *Continue to Question 3, Floodways*

   ☐ Coastal High Hazard Area (V Zone) → *Continue to Question 4, Coastal High Hazard Areas*

   ☐ 500-year floodplain (B Zone or shaded X Zone) → *Continue to Question 5, 500-year Floodplains*

   ☐ 100-year floodplain (A Zone) → *The 8-Step Process is required. Continue to Question 6, 8-Step Process*

3. **Floodways**

   Is this a functionally dependent use?

   ☐ Yes

   The 8-Step Process is required. Work with HUD or the RE to assist with the 8-Step Process.

→ *Continue to Worksheet Summary.*

☐ No → *Federal assistance may not be used at this location unless an exception in 55.12(c) applies. You must either choose an alternate site or cancel the project.*

4. **Coastal High Hazard Area**

Is this a critical action such as a hospital, nursing home, fire station, or police station?

☐ Yes → *Critical actions are prohibited in coastal high hazard areas unless an exception in 55.12(c) applies. You must either choose an alternate site or cancel the project.*

☐ No

Does this action include new construction that is not a functionally dependent use, existing construction (including improvements), or reconstruction following destruction caused by a disaster?

☐ Yes, there is new construction of something that is not a functionally dependent use. New construction must be designed to FEMA standards for V Zones at 44 CFR 60.3(e) (24 CFR 55.1(c)(3)(i)).
→ *Continue to Question 6, 8-Step Process*

☐ No, this action concerns only existing construction.
Existing construction must have met FEMA elevation and construction standards for a coastal high hazard area or other standards applicable at the time of construction.
→ *Continue to Question 6, 8-Step Process*

5. **500-year Floodplain**

Is this a critical action?

☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

☐Yes → *Continue to Question 6, 8-Step Process*

6. **8-Step Process**.

Is this 8-Step Process required? Select one of the following options:

☐ 8-Step Process applies.
This project will require mitigation and may require elevating structure or structures. See the link to the HUD Exchange above for information on HUD's elevation requirements.
→ *Work with the RE/HUD to assist with the 8-Step Process. Continue to Worksheet Summary.*

☐ 5-Step Process is applicable per 55.12(a)(1-3).
Provide the applicable citation at 24 CFR 55.12(a) here.
Click here to enter text.
→ *Work with the RE/HUD to assist with the 5-Step Process. Continue to Worksheet Summary.*

☐ 8-Step Process is inapplicable per 55.12(b)(1-4).
Provide the applicable citation at 24 CFR 55.12(b) here.
Click here to enter text.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Worksheet Summary

According to FEMA FIRM Panel # 06059C0164J, effective on December 3, 2009 and accessed at https://msc.fema.gov/portal/home, the project site is within Zone X - Unshaded (Area of minimal flood hazard) (FEMA 2012). The project site is designated as an area outside the 100-year base flood zone and the 500-year flood zone (**see Attachment 4**).

ERR No. 11. Historic Preservation

OMB No. 2506-0177
(exp. 2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Historic Preservation (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/historic-preservation

Threshold

Is Section 106 review required for your project?

☐ No, because a Programmatic Agreement states that all activities included in this project are exempt. (See the PA Database to find applicable PAs.)
Either provide the PA itself or a link to it here. Mark the applicable exemptions or include the text here:
Click here to enter text.
→ *Continue to the Worksheet Summary.*

☐ No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].
Either provide the memo itself or a link to it here. Explain and justify the other determination here:
Click here to enter text.
→ *Continue to the Worksheet Summary.*

☒Yes, because the project includes activities with potential to cause effects (direct or indirect). → *Continue to Step 1.*

The Section 106 Process
After determining the need to do a Section 106 review, HUD or the RE will initiate consultation with regulatory and other interested parties, identify and evaluate historic properties, assess effects of the project on properties listed on or eligible for the National Register of Historic Places, and resolve any adverse effects through project design modifications or mitigation.
Step 1: Initiate consultation
Step 2: Identify and evaluate historic properties
Step 3: Assess effects of the project on historic properties
Step 4: Resolve any adverse effects

Only RE or HUD staff may initiate the Section 106 consultation process. Partner entities may gather information, including from SHPO records, identify and evaluate historic properties, and make initial assessments of effects of the project on properties listed in or eligible for the National Register of Historic Place. Partners should then provide their RE or HUD with all of their analysis and documentation so that they may initiate consultation.

Step 1 - Initiate Consultation

The following parties are entitled to participate in Section 106 reviews: Advisory Council on Historic Preservation; State Historic Preservation Officers (SHPOs); federally recognized Indian tribes/Tribal Historic Preservation Officers (THPOs); Native Hawaiian Organizations (NHOs); local governments; and project grantees. The general public and individuals and organizations with a demonstrated interest in a project may participate as consulting parties at the discretion of the RE or HUD official. Participation varies with the nature and scope of a project. Refer to HUD's website for guidance on consultation, including the required timeframes for response. Consultation should begin early to enable full consideration of preservation options.

Use the When To Consult With Tribes checklist within Notice CPD-12-006: Process for Tribal Consultation to determine if the RE or HUD should invite tribes to consult on a particular project. Use the Tribal Directory Assessment Tool (TDAT) to identify tribes that may have an interest in the area where the project is located. Note that only HUD or the RE may initiate consultation with Tribes. Partner entities may prepare a draft letter for the RE or HUD to use to initiate consultation with tribes, but may not send the letter themselves.

List all organizations and individuals that you believe may have an interest in the project here:
State Historic Preservation Office

→ *Continue to Step 2.*

Step 2 - Identify and Evaluate Historic Properties

Provide a preliminary definition of the Area of Potential Effect (APE), either by entering the address(es) or providing a map depicting the APE. Attach an additional page if necessary.
1800 E. La Veta Avenue
Orange, CA 92866

Gather information about known historic properties in the APE. Historic buildings, districts and archeological sites may have been identified in local, state, and national surveys and registers, local historic districts, municipal plans, town and county histories, and local history websites. If not already listed on the National Register of Historic Places, identified properties are then evaluated to see if they are eligible for the National Register. Refer to HUD's website for guidance on identifying and evaluating historic properties.

In the space below, list historic properties identified and evaluated in the APE.
Every historic property that may be affected by the project should be listed. For each historic property or district, include the National Register status, whether the SHPO has concurred with the finding, and whether information on the site is sensitive. Attach an additional page if necessary.
Click here to enter text.

Provide the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination.

Was a survey of historic buildings and/or archeological sites done as part of the project?

If the APE contains previously unsurveyed buildings or structures over 50 years old, or there is a likely presence of previously unsurveyed archeological sites, a survey may be necessary. For Archeological surveys, refer to HP Fact Sheet #6, Guidance on Archeological Investigations in HUD Projects.

☒ Yes → *Provide survey(s) and report(s) and continue to Step 3.*
Additional notes:
Click here to enter text.

☐ No → *Continue to Step 3.*

Step 3 - Assess Effects of the Project on Historic Properties

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. (36 CFR 800.5) Consider direct and indirect effects as applicable as per HUD guidance.

Choose one of the findings below to recommend to the RE or HUD.
Please note: this is a recommendation only. It is **not** the official finding, which will be made by the RE or HUD, but only your suggestion as a Partner entity.

☒ No Historic Properties Affected
Document reason for finding:
☒ No historic properties present.
☐ Historic properties present, but project will have no effect upon them.

☐ No Adverse Effect
Document reason for finding and provide any comments below.
Comments may include recommendations for mitigation, monitoring, a plan for unanticipated discoveries, etc.

☐ Adverse Effect
Document reason for finding:
Copy and paste applicable Criteria into text box with summary and justification.
Criteria of Adverse Effect: 36 CFR 800.5]
Click here to enter text.

Provide any comments below:

Comments may include recommendations for avoidance, minimization, and/or mitigation.

Click here to enter text.

Remember to provide all documentation that justifies your National Register Status determination and recommendations along with this worksheet.

ERR No. 12. Noise (EA Level Reviews)

OMB No. 2506-0177
(exp. 2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Noise (EA Level Reviews) – PARTNER
https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control

1. **What activities does your project involve? Check all that apply:**

☒ New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.
→ *Continue to Question 2.*

☐ Rehabilitation of an existing residential property

NOTE: For major or substantial rehabilitation in Normally Unacceptable zones, HUD encourages mitigation to reduce levels to acceptable compliance standards. For major rehabilitation in Unacceptable zones, HUD strongly encourages mitigation to reduce levels to acceptable compliance standards. See 24 CFR 51 Subpart B for further details.
→ *Continue to Question 2.*

☐ None of the above

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

2. **Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).**
Indicate the findings of the Preliminary Screening below:

☐ There are no noise generators found within the threshold distances above.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing the location of the project relative to any noise generators.*

☒ Noise generators were found within the threshold distances.

→ *Continue to Question 3.*

3. **Complete the Noise Assessment Guidelines to quantify the noise exposure. Indicate the findings of the Noise Assessment below:**

☐ Acceptable (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

Indicate noise level here: Click here to enter text.
→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide noise analysis, including noise level and data used to complete the analysis.*

☒ Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in 24 CFR 51.105(a))
Indicate noise level here:
→ Dudek completed a Technical Noise Memorandum for the proposed project in February 2024. The primary noise source in the project vicinity is motor vehicle traffic. The eastern façades of the proposed residential units would face the southbound lanes of the SR-55 freeway, while the southern façades face the SR-22 freeway. Both the eastern and the southern facades are separated from these two freeways by several rows of residential homes and an existing noise barrier (i.e., a soundwall) approximately 14 feet in height constructed at the Caltrans right-of-way (ROW). In addition, the northern façades of the proposed residential units face La Veta Avenue, and the western facades face South Tustin Street. The other nearby roads are minor "feeder" streets which would have a negligible contribution to the on-site noise environment.

The Federal highway Administration's (FHWA) Traffic Noise Model (TNM) version 2.5 (FWHA 2004) was used to run a more detailed noise analysis for the project site. Exposure from traffic noise would exceed the HUD exterior noise standard of 65dBA DNL by up to 6 dB at the façade of units closest to the SR-22 freeway and South Tustin Street, putting those units in HUD's "normally unacceptable" noise range. The noise levels at the other modeled building facade receivers on the project site, except for the northern façade of Building 1, also exceed the HUD exterior noise standard of 65 dBA DNL to varying degrees. At the modeled outdoor use areas, the modeled traffic noise levels would not exceed the HUD exterior noise standard.

<u>If project is rehabilitation:</u>
→ *Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis.*

<u>If project is new construction:</u>
Is the project in a largely undeveloped area[1]?
☒ No
☐ Yes → ***The project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i).***

→ *Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis.*

☐ Unacceptable: (Above 75 decibels)

[1] A largely undeveloped area means the area within 2 miles of the project site is less than 50 percent developed with urban uses or does not have water and sewer capacity to serve the project.

Indicate noise level here: Click here to enter text.

If project is rehabilitation:
HUD strongly encourages conversion of noise-exposed sites to land uses compatible with high noise levels. Consider converting this property to a non-residential use compatible with high noise levels.
→ *Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis, and any other relevant information.*

If project is new construction:
The project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). *Work with HUD or the RE to either complete an EIS or obtain a waiver signed by the appropriate authority.*
→ *Continue to Question 4.*

4. **HUD strongly encourages mitigation be used to eliminate adverse noise impacts. Work with the RE/HUD on the development of the mitigation measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**
☒ Mitigation as follows will be implemented:

The proposed project would implement mitigation measures at the site to reduce indoor noise levels to within the HUD threshold of 45 dBA DNL. Mitigation would include providing residential units with a forced-air heating, ventilation, and air conditioning (HVAC) system in each unit that provides additional ventilation to keep the indoor air quality high, even with the windows closed. To ensure compliance with 24 CFR Part 51, Subpart B and that the HUD noise standard of 45 dBA DNL is not exceeded, the detailed architectural design plans (when these are prepared) would provide the following specification for upgraded windows: All windows and exterior doors in the east-facing residential units on floors 2-4 of Building 1 shall have a Sound Transmission Class (STC) rating of 30 or greater (**MM-NOI-1**); all windows and exterior doors in the south- and east-facing residential units on floors 2-4 of Building 2 shall have an STC ratting of 30 or greater (**MM-NOI-2**); all windows and exterior doors in the west-facing residential units of floors 1-4 of Building 3 shall have an STC rating of 35 or greater (**MM-NOI-3**); and all windows and exterior doors in the north- and south-facing residential units on floors 1-4 of Building 3 shall have an STC rating of 30 or greater (**MM-NOI-4**).

Noise levels at the outdoor spaces of the proposed project site, including the central courtyard, community garden, entertainment courtyard, and dog park, are within HUD exterior noise thresholds and no mitigation is required.

→ *Provide drawings, specifications, and other materials as needed to describe the project's noise mitigation measures.*
Continue to the Worksheet Summary.

☐ No mitigation is necessary.
Explain why mitigation will not be made here:
Click here to enter text.
→ *Continue to the Worksheet Summary.*

Worksheet Summary

See attached Technical Noise Memorandum, Dudek, February 2024 **(Attachment 14**).

ERR No. 13. Sole Source Aquifers

OMB No. 2506-0177
(exp.2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Sole Source Aquifers (CEST and EA)

General requirements	Legislation	Regulation
The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149
Reference		
https://www.hudexchange.info/environmental-review/sole-source-aquifers		

1. Does your project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

☐Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

☒No → *Continue to Question 2.*

2. Is the project located on a sole source aquifer (SSA)[1]?

☒No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area.*

☐Yes → *Continue to Question 3.*

3. Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer?

Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.

[1] A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

☐Yes → *Provide the MOU or agreement as part of your supporting documentation. Continue to Question 4.*

☐No → *Continue to Question 5.*

4. Does your MOU or working agreement exclude your project from further review?

☐Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.*

☐No → *Continue to Question 5.*

5. Will the proposed project contaminate the aquifer and create a significant hazard to public health?

Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area. EPA will also want to know about water, storm water and waste water at the proposed project. Follow your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

☐No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination*.

☐Yes → *Work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. <u>If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied.</u> Continue to Question 6.*

6. In order to continue with the project, any threat must be mitigated, and all mitigation must be approved by the EPA. Explain in detail the proposed measures that can be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

Worksheet Summary

According the EPA Sole Source Aquifer Locations Map, accessed at https://www.epa.gov/dwssa/map-sole-source-aquifer-locations, there are no sole-source aquifers in or near the project site (**see Attachment 15**). The proposed project is in compliance with the Safe Water Drinking Act.

ERR No. 14. Wetlands

OMB No. 2506-0177
(exp.2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Wetlands (CEST and EA) – Partner

https://www.hudexchange.info/environmental-review/wetlands-protection

1. **Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance?**
   The term "new construction" includes draining, dredging, channelizing, filling, diking, impounding, and related activities and construction of any structures or facilities.

   ☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☒ Yes → *Continue to Question 2.*

2. **Will the new construction or other ground disturbance impact a wetland as defined in E.O. 11990?**

   ☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map or any other relevant documentation to explain your determination.*

   ☐ Yes → *Work with HUD or the RE to assist with the 8-Step Process. Continue to Question 3.*

3. **Does Section 55.12 state that the 8-Step Process is not required?**

   ☐ No, the 8-Step Process applies.
   This project will require mitigation and may require elevating structure or structures. See the link to the HUD Exchange above for information on HUD's elevation requirements.
   → *Work with the RE/HUD to assist with the 8-Step Process. Continue to Worksheet Summary.*

   ☐ 5-Step Process is applicable per 55.12(a).
   Provide the applicable citation at 24 CFR 55.12(a) here.
   Click here to enter text.
   → *Work with the RE/HUD to assist with the 5-Step Process. This project may require mitigation or alternations. Continue to Worksheet Summary.*

   ☐ 8-Step Process is inapplicable per 55.12(b).
   Provide the applicable citation at 24 CFR 55.12(b) here.
   Click here to enter text.
   → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to Worksheet Summary.*

☐ 8-Step Process is inapplicable per 55.12(c).

Provide the applicable citation at 24 CFR 55.12(c) here.

Click here to enter text.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to Worksheet Summary.*

Worksheet Summary

According to the National Wetlands Inventory map regulated by the U.S. Fish and Wildlife Service and accessible at https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper, there are no wetlands on the project site (**see Attachment 16**). The nearest wetland feature is Santiago Creek, a riverine feature located approximately 175 feet northwest of the project site. As a result, the proposed project is in compliance with Executive Order 11990.

ERR No. 15. Wild and Scenic Rivers

OMB No. 2506-0177
(exp.2/28/2025)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Wild and Scenic Rivers (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers

1. Is your project within proximity of a Wild and Scenic River, Study River, or Nationwide Rivers Inventory River?

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide documentation used to make your determination.*

☐ Yes → *Continue to Question 2.*

2. Could the project do *any* of the following?

- Have a direct and adverse effect within Wild and Scenic River Boundaries,
- Invade the area or unreasonably diminish the river outside Wild and Scenic River Boundaries, or
- Have an adverse effect on the natural, cultural, and/or recreational values of a NRI segment.

Consult with the appropriate federal/state/local/tribal Managing Agency(s), pursuant to Section 7 of the Act, to determine if the proposed project may have an adverse effect on a Wild & Scenic River or a Study River and, if so, to determine the appropriate avoidance or mitigation measures.

Select one:

☐ The Managing Agency has concurred that the proposed project will not alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

☐ The Managing Agency was consulted and the proposed project may alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *The RE/HUD must work with the Managing Agency to identify mitigation measures to mitigate the impact or effect of the project on the river.*

Worksheet Summary

According to the EPA's NEPAssist mapping tool, the project site does not contain any rivers protected under the Wild and Scenic Rivers Act. The closest protected waterway is Bautista Creek, approximately

57.3 miles east of the project site. Therefore, the proposed project is in compliance with Executive Order 11990.

S**ee Attachment 17**.

ERR No. 16. Environmental Justice

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Environmental Justice (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/environmental-justice

HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.

1. **Were any adverse environmental impacts identified in any other compliance review portion of this project's total environmental review?**
   ☒Yes → *Continue to Question 2.*

   ☐No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

2. **Were these adverse environmental impacts disproportionately high for low-income and/or minority communities?**
   ☐Yes
   Explain:
   Click here to enter text.
   → *The RE/HUD must work with the affected low-income or minority community to decide what mitigation actions, if any, will be taken. Provide any supporting documentation.*

   ☒No
   Explain:
   The project site currently occupied by the former campus of the Rehabilitation Institute of Southern California and associated parking and landscaped areas and does not possess any recognized environmental conditions (RECs) or hazardous materials. Though not considered RECs, asbestos-containing materials (ACMs) and lead-based paint (LBP) were identified throughout the existing building onsite. Prior to demolition of the existing building, ACMs and LBPs would be removed by licensed asbestos abatement contractors and certified lead trained personnel in accordance with all applicable federal, state, and local regulations. The noise study for the proposed project indicated that the project site would experience high noise levels due to high traffic volume along the State Route (SR)-55 and SR-22 freeways. However, implementation of mitigation measures would reduce adverse noise impacts at the project site to below HUD thresholds. No disproportionate impacts to low income and/or minority communities would occur as a result of impacts from noise. As a result, potential adverse impacts related to noise would be avoided or reduced for all residents during the operational phase. In addition, with the implementation of best management practices required for the control of fugitive dust, erosion, and storm water at construction sites, no disproportionate impacts to low income and/or

minority communities would occur as a result of impacts to air quality. As a result, potential adverse impacts would be avoided or reduced for all residents during the operational phase.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Worksheet Summary

The proposed project would demolish the existing Rehabilitation Institute of Southern California campus, which is currently unoccupied, and construct a new affordable housing community with 166 units. The new housing development would be reserved for seniors aged 62+ and earning between 30-70% of the area mean income (AMI). Increasing affordable housing units for seniors supports the housing priorities detailed in the City's Housing Element. The proposed project, which is an infill site converting a commercial facility into multifamily housing, would not result in any disproportionately high or adverse impacts to minority or low-income populations.

Several studies have been conducted on the potential for environmental impacts related to the project. Some of these studies identified environmental concerns and mitigation measures:

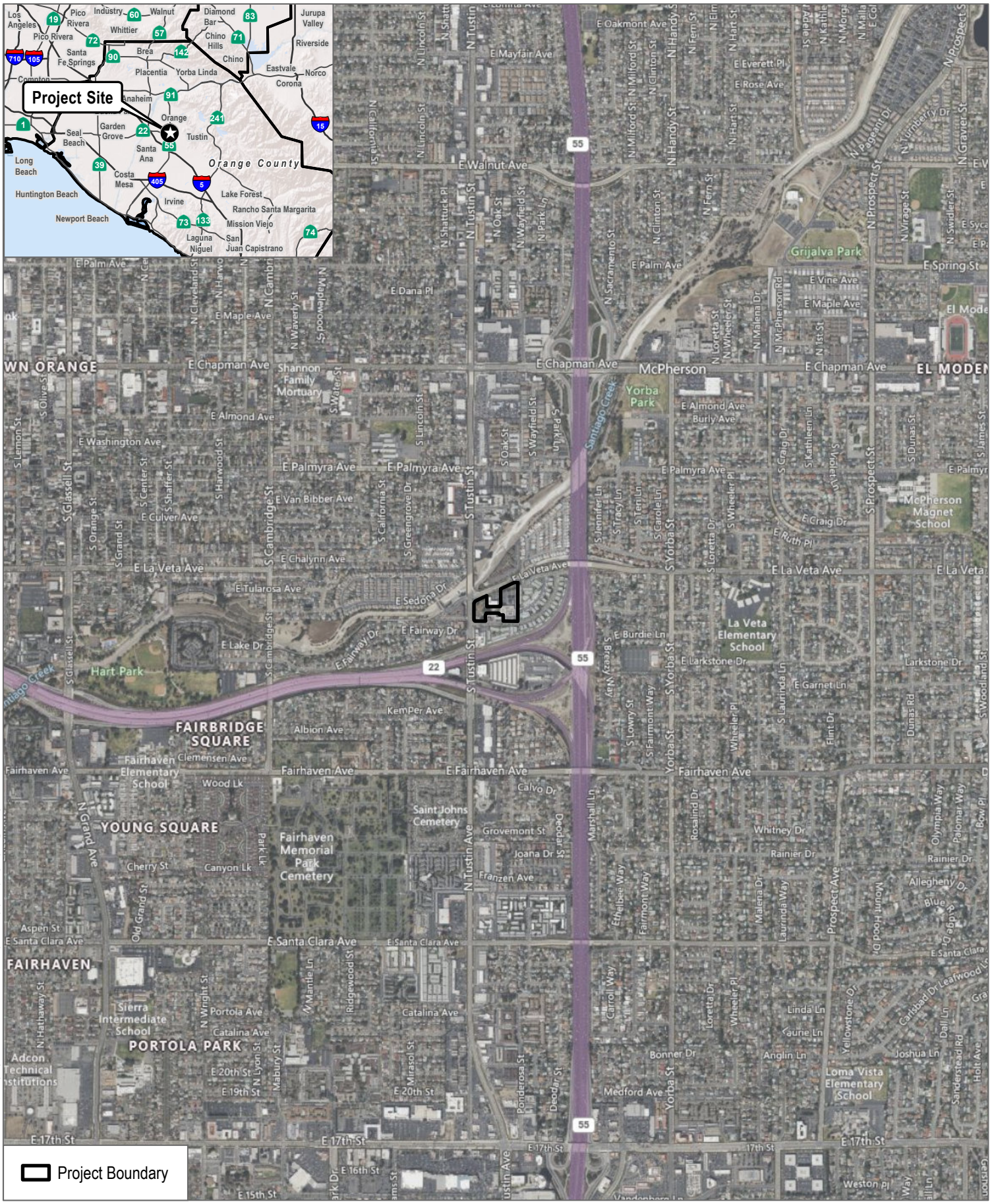
- **Air Quality:** Construction activities such as grading may cause temporary adverse impacts to air quality from fugitive dust during construction of the residential community; however, with the implementation of air quality mitigation measures required for fugitive dust required by SCQAMD Rule 403 (see **MM-AIR-1**), impacts to air quality would be minimized or avoided. Therefore, no disproportionate impacts to low income and/or minority communities would occur as a result of air quality.

- **Asbestos and Lead Paint:** A Pre-Renovation Asbestos and Lead Assessment for the project site was completed by EFI Global in August 2020. The purpose of the assessment was to identify whether ACMs and/or LBPs were present so that they may be properly managed prior to demolition of the structure. ACMs and LBPs were identified in multiple areas throughout the existing building. All ACMs and LBPs were found to be in good condition at the time of the assessment. Materials found to contain asbestos and/or presumed to contain asbestos that could be impacted during demolition activities, by law, must first be abated and properly disposed of by a licensed asbestos abatement contractor prior to such work (**MM-TOX-1**). In addition, all lead-laden components identified would be demolished or abated by certified lead trained personnel in accordance with all applicable federal, state, and local regulations prior to demolition activities (**MM-TOX-2**). Therefore, no disproportionate impacts to low income and/or minority communities would occur as a result of ACMs or LBPs.

- **Noise.** Construction of the project would generate noise associated with the operation of heavy construction equipment and construction-related activities in the vicinity of the project site. This would result in temporary, intermittent increases in ambient noise levels which would fluctuate depending on the particular construction phase. Pursuant to Chapter 8.24, Noise Control, of the City's Code of Ordinances, noise associated with construction is exempt from the provisions of the noise ordinance, provided that activities take place between the hours of 7:00 a.m. and 8:00 p.m. on any day except for Sunday or a federal holiday. The project would not require nighttime construction or construction on weekends or holidays, and therefore construction noise would not be subject to the City's noise standards identified in Table 8.24.040.

A Technical Noise Memorandum for the proposed project prepared by Dudek in February 2024 determined that exposure from traffic generated by the SR-55 and SR-22 freeways were the primary noise sources for the development. Exposure from traffic noise would exceed the HUD exterior noise standard of 65 dBA DNL by up to 6 dB at the façade of units closest to the SR-22 freeway and South Tustin Street, putting those units in HUD's "normally unacceptable" noise range. The noise levels at the other modeled building façade receivers on the project site, except for the northern façade of Building 1, also would exceed the HUD exterior noise standard of 65 dBA DNL to varying degrees. To reduce noise levels to within HUD thresholds, all residential units would be equipped with a forced air HVAC unit that allows for a "windows closed" condition (i.e., windows do not need to be left open for ventilation). In addition, all windows and exterior doors in the east-facing residential units on floors 2-4 of Building 1 shall have a Sound Transmission Class (STC) rating of 30 or greater (MM-NOI-1); all windows and exterior doors in the south- and east-facing residential units on floors 2-4 of Building 2 shall have an STC ratting of 30 or greater (MM-NOI-2); all windows and exterior doors in the west-facing residential units of floors 1-4 of Building 3 shall have an STC rating of 35 or greater (MM-NOI-3); and all windows and exterior doors in the north- and south-facing residential units on floors 1-4 of Building 3 shall have an STC rating of 30 or greater (MM-NOI-4). Therefore, no disproportionate impacts to low income and/or minority communities would occur as a result of noise.

Figure 1. Project Location



SOURCE: Bing Imagery 2021

FIGURE 1

Project Location

Orion Apartments

DUDEK

Figure 2. Site Vicinity

SOURCE: AEI, 2024

FIGURE 2

Site Vicinity

Orion Apartments

DUDEK

Attachment 1. Architectural Concept Designs

MATERIAL / COLOR LEGEND

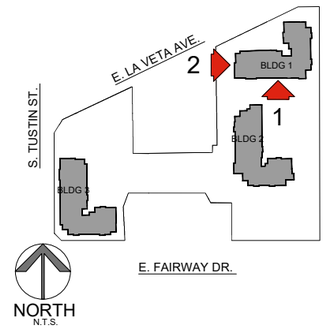
1	LIGHT SAND FINISH STUCCO	A	SW 6355 TRUE PENNY
2	VINYL WINDOWS	B	SW 7076 CYBERSPACE
3	METAL RAILING	C	SW 7647 CRUSHED ICE
4	METAL AWINING		
5	1" METAL SCREED CHANNEL		
6	ALUMINUM STOREFRONT		
7	EXTERIOR WALL MOUNTED LIGHT FIXTURE		
8	BUILDING NUMBER SIGNAGE		

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A4.0 FOR THE COLOR AND MATERIAL BOARD

LEFT ELEVATION 2

FRONT ELEVATION 1

KEY MAP



THE ORION

ORANGE, CA

BUILDING 1 ELEVATIONS

1"=10'-0" 0 5' 10' 20' 30'

DATE: 12-27-21
JOB NO.: 2020-009

A2.2

USA PROPERTIES FUND INC.
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MATERIAL / COLOR LEGEND

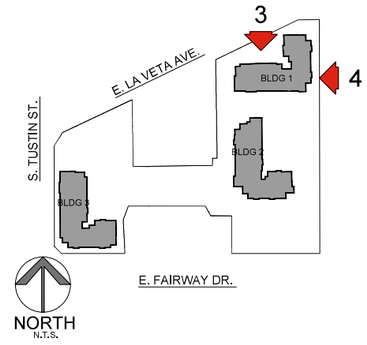
1	LIGHT SAND FINISH STUCCO	A	SW 6355 TRUE PENNY
2	VINYL WINDOWS	B	SW 7076 CYBERSPACE
3	METAL RAILING	C	SW 7647 CRUSHED ICE
4	METAL AWNING		
5	1" METAL SCREED CHANNEL		
6	ALUMINUM STOREFRONT		
7	EXTERIOR WALL MOUNTED LIGHT FIXTURE		
8	BUILDING NUMBER SIGNAGE		

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A4,0 FOR THE COLOR AND MATERIAL BOARD

RIGHT ELEVATION 4

REAR ELEVATION 3

KEY MAP



Monday, January 10, 2022 1:23:04 PM
\\FILES32\DFS\RESIDENTIAL\2020\2020-009 RCC ORION AFFORDABLE ORANGE\03 DESIGN\SCHEM\AUTOCAD\20-009_A2.2 - A2.11 BUILDING ELEVATIONS.DWG

THE ORION

ORANGE, CA

BUILDING 1 ELEVATIONS

1"=10'-0" 0 5' 10' 20' 30'

DATE: 12-27-21
JOB NO.: 2020-009

A2.3

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(714) 803-7200

AO ARCHITECTS
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(714) 639-9860

Architecture.
Design.
Relationships.

MATERIAL / COLOR LEGEND

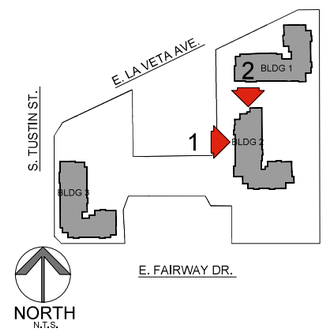
1	LIGHT SAND FINISH STUCCO	A	SW 6355 TRUE PENNY
2	VINYL WINDOWS	B	SW 7076 CYBERSPACE
3	METAL RAILING	C	SW 7647 CRUSHED ICE
4	METAL AWNING		
5	1" METAL SCREED CHANNEL		
6	ALUMINUM STOREFRONT		
7	EXTERIOR WALL MOUNTED LIGHT FIXTURE		
8	BUILDING NUMBER SIGNAGE		

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A4,0 FOR THE COLOR AND MATERIAL BOARD

LEFT ELEVATION 2

FRONT ELEVATION 1

KEY MAP



THE ORIENT

ORANGE, CA

BUILDING 2 ELEVATIONS

1"=10'-0" 0 5' 10' 20' 30'

DATE: 12-27-21

JOB NO.: 2020-009

A2.6

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Architecture. Design. Relationships.

MATERIAL / COLOR LEGEND

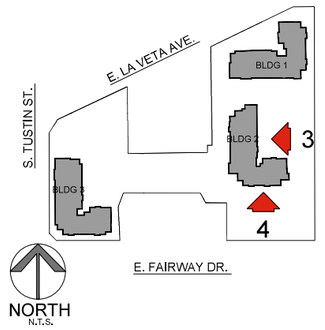
1	LIGHT SAND FINISH STUCCO	A	SW 6355 TRUE PENNY
2	VINYL WINDOWS	B	SW 7076 CYBERSPACE
3	METAL RAILING	C	SW 7647 CRUSHED ICE
4	METAL AWNING		
5	1" METAL SCREED CHANNEL		
6	ALUMINUM STOREFRONT		
7	EXTERIOR WALL MOUNTED LIGHT FIXTURE		
8	BUILDING NUMBER SIGNAGE		

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A4,0 FOR THE COLOR AND MATERIAL BOARD

RIGHT ELEVATION 4

REAR ELEVATION 3

KEY MAP



THE ORION

ORANGE, CA

BUILDING 2 ELEVATIONS

1"=10'-0" 0 5' 10' 20' 30'

DATE: 12-27-21
JOB NO.: 2020-009

A2.7

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MATERIAL / COLOR LEGEND

1	LIGHT SAND FINISH STUCCO	A	SW 6355 TRUE PENNY
2	VINYL WINDOWS	B	SW 7076 CYBERSPACE
3	METAL RAILING	C	SW 7647 CRUSHED ICE
4	METAL AWNING		
5	1" METAL SCREED CHANNEL		
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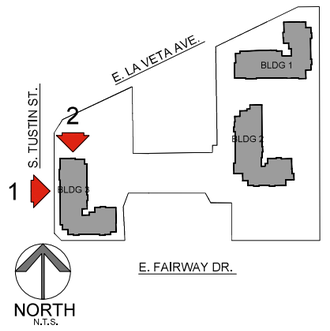
7	EXTERIOR WALL MOUNTED LIGHT FIXTURE		
8	BUILDING NUMBER SIGNAGE		

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A4,0 FOR THE COLOR AND MATERIAL BOARD

LEFT ELEVATION 2

FRONT ELEVATION 1

KEY MAP



BUILDING 3 ELEVATIONS

1"=10'-0" 0 5' 10' 20' 30'

DATE: 12-27-21
JOB NO.: 2020-009

A2.10

THE ORION

ORANGE, CA

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MATERIAL / COLOR LEGEND

1	LIGHT SAND FINISH STUCCO	A	SW 6355 TRUE PENNY
2	VINYL WINDOWS	B	SW 7076 CYBERSPACE
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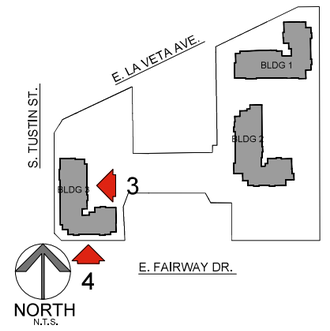
8	BUILDING NUMBER SIGNAGE		

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A4,0 FOR THE COLOR AND MATERIAL BOARD

RIGHT ELEVATION 4

REAR ELEVATION 3

KEY MAP



THE ORION

ORANGE, CA

BUILDING 3 ELEVATIONS

1"=10'-0" 0 5' 10' 20' 30'

DATE: 12-27-21
JOB NO.: 2020-009

A2.11

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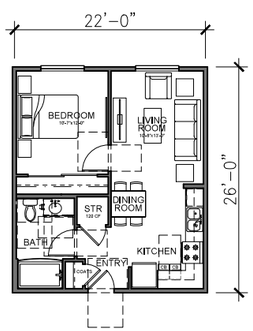
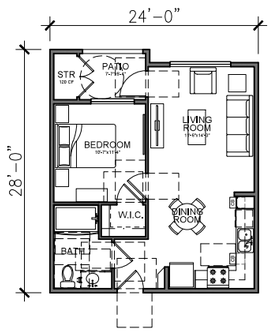


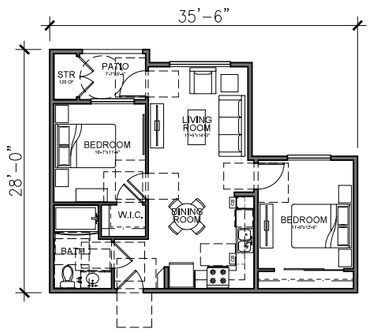
UNIT A1: 1 BEDROOM / 1BATH

Net SF: 539



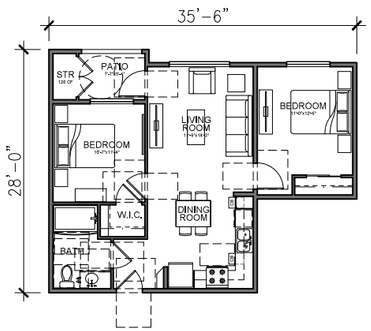
UNIT A2: 1 BEDROOM / 1BATH

Net SF: 537



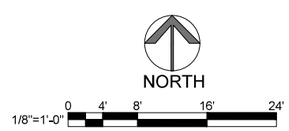
UNIT B1: 2 BEDROOM / 1BATH

Net SF: 700



UNIT B1 ALT: 2 BEDROOM / 1BATH

Net SF: 700



THE ORION

ORANGE, CA

UNIT PLANS

A3.0

DATE: 12-27-21
JOB NO.: 2020-009

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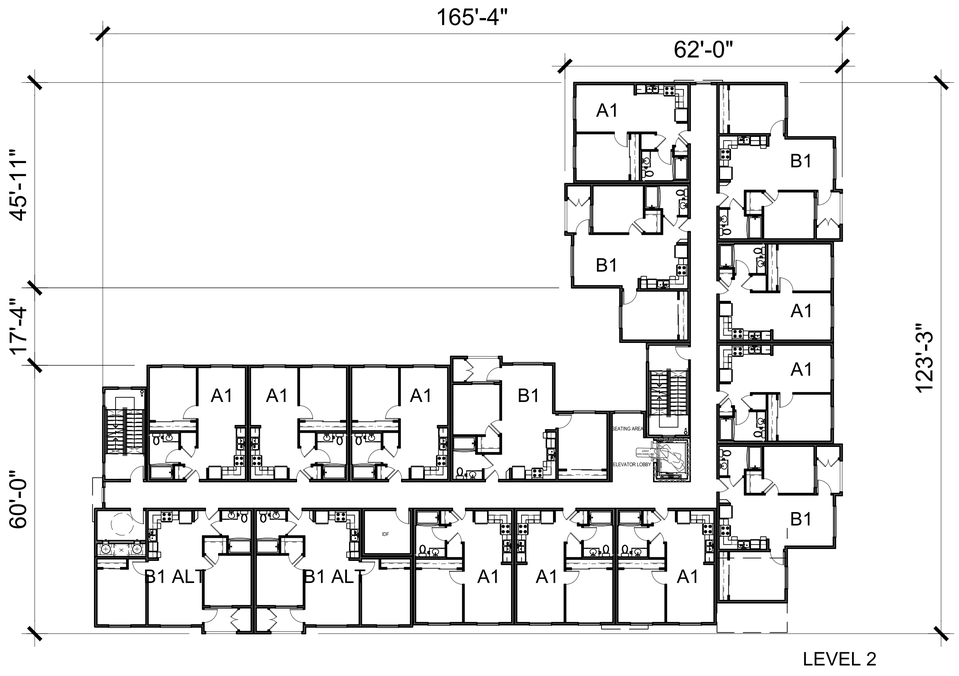
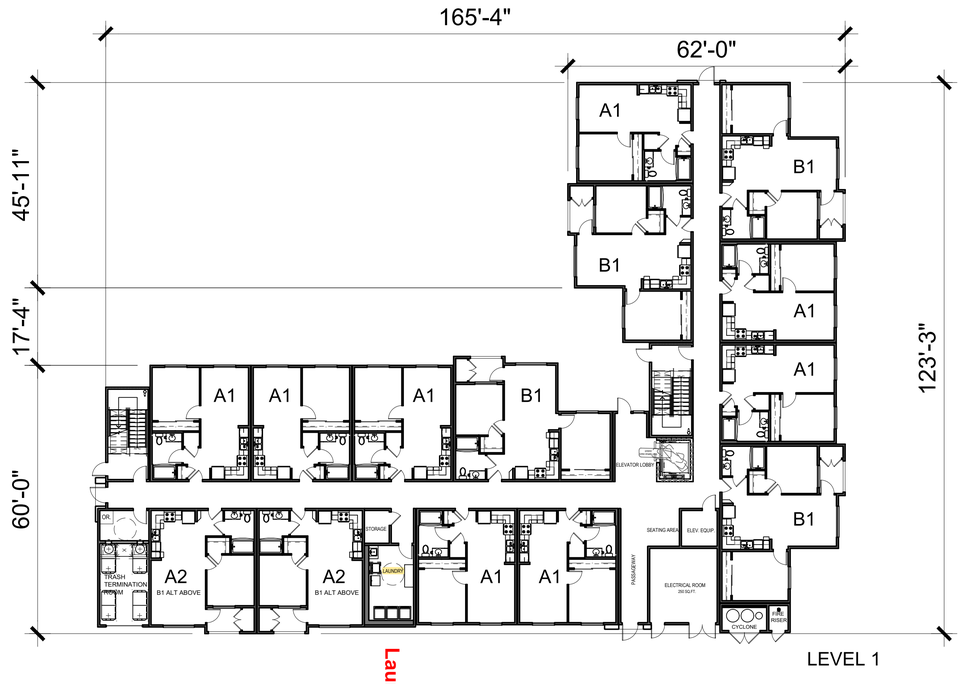
Design.
Relationships.

Laundry Room Building 1, Level 1





Laundry Room

1/16"=1'-0" 0 8' 16' 32' 48'

BUILDING 1 COMPOSITE PLAN

A2.0

DATE: 12-27-21
JOB NO.: 2020-009

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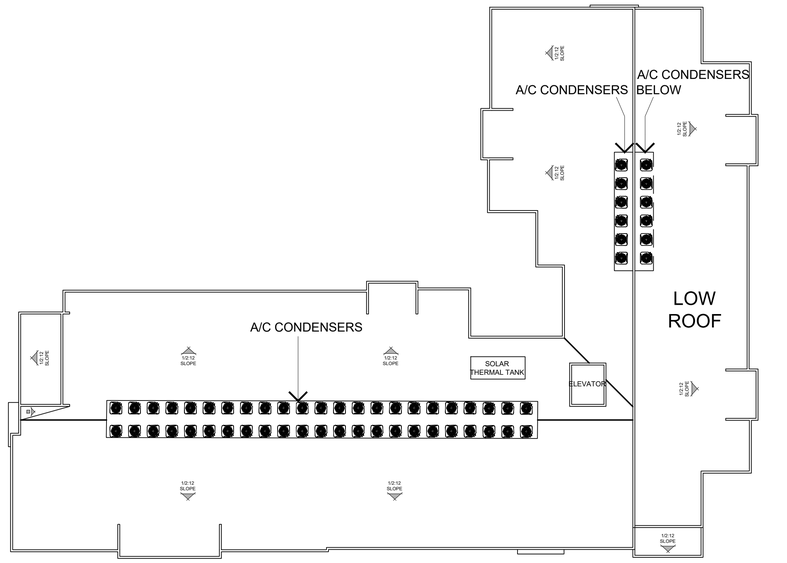
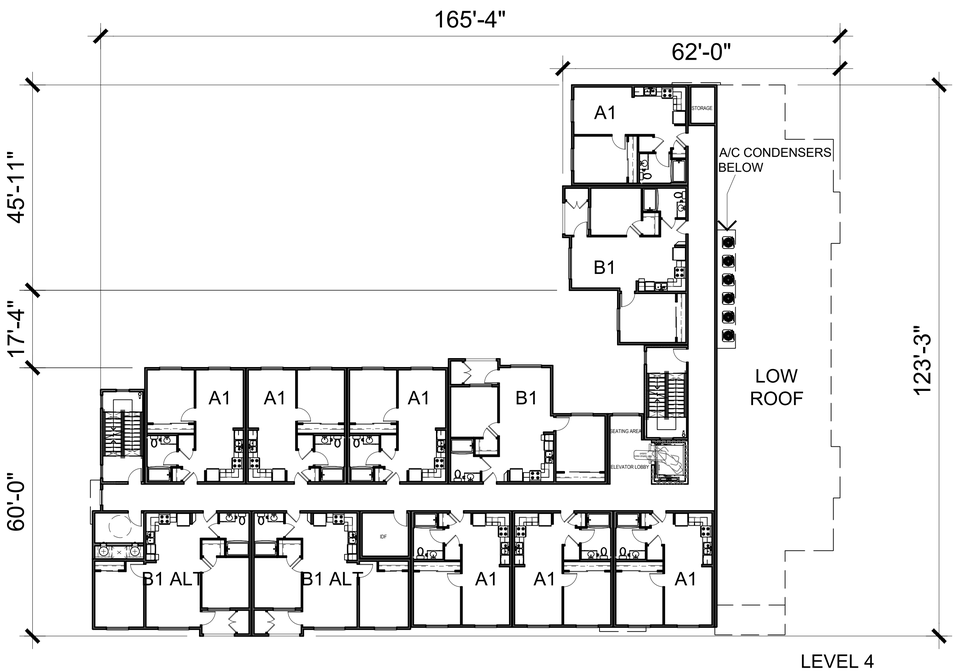
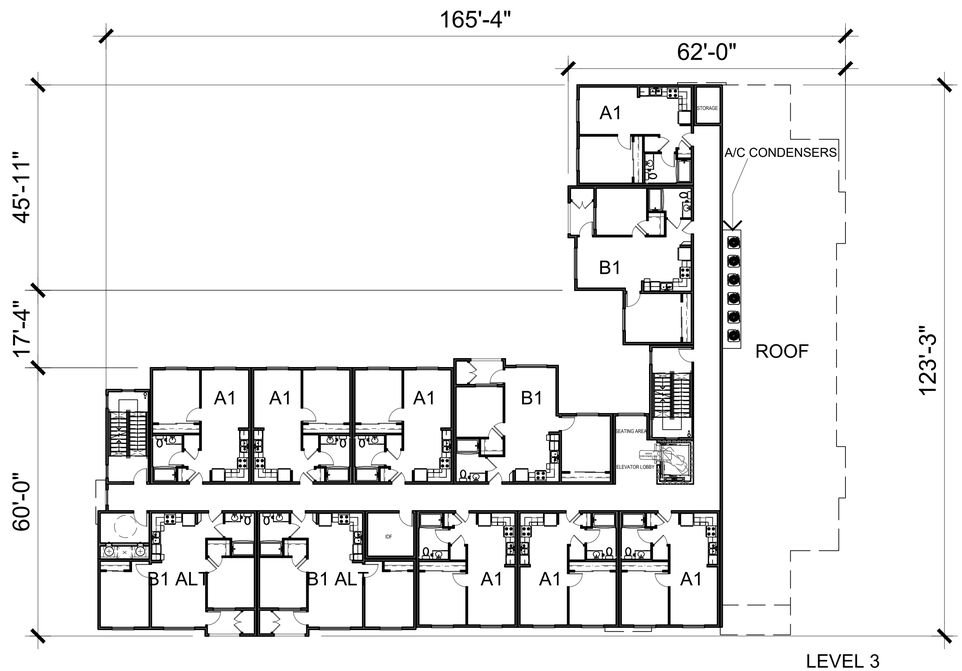
Architecture. Design. Relationships.



ROOF



LEVEL 4



LEVEL 3

BUILDING 1 COMPOSITE PLAN

A2.1

1/16"=1'-0" 0 8' 16' 32' 48'

DATE: 12-27-21
JOB NO.: 2020-009

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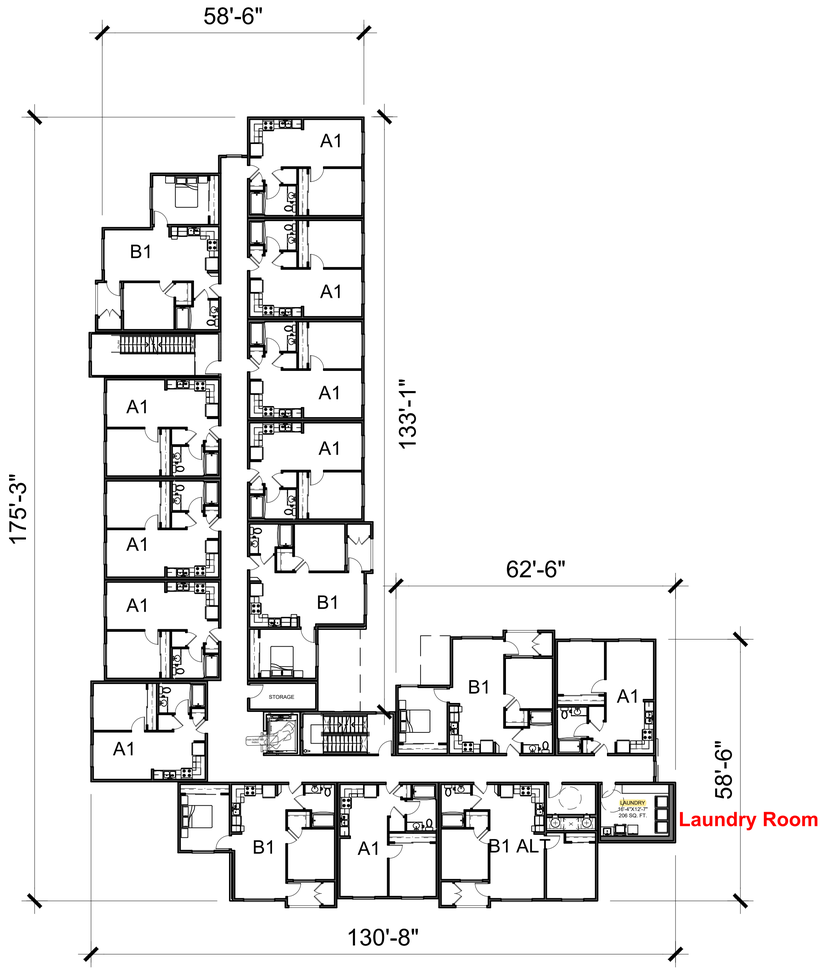
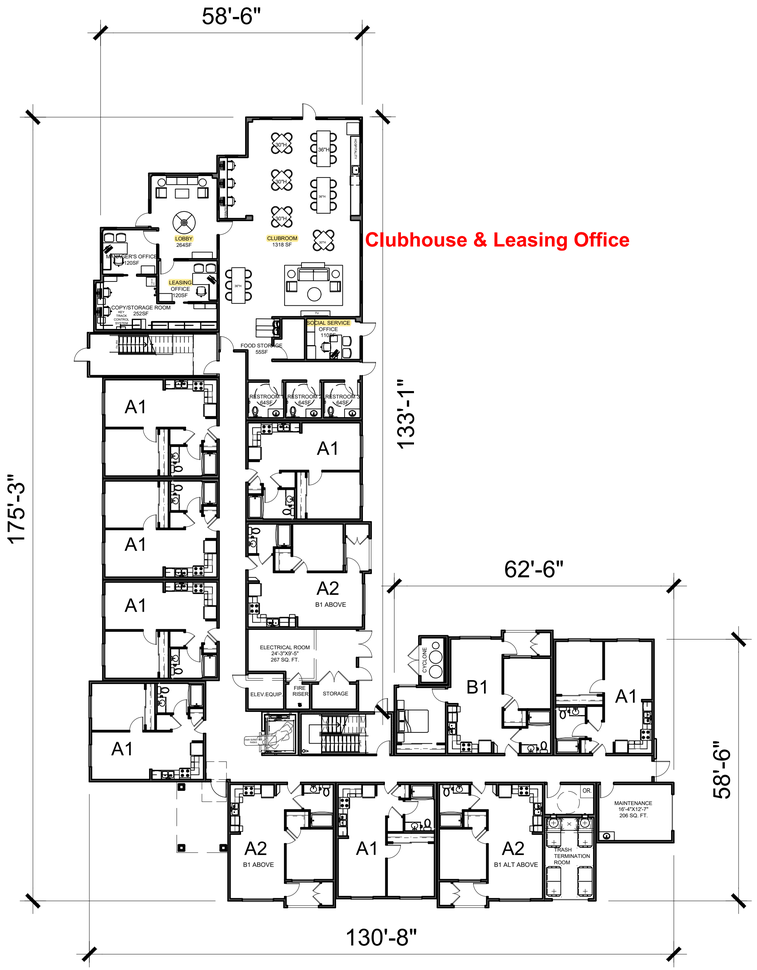
Architecture. Design. Relationships.

Laundry Room Building 2, Level 1

Clubhouse Building 2, Level 1



LEVEL 2



LEVEL 1

1/16"=1'-0" 0 8' 16' 32' 48'

BUILDING 2 COMPOSITE PLAN

A2.4

DATE: 12-27-21
JOB NO.: 2020-009

THE ORION

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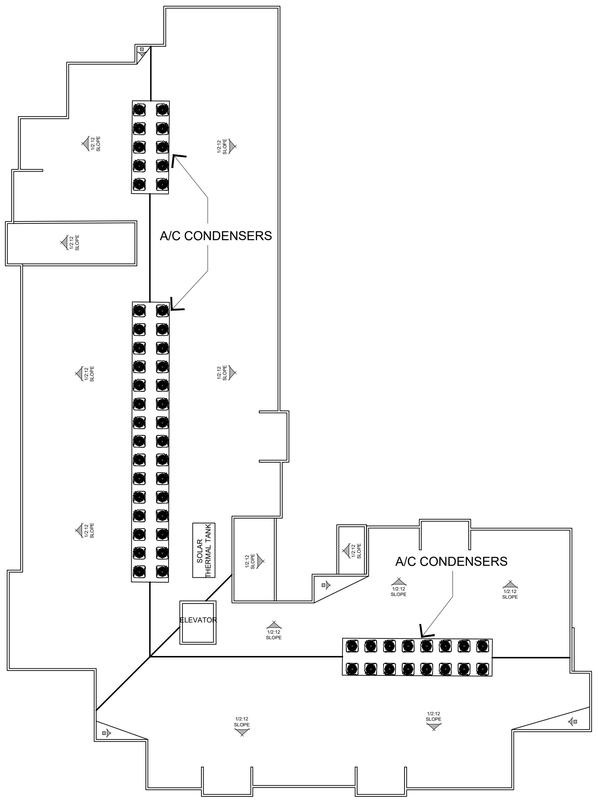
Architecture.
Design.
Relationships.



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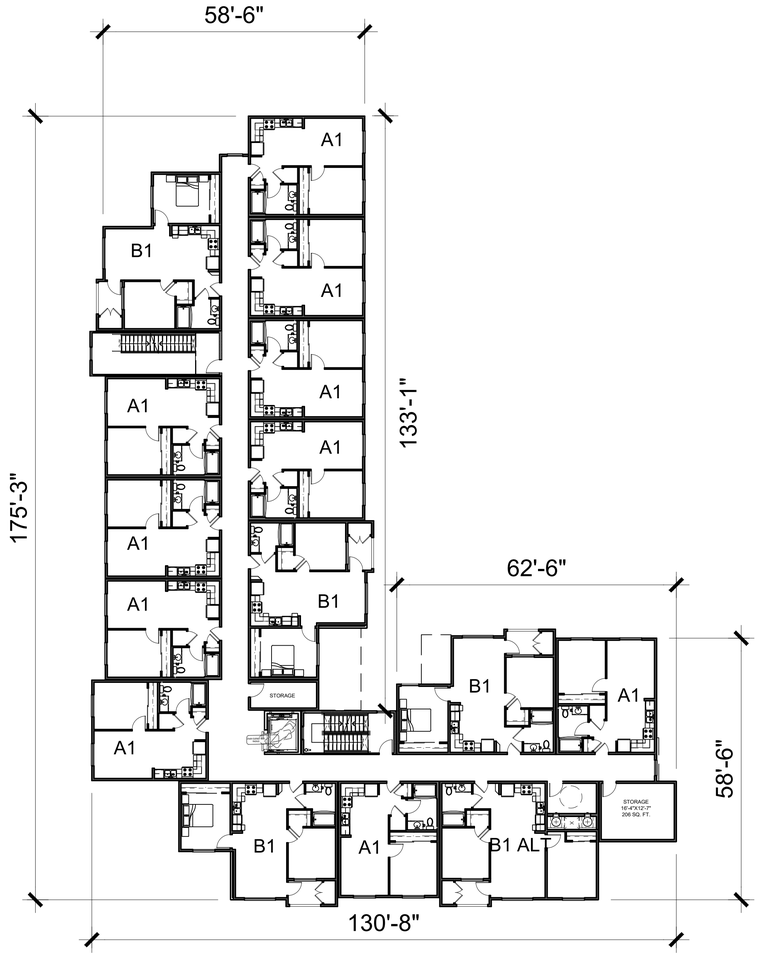
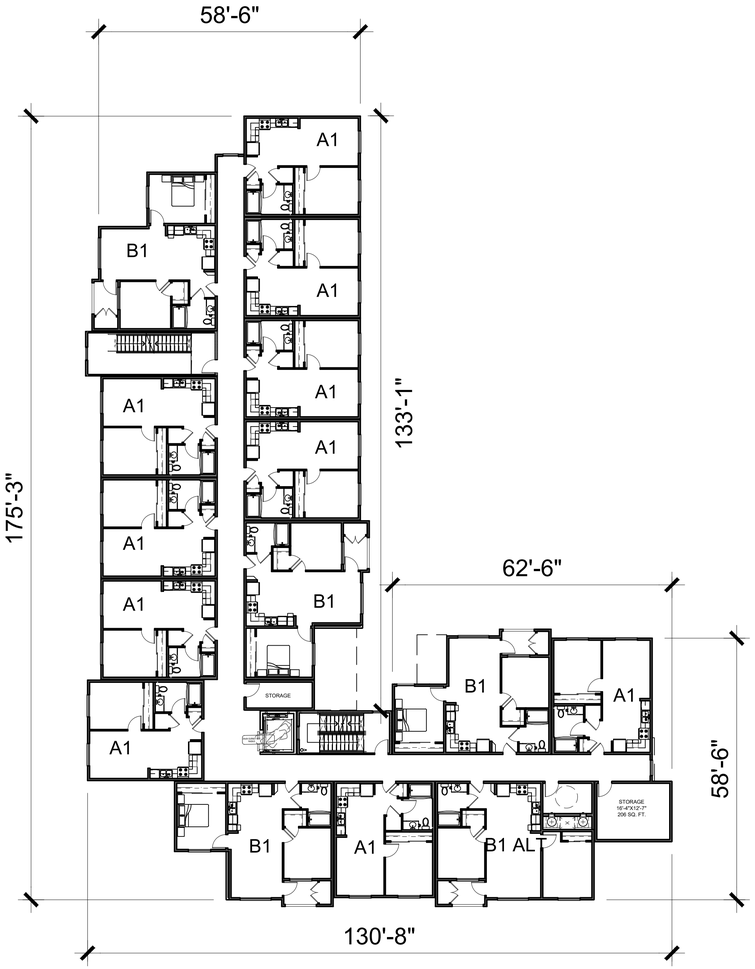


LEVEL 4



LEVEL 3

1/16"=1'-0" 0 8' 16' 32' 48'

BUILDING 2 COMPOSITE PLAN

A2.5

DATE: 12-27-21
JOB NO.: 2020-009

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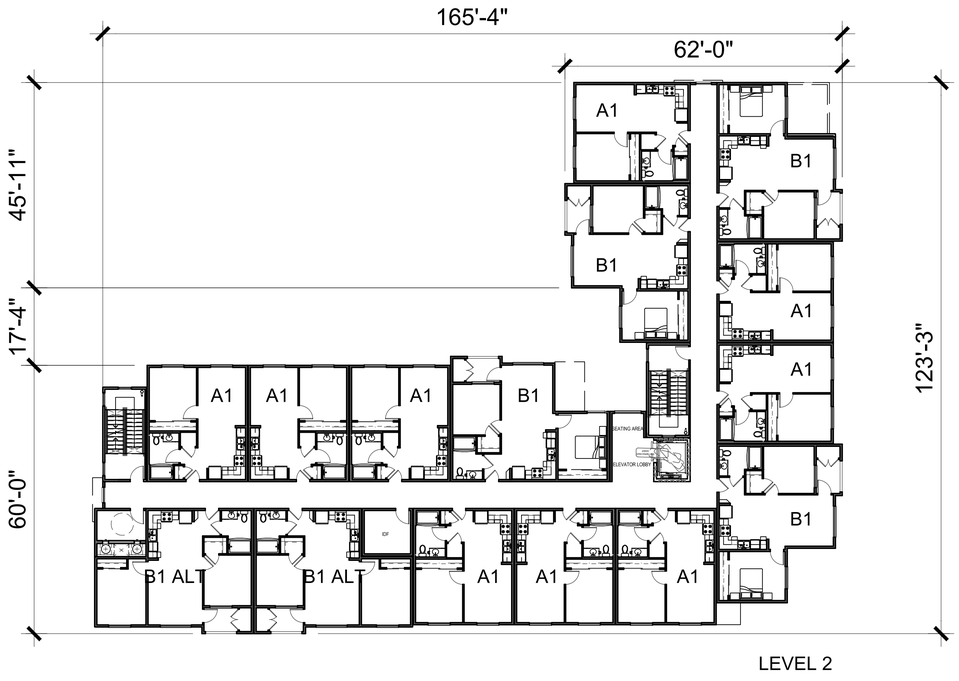
Architecture. Design. Relationships.

Laundry Room Building 3, Level 1



0 8' 16' 32' 48'
1/16"=1'-0"

BUILDING 3 COMPOSITE PLAN

A2.8

DATE: 12-27-21
JOB NO.: 2020-009

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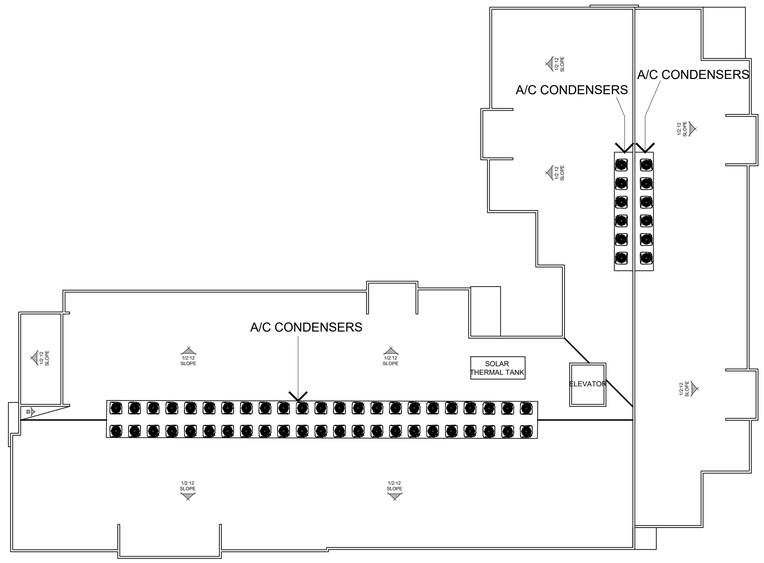

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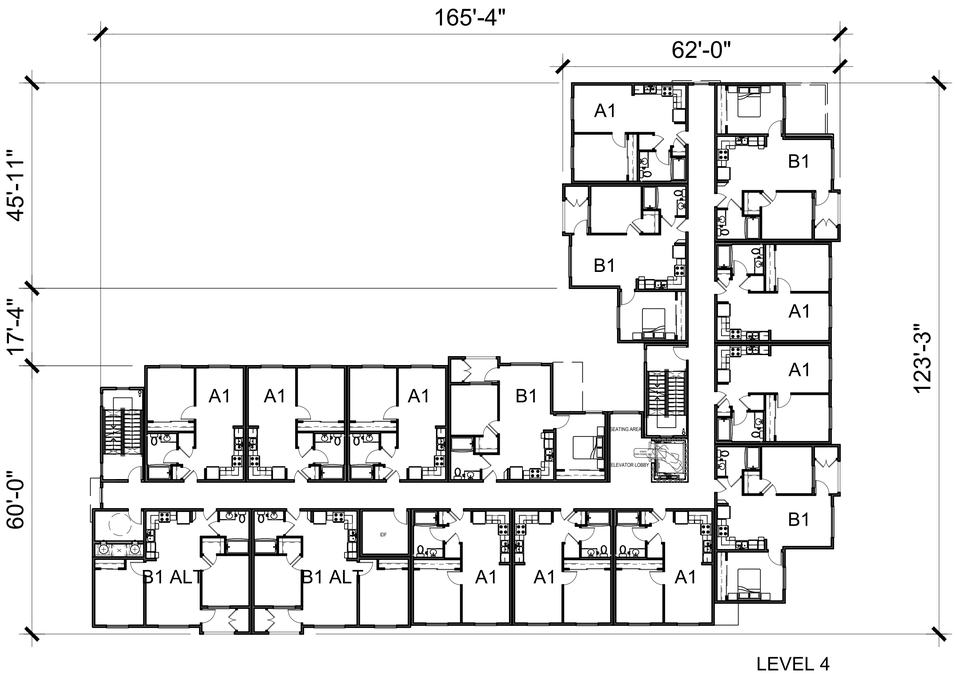
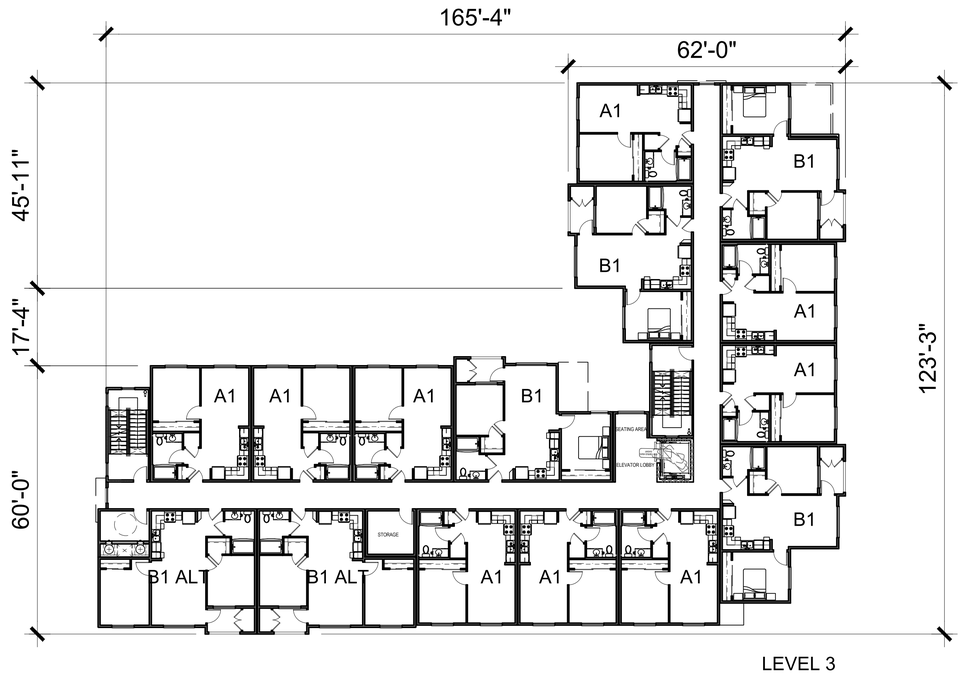


LEVEL 4



LEVEL 3

BUILDING 3 COMPOSITE PLAN

A2.9

THE ORION

ORANGE, CA

1/16"=1'-0" 0 8' 16' 32' 48'

DATE: 12-27-21
JOB NO.: 2020-009

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LEGEND

1. CENTRAL COMMUNITY COURTYARD (SEE ENLARGEMENT)
   - (2) BBQS WITH COUNTERTOP
   - LARGE SHADE COVER
   - VARIETY OF TABLES & LOUNGE SEATING
2. STROLLING GARDEN
   - MEANDERING PATHS
   - VARIETY OF SEATING NODES
   - LUSH MOUNDED GARDEN
3. PROJECT IDENTITY SIGNAGE
4. FLAG POLE
5. EXISTING TREES ANTICIPATED TO REMAIN (TYP.)
6. DROP OFF / PICK UP AREA WITH DECORATIVE PAVING & SEATING
7. GATED VEHICULAR ENTRY
8. DOG PARK
   - ENCLOSED SPACE W/ DOUBLE TRAP ENTRY
   - SYNTHETIC TURF
   - BENCH SEACHING W/ UMBRELLA
9. ICONIC PALM GROUPING AT CORNER
10. ENTERTAINMENT COURTYARD (SEE ENLARGEMENT)
    - (2) BBQS WITH COUNTERTOP
    - OPEN & COVERED SEATING OPPORTUNITIES
11. COMMUNITY GARDEN AREA (SEE ENLARGEMENT)
12. BIKE RACK LOCATIONS
    - (5) BIKES AT EACH LOCATION
13. EXISTING BUS STOP
14. PROPOSED IRRIGATION BACKFLOW PREVENTER LOCATION
15. SITE DIRECTORY
16. 6' HT. MONUMENT SIGN

TREE LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	W/H	SIZE	QTY.	WUCOLS
	Tristania conferta	Brisbane Box	8' x 20'	24"B	30	M
	Magnolia grandiflora 'Little Gem'	Southern Magnolia	8' x 15'	24"B	4	M
	Bauhinia purpurea	Orchid Tree	15' x 18'	36"B	1	M
	Arbutus 'Marina'	Marina Strawberry Tree	10' x 12'	24"B	17	L
	Lagerstroemia i. "Watermelon"	Crape Myrtle (Red)	10' x 12'	24"B		M
	Platanus acerifolia	London Plane Tree	20' x 25'	36"B	16	M
	Ulmus parvifolia	Chinese Elm	25' x 30'	36"B		M
	Magnolia grandiflora 'D.D. Blanchard'	D.D. Blanchard Magnolia	10' x 25'	24"B	4	M
	Pinus canariensis	Canary Island Pine	15' x 30'	24"B	1	L
	Melaleuca quinquenervia	Paperbark Tea Tree	15' x 25'	24"B	4	L
	Chitalpa tashkentensis 'Pink Dawn'	Pink Dawn Chitalpa	8' x 15'	24"B	3	L
	Strelitzia nicolai	Giant Bird Of Paradise	5' x 8'	15 Gal.	14	M
	Cinnamomum camphora	Camphor Tree	30' x 60'	36"B	3	M
	Citrus x sinensis	Orange Tree	6' x 10'	15 Gal.	11	M
	Pyrus calleryana	Ornamental Pear	10' x 15'	24"B	2	M
	Koelreuteria paniculata	Goldenrain Tree	15' x 25'	24"B	5	M
	PALMS					
	Chamaerops humilis	Mediterranean Fan Palm		24"B	1	L
	Phoenix Dactylifera	Date Palm		18' BTH	5	L
	Washingtonia robusta	Mexican Fan Palm		18' BTH	10	L

SHRUB LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	W/H	SIZE	QTY.	WUCOLS
	Agave 'Blue Flame'	Blue Flame Agave	3' x 3'	5 G	100	L
	Agave attenuata	Foxtail Agave	3' x 3'	5 G	90	L
	Agave desmettiana ' Variegata'	Variegated Dwarf Century Plant	3' x 3'	5 G	70	L
	Arbutus unedo 'Elfin King'	Elfin King Strawberry King	3' x 3'	5 G	26	L
	Buxus microphylla japonica	Japanese Boxwood	2' x 2'	5 G	120	M
	Callistemon viminalis 'LittleJohn'	Dwarf Bottlebrush	2' x 2'	5 G	80	M
	Carex tumulicola	Foothill Sedge	18"' x 18"'	1 G	100	L
	Chondropetalum tectorum	Cape Rush	3' x 3'	5 G	150	M
	Dianella revoluta 'DR5000'	Little Rev Flax Lily	18"' x 18"'	1 G	300	M
	Dianella tasmanica 'Silver Streak'	Silver Streak Flax Lily	2' x 3'	5 G	300	M
	Ilex crenata 'Sky Pencil'	Sky Pencil Ilex	2' x 4'	5 G	18	L
	Ilex vomitoria 'Stokes'	Stokes Holly	2' x 2'	1 G	20	L
	Lantana hybrids 'New Gold'	New Gold Lantana	2' x 4'	5 G	5	L
	Ligustrum japonicum 'Texanum'	Wax Leaf Privet	3' x 4'	5 G	500	M
	Lomandra longifolia 'LM300'	Breeze Dwarf Mat Rush	2' x 2'	5 G	30	M
	Moraea bicolor	Fortnight Lily	2' x 4'	5 G	90	M
	Muhlenbergia capillaris 'Regal Mist'	Regal Mist Muhly	3' x 3'	5 G	270	M
	Olea europaea 'Montra'	Little Ollie Dwarf Olive	3' x 2'	5 G	500	L
	Pennisetum 'Fairy Tails'	Fairy Tails Fountain Grass	2' x 2'	1 G	180	M
	Pittosporum tobira	Tobira	3' x 3'	5 G	111	M
	Podocarpus elongatus 'Monmal'	Icee Blue Yellow-Wood	2' x 6'	5 G	38	M
	Rhaphiolepis indica 'Clara'	Indian Hawthorne	3' x 3'	5 G	500	M
	Rosa 'Flower Carpet var. 'Noatraum'	Pink Carpet Rose	4' x 2'	5 G	20	M
	Rosa f. 'Ice Berg'	White Shrub Rose	3' x 3'	5 G	60	M
	Rosmarinus officinalis 'Huntington Carpet'	Huntington Rosemary Carpet	3' x 18"'	1 G	4	L
	Strelizia reginae	Bird-of-Paradise	3' x 3'	5 G	300	M
	Stipa tenuissima	Mexican Feather Grass	2' x 2'	1 G	90	M
	Yucca filamentosa 'Golden Sword'	Golden Sword Yucca	3' x 4'	5 G	8	L

EXISTING TREE LEGEND TO REMAIN

TAG	BOTANICAL NAME	COMMON NAME
T-5	Pinus pinea	Italian Stone Pine
T-35	Melaleuca quinquenervia	Paperbark
T-47	Pinus pinea	Italian Stone Pine
T-69	Eucalyptus sideroxylon	Red Ironbark
T-84	Pinus halepensis	Aleppo Pine
T-85	Pinus halepensis	Aleppo Pine
T-86	Pinus halepensis	Aleppo Pine

***Spacing distance shown is intended to be maiximum spacing for each plant. Plants may be located closer togehter if design criteria requires it.**

NOTES:

- Landscape/Irrigation plans shall comply with the City of Orange Landscape Standards and Specifications and Water Efficient Landscape Guidelines.
- A fully automated irrigation system shall be provided.
- All parking visible from the streets, including front and side yard areas is to be screened with 5 gallon minimum shrubs at 3 ft. on center.
- Shrub areas at the foundation lines of all building and 4 ft. minimum width planters at all elevations seen from the street, shall be planted with 5 gallon materials at 3 ft. on center.
- All shrubs material in parking areas shall be 30" ht. Max. For ease of visibility into site for police monitoring.

NORTH

1"=30'-0" (0, 15', 30', 60', 90')

OVERALL LANDSCAPE PLAN

L1

THE ORION

ORANGE, CA

DATE: 02-14-22
JOB NO.: 20-023

USA PROPERTIES FUND INC.
3200 DOUGLAS BLVD. SUITE 200, ROSEVILLE, CA 95661
(916) 773-6060

MULTIFAMILY
Creating Outstanding Communities.

RIVERSIDE CHARITABLE CORPORATION

SITESCAPES
Landscape Architecture & Planning
3190-B2 Airport Loop Drive
Costa Mesa, CA 92626
Richard Pahanus, License # 3782
(949) 644-9370 FAX (714) 210-3140

AO ARCHITECTS
144 NORTH ORANGE ST., ORANGE, CA 92866
(714) 639-9860
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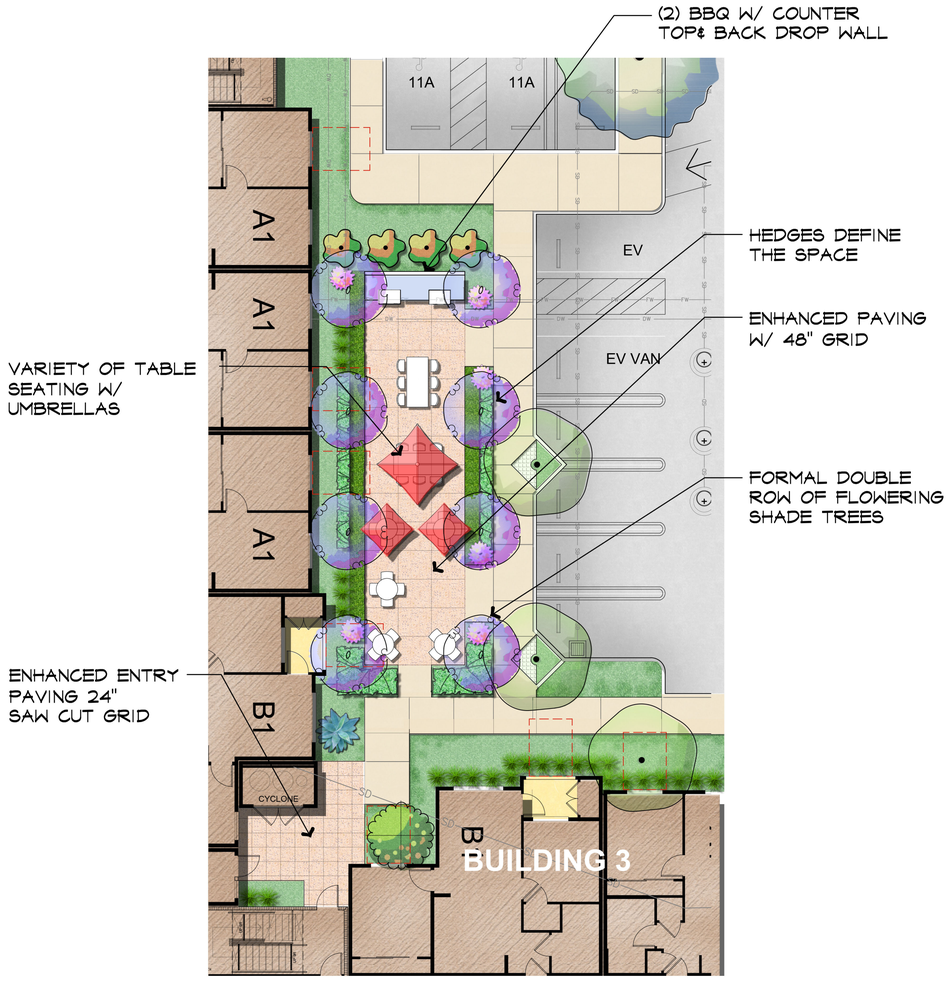
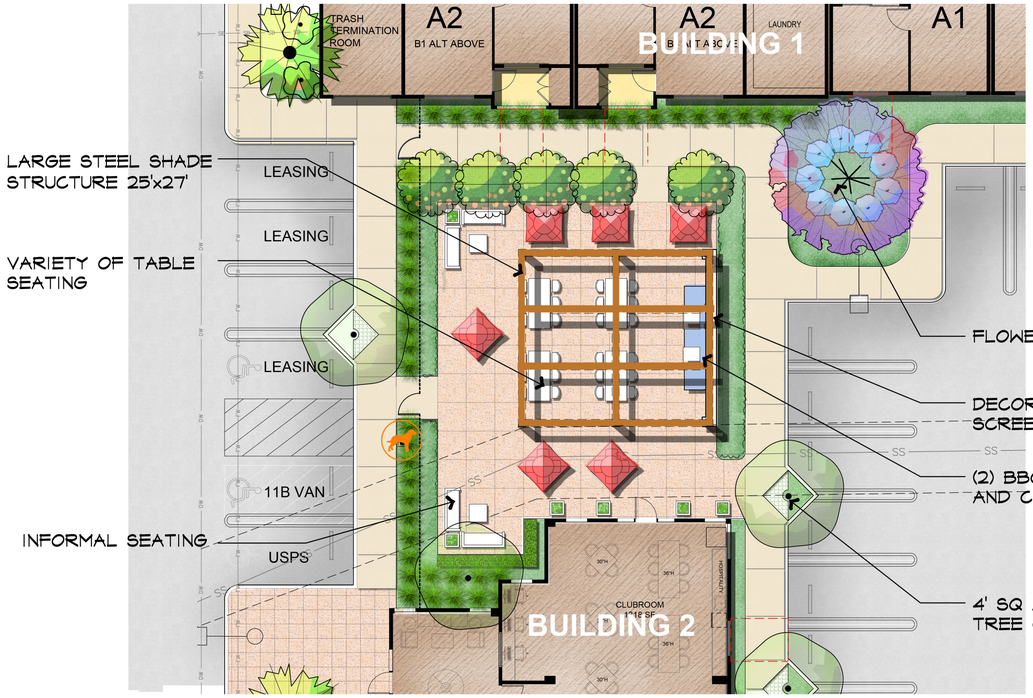
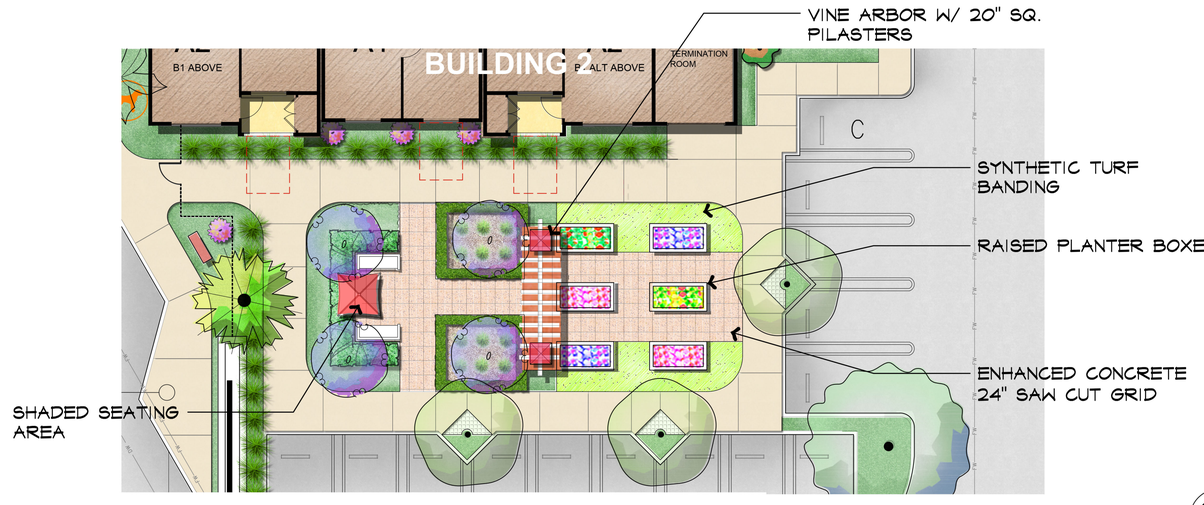


ENTERTAINMENT COURTYARD @ BUILDING 3



CENTRAL COMMUNITY COURTYARD



COMMUNITY GARDEN AREA @ BUILDING 2

NORTH

1"=10'-0" 0 5' 10' 20' 30'

LANDSCAPE ENLARGEMENT PLANS

L2

THE ORION

ORANGE, CA

DATE: 02-14-22
JOB NO.: 20-023

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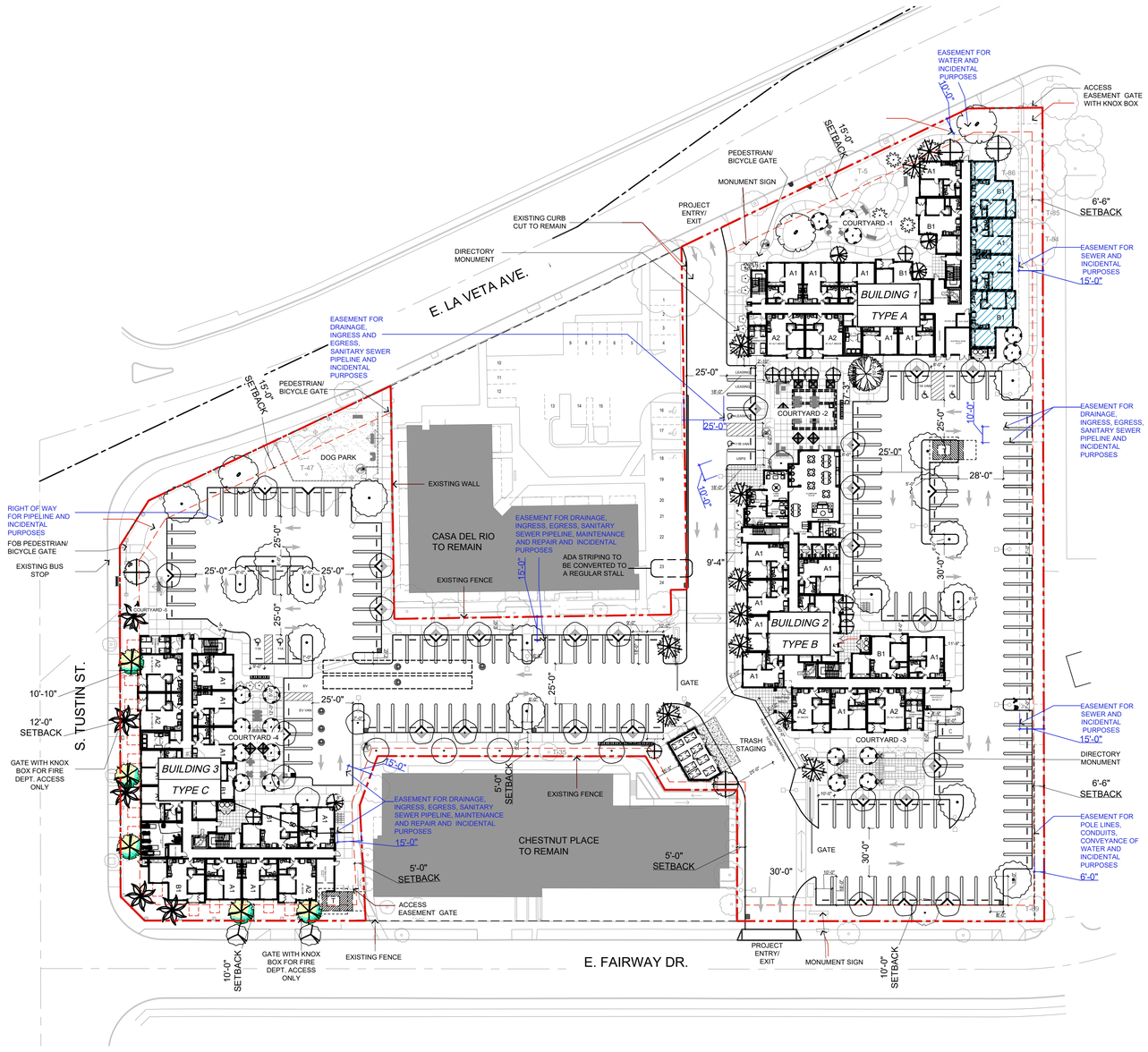

LEGEND

- 2- STORY VOLUME
- PROPERTY LINE
- EXISTING EASEMENT
- EXISTING BUILDINGS
- # / TYPE — BUILDING NUMBER / BUILDING TYPE
- T — TRANSFORMER LOCATION
- TYPICAL 90- DEGREE OPEN STALLS
- TYPICAL VAN ACCESSIBLE PARKING STALL
- RIDE SHARE/ LOADING STALL 10'X50'
- TYPICAL FINGER PLANTER
- TYPICAL DIAMOND PLANTER
- PARKING STRIPING
- DETAIL A

NORTH

1"=40'-0" (0, 20', 40', 80', 120')

THE ORION

ORANGE, CA

SITE PLAN - PROPOSED

A1.4

DATE: 02-17-22
JOB NO.: 2020-009

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(916) 773-6060

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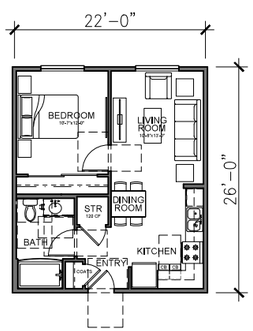
(714) 803-7200

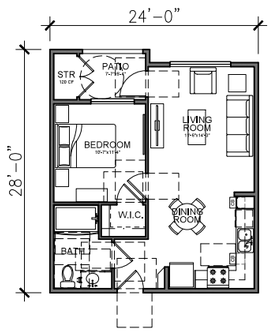
AO ARCHITECTS
144 NORTH ORANGE ST., ORANGE, CA 92866
(714) 639-9860

Architecture. Design. Relationships.



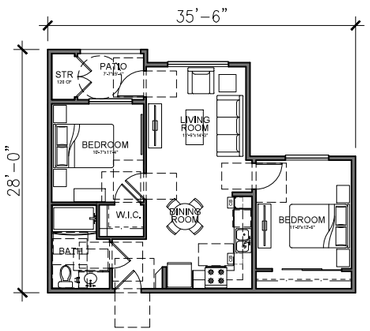
UNIT A1: 1 BEDROOM / 1BATH

Net SF: 539
Gross SF: 581



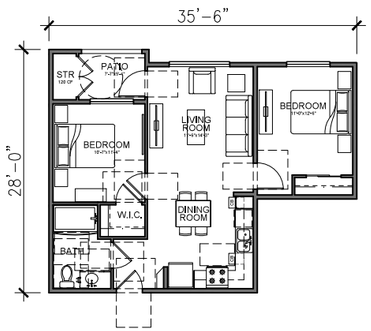
UNIT A2: 1 BEDROOM / 1BATH

Net SF: 537
Gross SF: 602



UNIT B1: 2 BEDROOM / 1BATH

Net SF: 700
Gross SF: 788



UNIT B1 ALT: 2 BEDROOM / 1BATH

Net SF: 700
Gross SF: 744

NORTH

1/8"=1'-0" 0 4' 8' 16' 24'

UNIT PLANS

A3.0

DATE: 12-27-21
JOB NO.: 2020-009

THE ORION

ORANGE, CA

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(714) 803-7200

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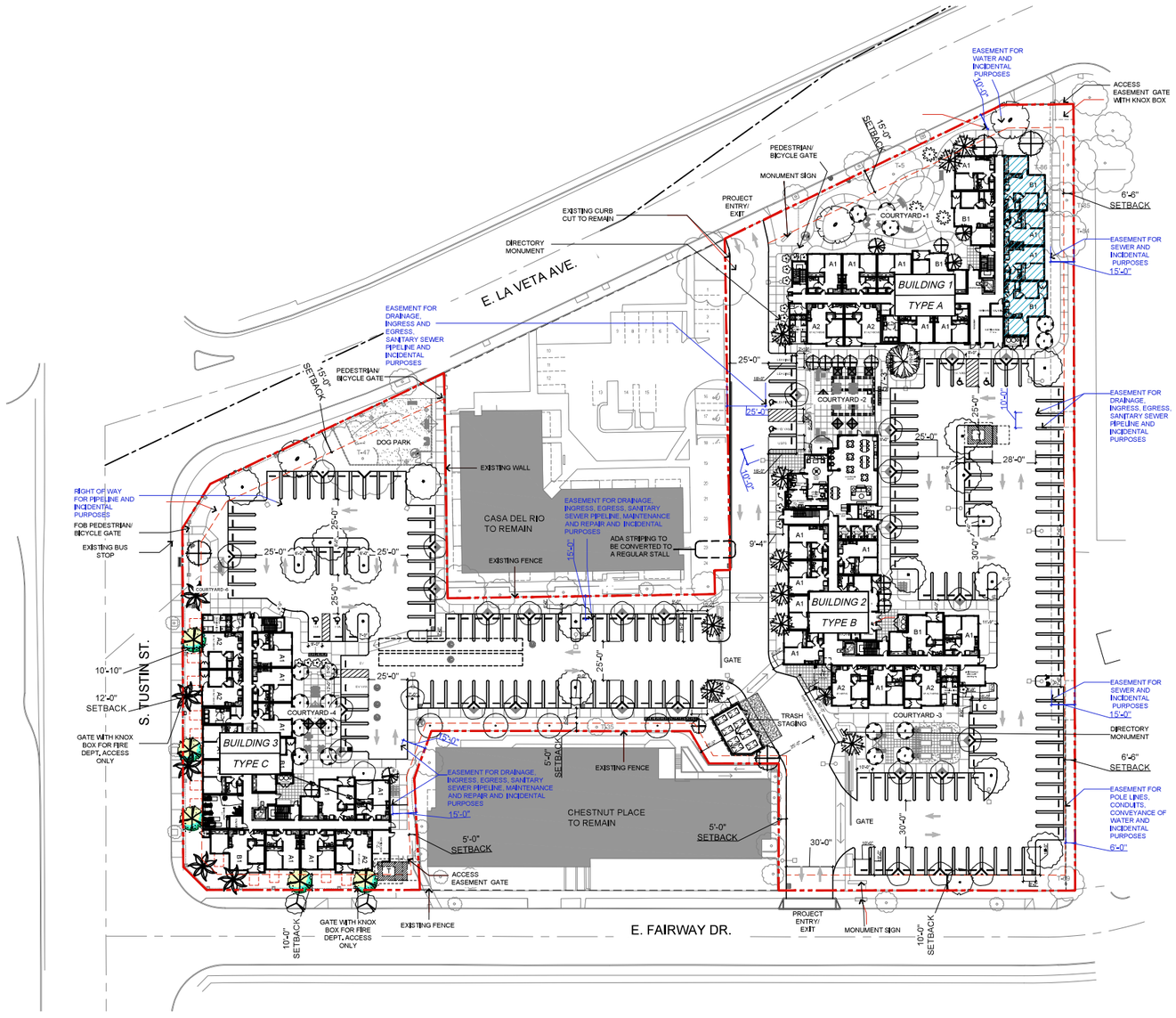
(714) 639-9860

Architecture.
Design.
Relationships.



LEGEND

- 2- STORY VOLUME
- PROPERTY LINE
- EXISTING EASEMENT
- EXISTING BUILDINGS
- # / TYPE — BUILDING NUMBER / BUILDING TYPE
- T — TRANSFORMER LOCATION
- TYPICAL 90- DEGREE OPEN STALLS
- TYPICAL VAN ACCESSIBLE PARKING STALL
- RIDE SHARE/ LOADING STALL 10'X50'
- TYPICAL FINGER PLANTER
- TYPICAL DIAMOND PLANTER
- PARKING STRIPING
- DETAIL A

NORTH

1"=40'-0" 0 20' 40' 80' 120'

Thursday, February 17, 2022 4:17:01 PM
R:\2020\2020-009 RCC ORION AFFORDABLE ORANGE\03 DESIGN\SCHEM\AUTOCAD\20-009_A1.3 - A1.4 SITE PLAN.DWG

THE ORION

ORANGE, CA

SITE PLAN - PROPOSED

A1.4

DATE: 02-17-22
JOB NO.: 2020-009

USA PROPERTIES FUND INC.
3200 DOUGLAS BLVD. SUITE 200, ROSEVILLE, CA 95661
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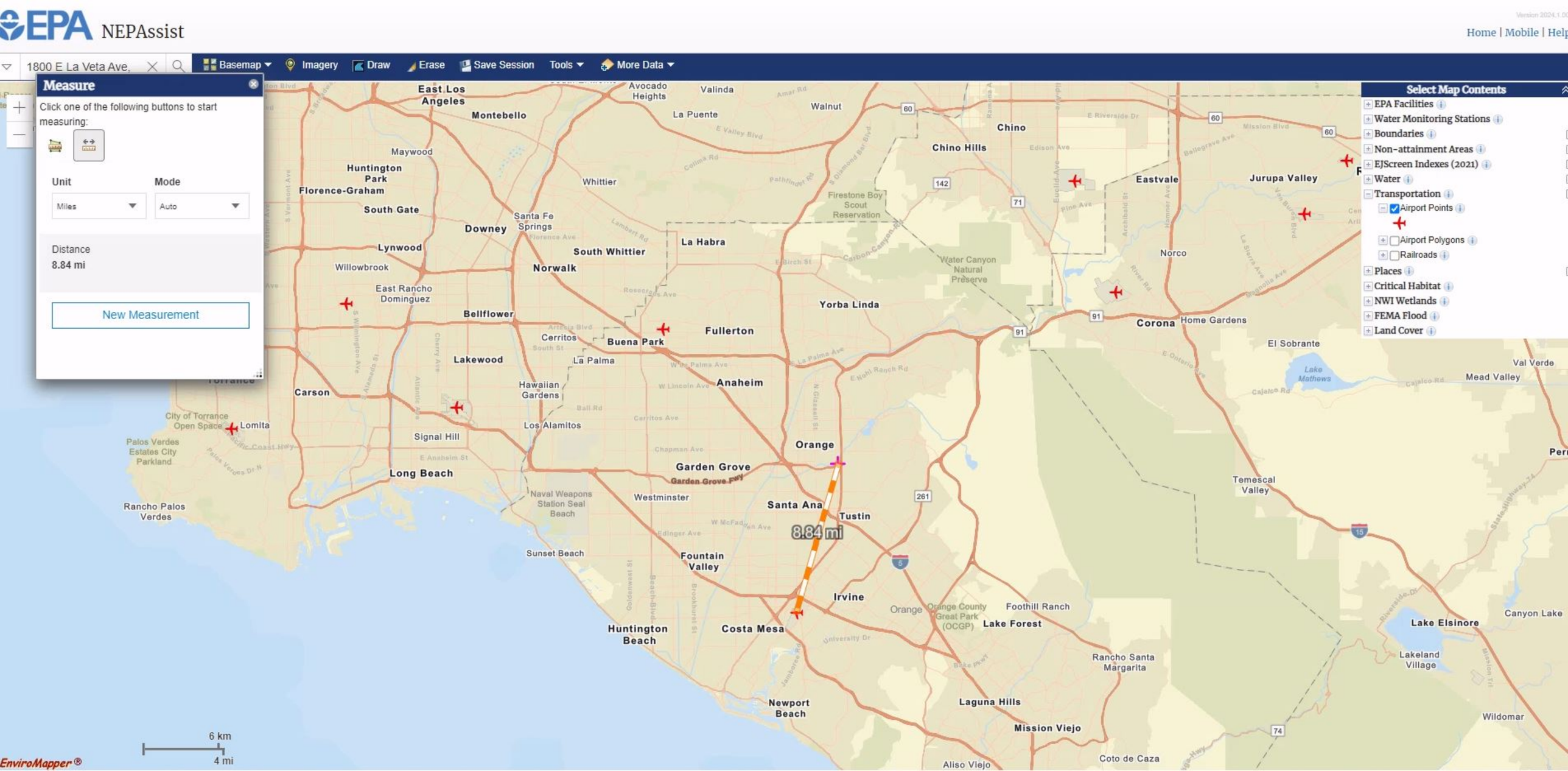
Attachment 2. Airports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Home | Mobile | Help
1800 E La Veta Ave,
Basemap
Imagery
Draw
Erase
Save Session
Tools
More Data
Measure
Click one of the following buttons to start measuring:
Unit
Miles
Mode
Auto
Distance
8.84 mi
New Measurement
Select Map Contents
EPA Facilities
Water Monitoring Stations
Boundaries
Non-attainment Areas
EJScreen Indexes (2021)
Water
Transportation
Airport Points
Airport Polygons
Railroads
Places
Critical Habitat
NWI Wetlands
FEMA Flood
Land Cover
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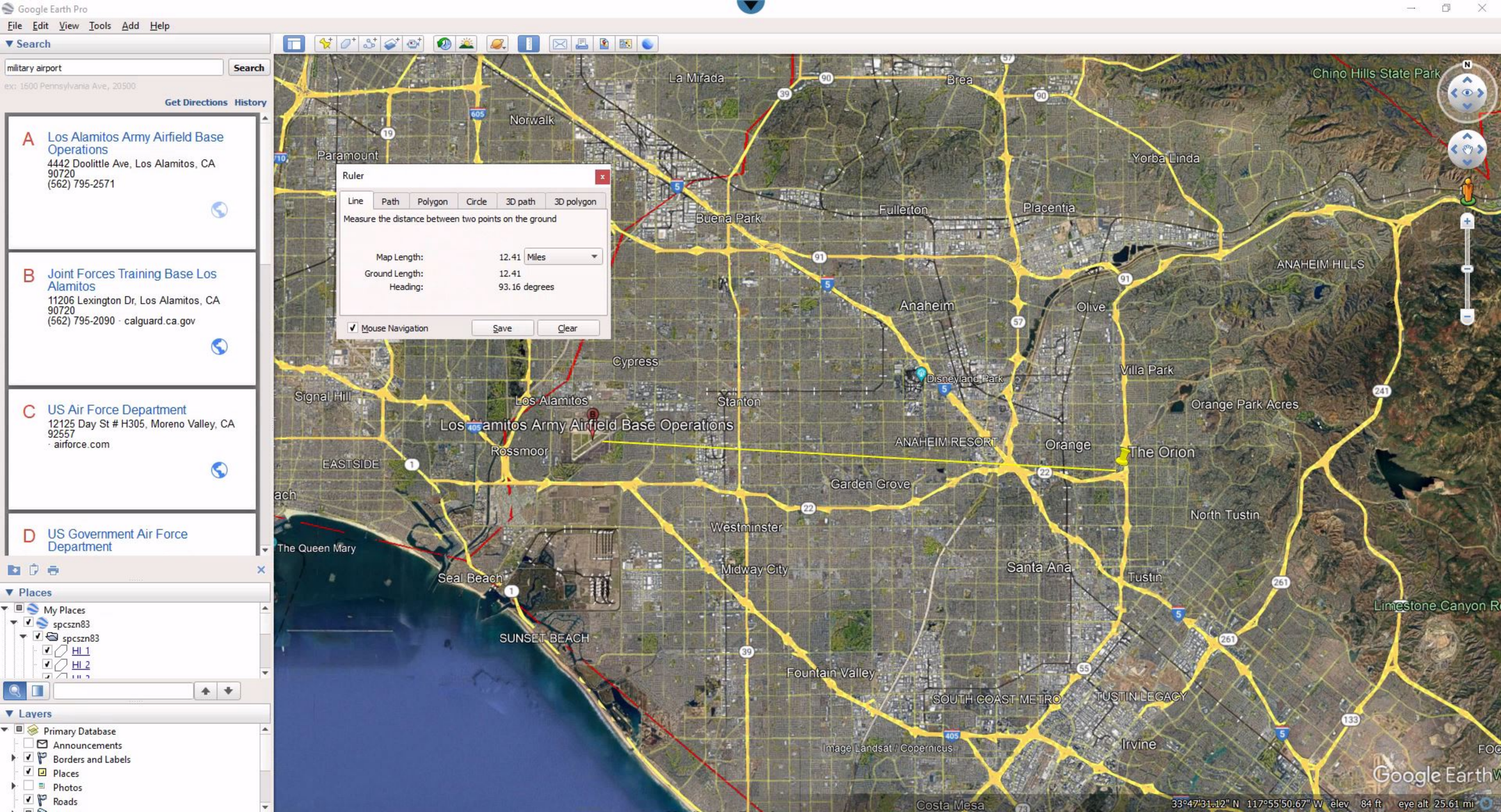
East Los Angeles
Montebello
Avocado Heights
Valinda
La Puente
Walnut
Chino
Chino Hills
Maywood
Huntington Park
Florence-Graham
Whittier
Eastvale
Jurupa Valley
South Gate
Santa Fe Springs
Downey
Lynwood
South Whittier
La Habra
Norwalk
Willowbrook
Norco
East Rancho Dominguez
Yorba Linda
Bellflower
Fullerton
Corona
Home Gardens
Cerritos
Buena Park
El Sobrante
Lakewood
La Palma
Anaheim
Carson
Hawaiian Gardens
Mead Valley
Los Alamitos
Lomita
Signal Hill
Orange
Garden Grove
Long Beach
Temescal Valley
Naval Weapons Station Seal Beach
Westminster
Santa Ana
Tustin
Rancho Palos Verdes
Sunset Beach
Fountain Valley
Irvine
Huntington Beach
Costa Mesa
Foothill Ranch
Lake Forest
Lake Elsinore
Canyon Lake
Rancho Santa Margarita
Lakeland Village
Newport Beach
Laguna Hills
Mission Viejo
Wildomar
Aliso Viejo
Coto de Caza
6 km
4 mi
EnviroMapper®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Search
military airport
Search
ex: 1600 Pennsylvania Ave, 20500
Get Directions History
A Los Alamitos Army Airfield Base Operations
4442 Doolittle Ave, Los Alamitos, CA 90720
(562) 795-2571
B Joint Forces Training Base Los Alamitos
11206 Lexington Dr, Los Alamitos, CA 90720
(562) 795-2090 · calguard.ca.gov
C US Air Force Department
12125 Day St # H305, Moreno Valley, CA 92557
· airforce.com
D US Government Air Force Department
Ruler
Line Path Polygon Circle 3D path 3D polygon
Measure the distance between two points on the ground
Map Length: 12.41 Miles
Ground Length: 12.41
Heading: 93.16 degrees
Mouse Navigation Save Clear
Places
My Places
spcszn83
spcszn83
HI 1
HI 2
Layers
Primary Database
Announcements
Borders and Labels
Places
Photos
Roads
La Mirada
Norwalk
Paramount
Brea
Chino Hills State Park
Yorba Linda
Buena Park
Fullerton
Placentia
ANAHEIM HILLS
Anaheim
Olive
Cypress
Villa Park
Disneyland Park
Signal Hill
Los Alamitos
Stanton
Orange Park Acres
Los Alamitos Army Airfield Base Operations
Rossmoor
ANAHEIM RESORT
Orange
The Orion
EASTSIDE
Garden Grove
North Tustin
Westminster
The Queen Mary
Midway City
Santa Ana
Tustin
Seal Beach
SUNSET BEACH
Fountain Valley
SOUTH COAST METRO
TUSTIN LEGACY
Irvine
Image Landsat / Copernicus
Costa Mesa
Google Earth
33°47'31.12" N 117°55'50.67" W elev 84 ft eye alt 25.61 mi

Attachment 3. Coastal Barrier Resources

Coastal Barrier Resources System Mapper

U.S Fish & Wildlife Service

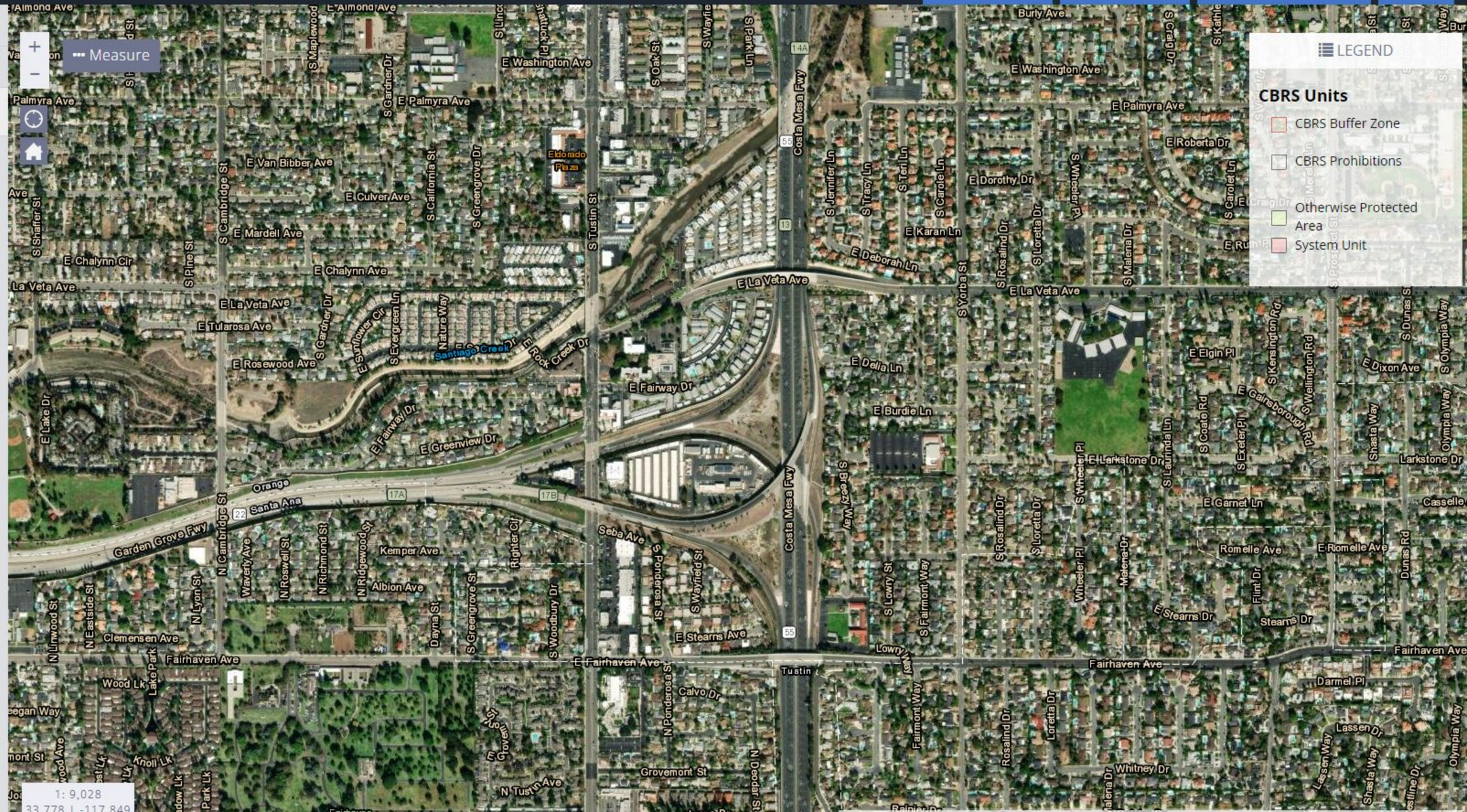
ABOUT | FIND LOCATION | FIND CBRS UNIT | CBRS VALIDATION TOOL | PRINT

BASEMAPS

MAP LAYERS

CBRS Units

Click here to learn more about CBRS Units.

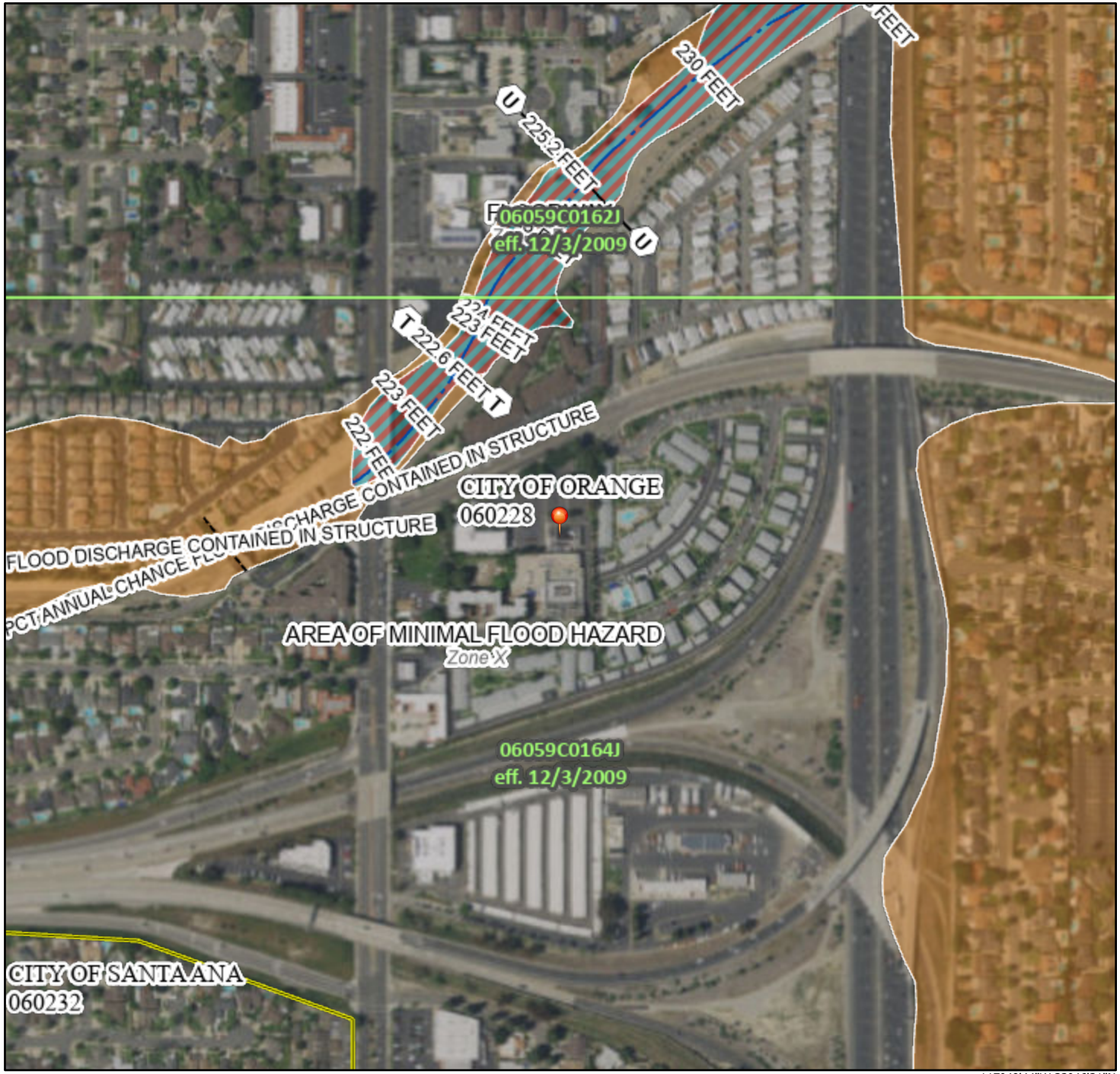


Attachment 4. FEMA FIRM Map

National Flood Hazard Layer FIRMette

FEMA

117°50'21"W 33°47'1"N



117°49'44"W 33°46'31"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/21/2023 at 2:26 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Attachment 5. CalEEMod Air Quality Model

Orion Apartments HUD Project Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Orion Apartments HUD Project
Construction Start Date	8/1/2024
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	2.20
Location	1800 E La Veta Ave, Orange, CA 92866, USA
County	Orange
City	Orange
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5744
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Apartments Mid Rise	166	Dwelling Unit	2.30	145,716	17,914	—	495	—
Parking Lot	172	Space	1.55	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-1	Increase Residential Density
Transportation	T-4	Integrate A ordable and Below Market Rate Housing
Energy	E-2	Require Energy Efficient Appliances
Water	W-4	Require Low-Flow Water Fixtures

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.42	51.9	36.1	34.0	0.07	1.60	8.97	10.1	1.47	4.00	5.47	—	9,602	9,602	0.62	0.98	13.3	9,924
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	1.66	12.4	19.7	0.03	0.51	1.72	2.23	0.46	0.41	0.87	—	4,528	4,528	0.15	0.16	0.21	4,580
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.86	3.28	5.32	8.92	0.01	0.21	1.02	1.22	0.19	0.25	0.44	—	2,033	2,033	0.07	0.09	1.45	2,057
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.16	0.60	0.97	1.63	< 0.005	0.04	0.19	0.22	0.03	0.05	0.08	—	337	337	0.01	0.01	0.24	341

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.42	3.71	36.1	34.0	0.07	1.60	8.97	10.1	1.47	4.00	5.47	—	9,602	9,602	0.62	0.98	13.3	9,924
2025	1.87	51.9	11.5	20.1	0.03	0.44	1.72	2.16	0.40	0.41	0.81	—	4,565	4,565	0.15	0.16	7.60	4,622
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.99	1.66	12.4	19.7	0.03	0.51	1.72	2.23	0.46	0.41	0.87	—	4,528	4,528	0.15	0.16	0.21	4,580
2025	1.87	1.57	11.5	19.2	0.03	0.44	1.72	2.16	0.40	0.41	0.81	—	4,488	4,488	0.15	0.16	0.20	4,538
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.72	0.58	5.21	6.38	0.01	0.21	1.02	1.22	0.19	0.25	0.44	—	1,599	1,599	0.07	0.09	1.05	1,628
2025	0.86	3.28	5.32	8.92	0.01	0.20	0.77	0.97	0.19	0.18	0.37	—	2,033	2,033	0.07	0.07	1.45	2,057
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.13	0.11	0.95	1.16	< 0.005	0.04	0.19	0.22	0.03	0.05	0.08	—	265	265	0.01	0.01	0.17	270
2025	0.16	0.60	0.97	1.63	< 0.005	0.04	0.14	0.18	0.03	0.03	0.07	—	337	337	0.01	0.01	0.24	341

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	4.42	3.71	36.1	34.0	0.07	1.60	8.97	10.1	1.47	4.00	5.47	—	9,602	9,602	0.62	0.98	13.3	9,924
2025	1.87	51.9	11.5	20.1	0.03	0.44	1.72	2.16	0.40	0.41	0.81	—	4,565	4,565	0.15	0.16	7.60	4,622
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.99	1.66	12.4	19.7	0.03	0.51	1.72	2.23	0.46	0.41	0.87	—	4,528	4,528	0.15	0.16	0.21	4,580
2025	1.87	1.57	11.5	19.2	0.03	0.44	1.72	2.16	0.40	0.41	0.81	—	4,488	4,488	0.15	0.16	0.20	4,538
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.72	0.58	5.21	6.38	0.01	0.21	1.02	1.22	0.19	0.25	0.44	—	1,599	1,599	0.07	0.09	1.05	1,628
2025	0.86	3.28	5.32	8.92	0.01	0.20	0.77	0.97	0.19	0.18	0.37	—	2,033	2,033	0.07	0.07	1.45	2,057
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.13	0.11	0.95	1.16	< 0.005	0.04	0.19	0.22	0.03	0.05	0.08	—	265	265	0.01	0.01	0.17	270
2025	0.16	0.60	0.97	1.63	< 0.005	0.04	0.14	0.18	0.03	0.03	0.07	—	337	337	0.01	0.01	0.24	341

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.00	7.04	2.55	32.4	0.06	0.08	5.52	5.60	0.07	1.40	1.48	78.1	7,244	7,322	8.23	0.27	21.7	7,629
Mit.	2.48	5.65	1.56	21.1	0.03	0.06	2.78	2.84	0.06	0.71	0.76	77.0	4,252	4,329	7.98	0.15	11.4	4,584
% Reduced	38%	20%	39%	35%	47%	23%	50%	49%	22%	50%	48%	1%	41%	41%	3%	44%	47%	40%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.09	6.18	2.63	21.5	0.06	0.07	5.52	5.59	0.07	1.40	1.47	78.1	6,991	7,069	8.24	0.28	1.58	7,359
Mit.	1.59	4.80	1.56	10.9	0.03	0.06	2.78	2.84	0.05	0.71	0.76	77.0	4,111	4,188	7.98	0.16	1.31	4,436

% Reduced	49%	22%	41%	49%	47%	24%	50%	49%	23%	50%	48%	1%	41%	41%	3%	44%	17%	40%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.53	6.60	2.60	27.3	0.06	0.07	5.24	5.31	0.07	1.33	1.40	78.1	6,784	6,862	8.22	0.27	9.52	7,156
Mit.	2.10	5.30	1.57	17.1	0.03	0.06	2.64	2.70	0.06	0.67	0.73	77.0	4,016	4,093	7.97	0.15	5.31	4,342
% Reduced	40%	20%	40%	38%	47%	22%	50%	49%	22%	50%	48%	1%	41%	40%	3%	44%	44%	39%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	1.20	0.48	4.99	0.01	0.01	0.96	0.97	0.01	0.24	0.26	12.9	1,123	1,136	1.36	0.04	1.58	1,185
Mit.	0.38	0.97	0.29	3.12	0.01	0.01	0.48	0.49	0.01	0.12	0.13	12.8	665	678	1.32	0.02	0.88	719
% Reduced	40%	20%	40%	38%	47%	22%	50%	49%	22%	50%	48%	1%	41%	40%	3%	44%	44%	39%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.06	2.80	1.99	22.8	0.06	0.04	5.52	5.56	0.03	1.40	1.43	—	5,953	5,953	0.27	0.23	20.7	6,049
Area	0.88	4.21	0.09	9.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	25.2	25.2	< 0.005	< 0.005	—	25.3
Energy	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,224	1,224	0.11	0.01	—	1,229
Water	—	—	—	—	—	—	—	—	—	—	—	11.9	41.6	53.6	1.23	0.03	—	93.1
Waste	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Total	4.00	7.04	2.55	32.4	0.06	0.08	5.52	5.60	0.07	1.40	1.48	78.1	7,244	7,322	8.23	0.27	21.7	7,629

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.04	2.78	2.16	21.3	0.06	0.04	5.52	5.56	0.03	1.40	1.43	—	5,725	5,725	0.28	0.24	0.54	5,804
Area	0.00	3.38	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
Energy	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,224	1,224	0.11	0.01	—	1,229
Water	—	—	—	—	—	—	—	—	—	—	—	11.9	41.6	53.6	1.23	0.03	—	93.1
Waste	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Total	3.09	6.18	2.63	21.5	0.06	0.07	5.52	5.59	0.07	1.40	1.47	78.1	6,991	7,069	8.24	0.28	1.58	7,359
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.87	2.62	2.08	20.7	0.05	0.03	5.24	5.27	0.03	1.33	1.36	—	5,501	5,501	0.26	0.23	8.48	5,584
Area	0.60	3.95	0.06	6.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	17.2	17.2	< 0.005	< 0.005	—	17.3
Energy	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,224	1,224	0.11	0.01	—	1,229
Water	—	—	—	—	—	—	—	—	—	—	—	11.9	41.6	53.6	1.23	0.03	—	93.1
Waste	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Total	3.53	6.60	2.60	27.3	0.06	0.07	5.24	5.31	0.07	1.33	1.40	78.1	6,784	6,862	8.22	0.27	9.52	7,156
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.52	0.48	0.38	3.78	0.01	0.01	0.96	0.96	0.01	0.24	0.25	—	911	911	0.04	0.04	1.40	924
Area	0.11	0.72	0.01	1.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.86	2.86	< 0.005	< 0.005	—	2.87
Energy	0.01	< 0.005	0.08	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	203	203	0.02	< 0.005	—	204
Water	—	—	—	—	—	—	—	—	—	—	—	1.98	6.90	8.87	0.20	< 0.005	—	15.4
Waste	—	—	—	—	—	—	—	—	—	—	—	11.0	0.00	11.0	1.10	0.00	—	38.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17	0.17
Total	0.64	1.20	0.48	4.99	0.01	0.01	0.96	0.97	0.01	0.24	0.26	12.9	1,123	1,136	1.36	0.04	1.58	1,185

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.54	1.41	1.00	11.5	0.03	0.02	2.78	2.80	0.02	0.71	0.72	—	2,999	2,999	0.14	0.12	10.4	3,047
Area	0.88	4.21	0.09	9.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	25.2	25.2	< 0.005	< 0.005	—	25.3
Energy	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,189	1,189	0.11	0.01	—	1,194
Water	—	—	—	—	—	—	—	—	—	—	—	10.8	37.9	48.8	1.11	0.03	—	84.6
Waste	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Total	2.48	5.65	1.56	21.1	0.03	0.06	2.78	2.84	0.06	0.71	0.76	77.0	4,252	4,329	7.98	0.15	11.4	4,584
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.53	1.40	1.09	10.7	0.03	0.02	2.78	2.80	0.02	0.71	0.72	—	2,884	2,884	0.14	0.12	0.27	2,924
Area	0.00	3.38	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
Energy	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,189	1,189	0.11	0.01	—	1,194
Water	—	—	—	—	—	—	—	—	—	—	—	10.8	37.9	48.8	1.11	0.03	—	84.6
Waste	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Total	1.59	4.80	1.56	10.9	0.03	0.06	2.78	2.84	0.05	0.71	0.76	77.0	4,111	4,188	7.98	0.16	1.31	4,436
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.45	1.32	1.05	10.4	0.03	0.02	2.64	2.66	0.02	0.67	0.69	—	2,771	2,771	0.13	0.11	4.27	2,813
Area	0.60	3.95	0.06	6.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	17.2	17.2	< 0.005	< 0.005	—	17.3
Energy	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,189	1,189	0.11	0.01	—	1,194
Water	—	—	—	—	—	—	—	—	—	—	—	10.8	37.9	48.8	1.11	0.03	—	84.6

Waste	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Total	2.10	5.30	1.57	17.1	0.03	0.06	2.64	2.70	0.06	0.67	0.73	77.0	4,016	4,093	7.97	0.15	5.31	4,342
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.26	0.24	0.19	1.90	< 0.005	< 0.005	0.48	0.48	< 0.005	0.12	0.13	—	459	459	0.02	0.02	0.71	466
Area	0.11	0.72	0.01	1.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.86	2.86	< 0.005	< 0.005	—	2.87
Energy	0.01	< 0.005	0.08	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	197	197	0.02	< 0.005	—	198
Water	—	—	—	—	—	—	—	—	—	—	—	1.79	6.28	8.07	0.18	< 0.005	—	14.0
Waste	—	—	—	—	—	—	—	—	—	—	—	11.0	0.00	11.0	1.10	0.00	—	38.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17	0.17
Total	0.38	0.97	0.29	3.12	0.01	0.01	0.48	0.49	0.01	0.12	0.13	12.8	665	678	1.32	0.02	0.88	719

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	7.24	7.24	—	1.10	1.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.36	1.19	< 0.005	0.06	—	0.06	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.40	0.40	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.96	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.89	220
Vendor	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	0.00
Hauling	0.61	0.12	7.39	3.22	0.04	0.07	1.52	1.59	0.07	0.43	0.50	—	5,960	5,960	0.48	0.95	12.4	6,267
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.02	11.6
Vendor	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	0.00
Hauling	0.03	0.01	0.42	0.18	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	327	327	0.03	0.05	0.29	343
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.90	1.90	< 0.005	< 0.005	< 0.005	1.92

Vendor	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	0.00
Hauling	0.01	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	54.1	54.1	< 0.005	0.01	0.05	56.8

3.2. Demolition (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	7.24	7.24	—	1.10	1.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.36	1.19	< 0.005	0.06	—	0.06	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.40	0.40	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.96	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.89	220
Vendor	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	0.00
Hauling	0.61	0.12	7.39	3.22	0.04	0.07	1.52	1.59	0.07	0.43	0.50	—	5,960	5,960	0.48	0.95	12.4	6,267
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.02	11.6
Vendor	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	0.00
Hauling	0.03	0.01	0.42	0.18	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	327	327	0.03	0.05	0.29	343
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.90	1.90	< 0.005	< 0.005	< 0.005	1.92
Vendor	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	0.00
Hauling	0.01	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	54.1	54.1	< 0.005	0.01	0.05	56.8

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.49	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.5	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.08	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	244	244	< 0.005	0.01	1.00	248

Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.8	64.8	< 0.005	0.01	0.17	67.7
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.22	3.22	< 0.005	< 0.005	0.01	3.27
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.89	0.89	< 0.005	< 0.005	< 0.005	0.93
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.15
Hauling	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	0.00

3.4. Site Preparation (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.49	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.5	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.08	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	244	244	< 0.005	0.01	1.00	248
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.8	64.8	< 0.005	0.01	0.17	67.7
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.22	3.22	< 0.005	< 0.005	0.01	3.27
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.89	0.89	< 0.005	< 0.005	< 0.005	0.93
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.15
Hauling	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	0.00

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.40	0.41	< 0.005	0.02	—	0.02	0.02	—	0.02	—	64.8	64.8	< 0.005	< 0.005	—	65.1

Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.96	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.89	220
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.8	64.8	< 0.005	0.01	0.17	67.7
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.58	4.58	< 0.005	< 0.005	0.01	4.65
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.48
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.77
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25

Hauling	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	0.00

3.6. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.40	0.41	< 0.005	0.02	—	0.02	0.02	—	0.02	—	64.8	64.8	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.96	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.89	220
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.8	64.8	< 0.005	0.01	0.17	67.7
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.58	4.58	< 0.005	< 0.005	0.01	4.65
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.48
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.77
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25
Hauling	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	0.00

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.28	2.67	< 0.005	0.10	—	0.10	0.09	—	0.09	—	488	488	0.02	< 0.005	—	490
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.42	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	80.8	80.8	< 0.005	< 0.005	—	81.1
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.44	0.47	7.22	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,626	1,626	0.02	0.06	6.67	1,650
Vendor	0.05	0.02	0.62	0.31	< 0.005	0.01	0.15	0.16	< 0.005	0.04	0.05	—	583	583	0.03	0.08	1.57	609
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.44	0.53	6.22	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,547	1,547	0.02	0.06	0.17	1,566
Vendor	0.05	0.02	0.65	0.32	< 0.005	0.01	0.15	0.16	< 0.005	0.04	0.05	—	583	583	0.03	0.08	0.04	608
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.11	1.33	0.00	0.00	0.32	0.32	0.00	0.07	0.07	—	319	319	< 0.005	0.01	0.59	324
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	119	119	0.01	0.02	0.14	124
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	52.9	52.9	< 0.005	< 0.005	0.10	53.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.7	19.7	< 0.005	< 0.005	0.02	20.5
Hauling	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	0.00

3.8. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.28	2.67	< 0.005	0.10	—	0.10	0.09	—	0.09	—	488	488	0.02	< 0.005	—	490
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.42	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	80.8	80.8	< 0.005	< 0.005	—	81.1
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.44	0.47	7.22	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,626	1,626	0.02	0.06	6.67	1,650
Vendor	0.05	0.02	0.62	0.31	< 0.005	0.01	0.15	0.16	< 0.005	0.04	0.05	—	583	583	0.03	0.08	1.57	609
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.44	0.53	6.22	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,547	1,547	0.02	0.06	0.17	1,566
Vendor	0.05	0.02	0.65	0.32	< 0.005	0.01	0.15	0.16	< 0.005	0.04	0.05	—	583	583	0.03	0.08	0.04	608
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.11	1.33	0.00	0.00	0.32	0.32	0.00	0.07	0.07	—	319	319	< 0.005	0.01	0.59	324
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	119	119	0.01	0.02	0.14	124

Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	52.9	52.9	< 0.005	< 0.005	0.10	53.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.7	19.7	< 0.005	< 0.005	0.02	20.5
Hauling	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	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.48	4.48	5.59	0.01	0.19	—	0.19	0.17	—	0.17	—	1,028	1,028	0.04	0.01	—	1,031
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.09	0.82	1.02	< 0.005	0.03	—	0.03	0.03	—	0.03	—	170	170	0.01	< 0.005	—	171
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.43	0.42	6.72	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,593	1,593	0.02	0.06	6.03	1,616
Vendor	0.04	0.02	0.60	0.30	< 0.005	< 0.005	0.15	0.16	< 0.005	0.04	0.05	—	574	574	0.03	0.08	1.56	600
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.42	0.47	5.81	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,516	1,516	0.02	0.06	0.16	1,534
Vendor	0.04	0.02	0.62	0.30	< 0.005	< 0.005	0.15	0.16	< 0.005	0.04	0.05	—	574	574	0.03	0.08	0.04	599
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.20	2.60	0.00	0.00	0.67	0.67	0.00	0.16	0.16	—	659	659	0.01	0.02	1.12	667
Vendor	0.02	0.01	0.27	0.13	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	246	246	0.01	0.03	0.29	257
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.18	110
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.7	40.7	< 0.005	0.01	0.05	42.5
Hauling	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	0.00

3.10. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.48	4.48	5.59	0.01	0.19	—	0.19	0.17	—	0.17	—	1,028	1,028	0.04	0.01	—	1,031
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.82	1.02	< 0.005	0.03	—	0.03	0.03	—	0.03	—	170	170	0.01	< 0.005	—	171
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.43	0.42	6.72	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,593	1,593	0.02	0.06	6.03	1,616
Vendor	0.04	0.02	0.60	0.30	< 0.005	< 0.005	0.15	0.16	< 0.005	0.04	0.05	—	574	574	0.03	0.08	1.56	600
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.42	0.47	5.81	0.00	0.00	1.57	1.57	0.00	0.37	0.37	—	1,516	1,516	0.02	0.06	0.16	1,534
Vendor	0.04	0.02	0.62	0.30	< 0.005	< 0.005	0.15	0.16	< 0.005	0.04	0.05	—	574	574	0.03	0.08	0.04	599
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.20	2.60	0.00	0.00	0.67	0.67	0.00	0.16	0.16	—	659	659	0.01	0.02	1.12	667
Vendor	0.02	0.01	0.27	0.13	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	246	246	0.01	0.03	0.29	257
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.18	110
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.7	40.7	< 0.005	0.01	0.05	42.5
Hauling	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	0.00

3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	—	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.32	0.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	66.6	66.6	< 0.005	< 0.005	—	66.8
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.1
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.12	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	265	265	< 0.005	0.01	1.01	269
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.02	12.8
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.09	2.09	< 0.005	< 0.005	< 0.005	2.12
Vendor	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	0.00
Hauling	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	0.00

3.12. Paving (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	—	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.32	0.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	66.6	66.6	< 0.005	< 0.005	—	66.8
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.1
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.12	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	265	265	< 0.005	0.01	1.01	269
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.02	12.8
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.09	2.09	< 0.005	< 0.005	< 0.005	2.12
Vendor	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	0.00
Hauling	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	0.00

3.13. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.58	6.58	< 0.005	< 0.005	—	6.61
Architectural Coatings	—	2.55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.09	1.09	< 0.005	< 0.005	—	1.09
Architectural Coatings	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.34	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	319	319	< 0.005	0.01	1.21	323
Vendor	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	0.00
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.2	15.2	< 0.005	< 0.005	0.03	15.4
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.51	2.51	< 0.005	< 0.005	< 0.005	2.54
Vendor	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	0.00
Hauling	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	0.00

3.14. Architectural Coating (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.58	6.58	< 0.005	< 0.005	—	6.61
Architectural Coatings	—	2.55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.09	1.09	< 0.005	< 0.005	—	1.09
Architectural Coatings	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.34	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	319	319	< 0.005	0.01	1.21	323
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.2	15.2	< 0.005	< 0.005	0.03	15.4
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.51	2.51	< 0.005	< 0.005	< 0.005	2.54

Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.06	2.80	1.99	22.8	0.06	0.04	5.52	5.56	0.03	1.40	1.43	—	5,953	5,953	0.27	0.23	20.7	6,049
Parking Lot	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	0.00
Total	3.06	2.80	1.99	22.8	0.06	0.04	5.52	5.56	0.03	1.40	1.43	—	5,953	5,953	0.27	0.23	20.7	6,049
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.04	2.78	2.16	21.3	0.06	0.04	5.52	5.56	0.03	1.40	1.43	—	5,725	5,725	0.28	0.24	0.54	5,804
Parking Lot	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	0.00
Total	3.04	2.78	2.16	21.3	0.06	0.04	5.52	5.56	0.03	1.40	1.43	—	5,725	5,725	0.28	0.24	0.54	5,804
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	0.52	0.48	0.38	3.78	0.01	0.01	0.96	0.96	0.01	0.24	0.25	—	911	911	0.04	0.04	1.40	924
Parking Lot	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	0.00
Total	0.52	0.48	0.38	3.78	0.01	0.01	0.96	0.96	0.01	0.24	0.25	—	911	911	0.04	0.04	1.40	924

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	1.54	1.41	1.00	11.5	0.03	0.02	2.78	2.80	0.02	0.71	0.72	—	2,999	2,999	0.14	0.12	10.4	3,047
Parking Lot	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	0.00
Total	1.54	1.41	1.00	11.5	0.03	0.02	2.78	2.80	0.02	0.71	0.72	—	2,999	2,999	0.14	0.12	10.4	3,047
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	1.53	1.40	1.09	10.7	0.03	0.02	2.78	2.80	0.02	0.71	0.72	—	2,884	2,884	0.14	0.12	0.27	2,924
Parking Lot	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	0.00
Total	1.53	1.40	1.09	10.7	0.03	0.02	2.78	2.80	0.02	0.71	0.72	—	2,884	2,884	0.14	0.12	0.27	2,924
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.26	0.24	0.19	1.90	< 0.005	< 0.005	0.48	0.48	< 0.005	0.12	0.13	—	459	459	0.02	0.02	0.71	466

Parking Lot	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	0.00
Total	0.26	0.24	0.19	1.90	< 0.005	< 0.005	0.48	0.48	< 0.005	0.12	0.13	—	459	459	0.02	0.02	0.71	466

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	577	577	0.06	0.01	—	581
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	56.1	56.1	0.01	< 0.005	—	56.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	633	633	0.06	0.01	—	637
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	577	577	0.06	0.01	—	581
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	56.1	56.1	0.01	< 0.005	—	56.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	633	633	0.06	0.01	—	637
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	95.6	95.6	0.01	< 0.005	—	96.1

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	9.29	9.29	< 0.005	< 0.005	—	9.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.01	< 0.005	—	105

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	542	542	0.05	0.01	—	545
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	56.1	56.1	0.01	< 0.005	—	56.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	598	598	0.06	0.01	—	602
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	542	542	0.05	0.01	—	545
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	56.1	56.1	0.01	< 0.005	—	56.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	598	598	0.06	0.01	—	602
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	89.8	89.8	0.01	< 0.005	—	90.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	9.29	9.29	< 0.005	< 0.005	—	9.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	99.1	99.1	0.01	< 0.005	—	99.6

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	591	591	0.05	< 0.005	—	593
Parking Lot	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
Total	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	591	591	0.05	< 0.005	—	593
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	591	591	0.05	< 0.005	—	593
Parking Lot	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
Total	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	591	591	0.05	< 0.005	—	593
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	< 0.005	0.08	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	97.8	97.8	0.01	< 0.005	—	98.1
Parking Lot	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
Total	0.01	< 0.005	0.08	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	97.8	97.8	0.01	< 0.005	—	98.1

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	591	591	0.05	< 0.005	—	593
Parking Lot	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
Total	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	591	591	0.05	< 0.005	—	593
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	591	591	0.05	< 0.005	—	593
Parking Lot	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
Total	0.05	0.03	0.47	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	591	591	0.05	< 0.005	—	593
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	< 0.005	0.08	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	97.8	97.8	0.01	< 0.005	—	98.1
Parking Lot	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
Total	0.01	< 0.005	0.08	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	97.8	97.8	0.01	< 0.005	—	98.1

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	3.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.88	0.83	0.09	9.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.2	25.2	< 0.005	< 0.005	—	25.3
Total	0.88	4.21	0.09	9.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	25.2	25.2	< 0.005	< 0.005	—	25.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	3.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	3.38	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.11	0.10	0.01	1.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.86	2.86	< 0.005	< 0.005	—	2.87
Total	0.11	0.72	0.01	1.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.86	2.86	< 0.005	< 0.005	—	2.87

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	3.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.88	0.83	0.09	9.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.2	25.2	< 0.005	< 0.005	—	25.3
Total	0.88	4.21	0.09	9.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	25.2	25.2	< 0.005	< 0.005	—	25.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	3.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	3.38	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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.10	0.01	1.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.86	2.86	< 0.005	< 0.005	—	2.87
Total	0.11	0.72	0.01	1.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.86	2.86	< 0.005	< 0.005	—	2.87

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	11.9	41.6	53.6	1.23	0.03	—	93.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	11.9	41.6	53.6	1.23	0.03	—	93.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	11.9	41.6	53.6	1.23	0.03	—	93.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	11.9	41.6	53.6	1.23	0.03	—	93.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.98	6.90	8.87	0.20	< 0.005	—	15.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.98	6.90	8.87	0.20	< 0.005	—	15.4

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	10.8	37.9	48.8	1.11	0.03	—	84.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.8	37.9	48.8	1.11	0.03	—	84.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	10.8	37.9	48.8	1.11	0.03	—	84.6

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.8	37.9	48.8	1.11	0.03	—	84.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.79	6.28	8.07	0.18	< 0.005	—	14.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.79	6.28	8.07	0.18	< 0.005	—	14.0

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	11.0	0.00	11.0	1.10	0.00	—	38.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	11.0	0.00	11.0	1.10	0.00	—	38.3

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	66.2	0.00	66.2	6.62	0.00	—	232

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	11.0	0.00	11.0	1.10	0.00	—	38.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	11.0	0.00	11.0	1.10	0.00	—	38.3

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17	0.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17	0.17

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17	0.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17	0.17

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	8/1/2024	8/29/2024	5.00	20.0	—
Site Preparation	Site Preparation	8/30/2024	9/6/2024	5.00	5.00	—
Grading	Grading	9/7/2024	9/18/2024	5.00	8.00	—
Building Construction	Building Construction	9/19/2024	8/7/2025	5.00	230	—
Paving	Paving	8/8/2025	9/2/2025	5.00	18.0	—
Architectural Coating	Architectural Coating	9/3/2025	9/28/2025	5.00	18.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	16.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	84.0	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	18.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	16.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	2.00	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	120	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	18.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT

Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	24.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	16.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	84.0	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	18.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	16.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	2.00	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	120	18.5	LDA,LDT1,LDT2

Building Construction	Vendor	18.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	24.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	295,075	98,358	0.00	0.00	4,051

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)

Demolition	0.00	0.00	0.00	6,706	—
Site Preparation	—	—	7.50	0.00	—
Grading	—	—	8.00	0.00	—
Paving	0.00	0.00	0.00	0.00	1.55

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Parking Lot	1.55	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	903	815	679	313,337	7,800	7,040	5,865	2,706,598
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	455	411	342	157,860	3,930	3,547	2,955	1,363,595
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	166
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	166
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
295074.89999999997	98,358	0.00	0.00	4,051

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	608,528	346	0.0330	0.0040	1,843,736
Parking Lot	59,146	346	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	571,722	346	0.0330	0.0040	1,843,736
Parking Lot	59,146	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	6,229,258	283,766
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	5,651,806	283,766
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Apartments Mid Rise	123	—
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	123	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	10.5	annual days of extreme heat
Extreme Precipitation	4.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	57.0
AQ-PM	71.8
AQ-DPM	71.9
Drinking Water	63.5
Lead Risk Housing	53.7
Pesticides	6.34
Toxic Releases	90.4
Traffic	95.9
Effect Indicators	—
CleanUp Sites	58.2

Groundwater	14.3
Haz Waste Facilities/Generators	46.4
Impaired Water Bodies	0.00
Solid Waste	89.3
Sensitive Population	—
Asthma	30.2
Cardio-vascular	24.4
Low Birth Weights	16.4
Socioeconomic Factor Indicators	—
Education	61.2
Housing	60.9
Linguistic	52.0
Poverty	44.9
Unemployment	22.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	40.39522649
Employed	80.26433979
Median HI	43.7058899
Education	—
Bachelor's or higher	39.70229693
High school enrollment	100
Preschool enrollment	22.41755422
Transportation	—

Auto Access	49.51879892
Active commuting	54.04850507
Social	—
2-parent households	46.6059284
Voting	49.15950212
Neighborhood	—
Alcohol availability	27.11407674
Park access	27.44770948
Retail density	57.44899269
Supermarket access	53.70204029
Tree canopy	19.79982035
Housing	—
Homeownership	39.93327345
Housing habitability	34.03054023
Low-inc homeowner severe housing cost burden	45.10458103
Low-inc renter severe housing cost burden	60.47735147
Uncrowded housing	15.62941101
Health Outcomes	—
Insured adults	4.953163095
Arthritis	36.0
Asthma ER Admissions	74.4
High Blood Pressure	53.6
Cancer (excluding skin)	34.5
Asthma	34.7
Coronary Heart Disease	31.2
Chronic Obstructive Pulmonary Disease	25.1
Diagnosed Diabetes	50.0

Life Expectancy at Birth	41.0
Cognitively Disabled	91.4
Physically Disabled	65.4
Heart Attack ER Admissions	88.7
Mental Health Not Good	37.4
Chronic Kidney Disease	35.4
Obesity	53.5
Pedestrian Injuries	77.8
Physical Health Not Good	37.9
Stroke	34.3
Health Risk Behaviors	—
Binge Drinking	25.3
Current Smoker	36.3
No Leisure Time for Physical Activity	38.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	26.6
Elderly	44.5
English Speaking	15.5
Foreign-born	77.6
Outdoor Workers	12.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	22.4
Traffic Density	97.7
Traffic Access	23.0
Other Indices	—

Hardship	68.8
Other Decision Support	—
2016 Voting	77.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	50.0
Healthy Places Index Score for Project Location (b)	40.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

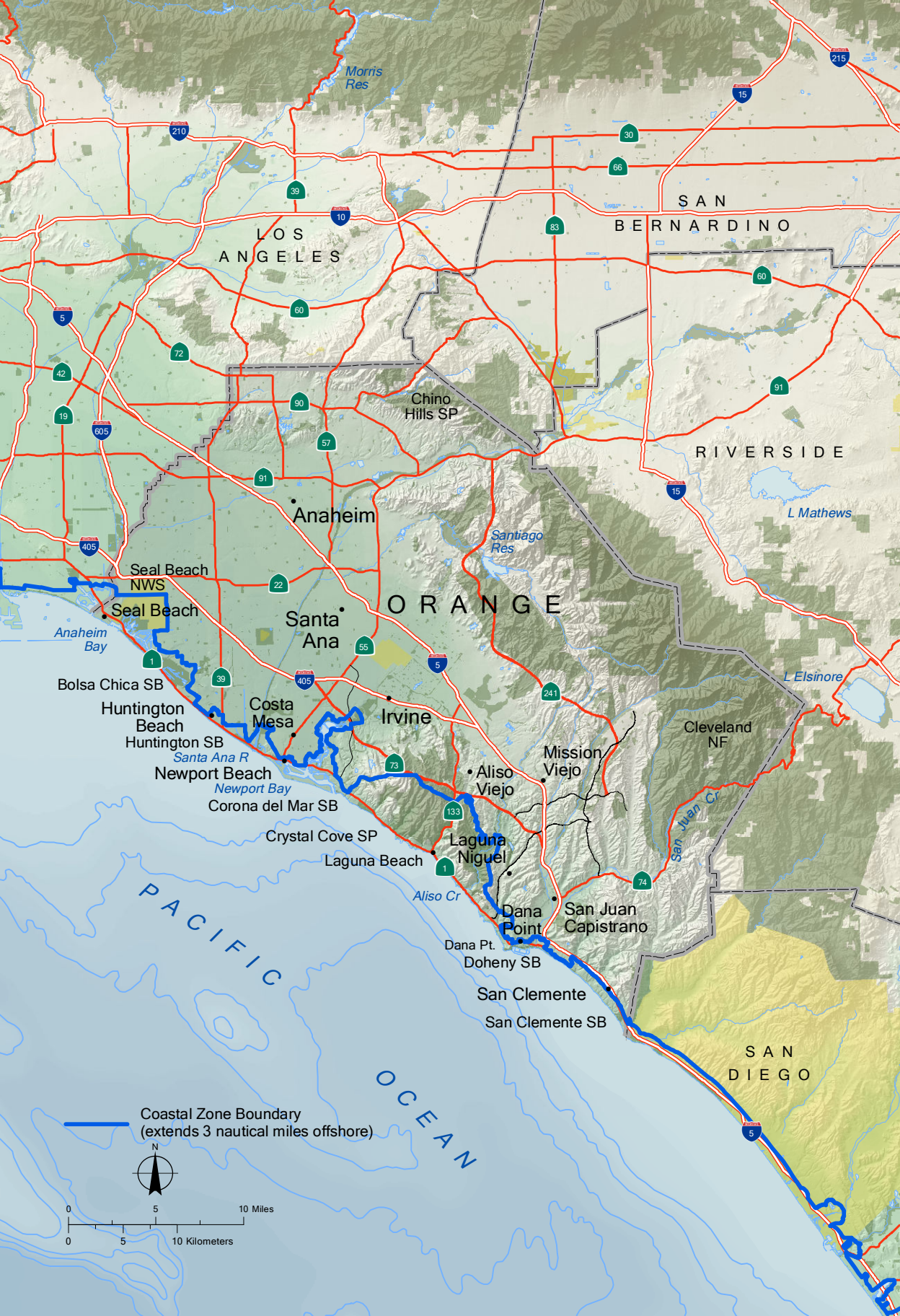
No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses based on proposed project: 166 dwelling units (164 of which are affordable senior) and 172 parking spaces on 3.85 acres
Construction: Trips and VMT	Rounded default trips up to nearest even number. Added vendor trips to site preparation and grading phases to account for water trucks

Operations: Hearths	No fireplaces or wood stoves assumed

Attachment 6. Coastal Zone Management Map


Morris Res
LOS ANGELES
SAN BERNARDINO
RIVERSIDE
ORANGE
SAN DIEGO
Chino Hills SP
Anaheim
Santiago Res
L Mathews
L Elsinore
Seal Beach NWS
Seal Beach
Anaheim Bay
Santa Ana
Bolsa Chica SB
Huntington Beach
Huntington SB
Costa Mesa
Irvine
Santa Ana R
Newport Beach
Newport Bay
Corona del Mar SB
Crystal Cove SP
Laguna Beach
Aliso Cr
Aliso Viejo
Mission Viejo
Laguna Niguel
Dana Point
Dana Pt.
Doheny SB
San Clemente
San Clemente SB
San Juan Capistrano
San Juan Cr
Cleveland NF
PACIFIC OCEAN
Coastal Zone Boundary
(extends 3 nautical miles offshore)
N
0 5 10 Miles
0 5 10 Kilometers

Attachment 7. Phase I Environmental Site Assessment

Attachment 8. Lead Based Paint & Asbestos Survey

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August 31, 2020

Leatha Clark
USA Properties Fund, Inc.
3200 Douglas Boulevard, Suite 200
Roseville, CA 95661

Subject: ***Pre-Renovation Asbestos and Lead Assessment***
1800 E. La Veta Avenue, Orange, CA 92866
EFI Job Number: 045.04081

1. Introduction

USA Properties Fund, Inc., (referred to hereunder as the client) retained EFI Global to perform pre-renovation sampling of building materials suspected to contain asbestos and surface coatings suspected to contain lead (i.e., suspect materials) within the subject property. The purpose of the assessment was to identify whether asbestos-containing materials (ACM) and/or lead-based paint (LBP) were present so they may be properly managed prior to renovation of the structure. The subject property is approximately 2.6 total acres in size with one single-story commercial building (i.e., Building 1) and one unoccupied residential structure (i.e., Building 2), which total approximately 37,500 square feet (ft^2). Building 1 is a physical rehabilitation center and building 2 consists a vacant residential house; both structures were included in this assessment.

The pre-demolition assessment was performed on August 7 and 8, 2020, by Heriberto Romero, a Cal/OSHA Certified Site Surveillance Technician (CSST, DOSH Cert No. 15-5572) and Jacob Pulliam, a California Department of Health (CDPH) Lead Sampling Technician (LST, Cert. No. LRC-00001469). The work was performed under the supervision of Benjamin Curry, a DOSH Certified Asbestos Consultant (CAC, DOSH Cert No. 09-4549) and CDPH Lead Inspector / Assessor (LIA, Cert. No. LRC-00000208).

2. Asbestos Assessment

The purpose of this assessment was to conduct bulk sampling in order to determine the presence of ACM and/or regulated asbestos containing materials (RACM) at the subject property so they may be properly abated prior to demolition. The scope of this assessment included reviewing building and/or previous investigation records, visually identifying homogeneous sample areas, collecting bulk samples of building materials suspected to contain asbestos, recording the friability and condition of suspect building materials, interpreting the laboratory results, and producing a written report of findings and recommendations. EFI requested but was not provided copies of previous investigation reports; it is assumed there are no such documents.

The sampling was performed in accordance with requirements of the following regulations:

- Asbestos Hazard Emergency Response Act (AHERA); 40 CFR 763 Subpart E
- Asbestos School Hazard Abatement Reauthorization Act (ASHARA); Section 206 of the Toxic Substance Control Act
- National Emissions Standards for Hazardous Air Pollutants (NESHAPS); 40 CFR 61 Subpart M.
- South Coast Air Quality Management District (SCAQMD) Rule 1403

This report is a record of activities performed, observations made, analytical results obtained, and recommendations to date.

2.1 Asbestos Results Summary

The laboratory results indicate that the following materials contain asbestos above the threshold limit of 1%, and are to be treated and disposed of as ACM:

Building 1: Main Structure -

- Drywall Joint Compound – Interior Throughout (2 -3% Chrysotile), samples 14A-14I & 40A-40B
- Sink Undercoating – Room 149 (3% Chrysotile), samples, 19A-19B
- Tan Carpet Adhesive – Changing Room 1 (4% Chrysotile), samples; 23A-23B
- Gray Pebble VSF – See Table (15% Chrysotile), samples; 26A-26C
- 12" Gray w/ White VFT – Utility Room 2 (6% Chrysotile), samples 30A-30B
- Black Roofing Mastic – North Roof (4% Chrysotile), samples, 46A-46C
- Gray HVAC Coating – Center Roof HVAC Ducting (4% Chrysotile), samples; 49A-49C
- White Vent Coating – Center Roof HVAC Ducting (5% Chrysotile), samples; 50A-50C
- Penetration Mastic – Center Roof (5% Chrysotile), samples 51A-51C

Building 2: Small House Structure -

- Beige VFT – Closet 1 (20 - 30% Chrysotile), samples 9A-9B
- Tan VFT & Mastic – Kitchen (2 - 3% Chrysotile), samples; 11A-11B

The following materials were further analyzed via the 1,000-Point Count method. The laboratory results indicate that the following materials contain between 0.10 and 1.0% asbestos and should be treated and disposed of as ACCM:

Main Structure -

- Stucco – Exterior (0.2% Chrysotile), samples 22A-22G

Each of the above materials were found to be in good condition at the time of the assessment. All other building materials sampled during this assessment were found to be none detected for asbestos.

Please refer to Tables 2 and 3 for a list of ACM Homogenous Materials, their locations and approximate quantities. Analytical data can be found in Appendix II.

2.2 Methodology

All samples were collected using a clean knife, chisel or the appropriate sampling tool(s). Each sample was extracted carefully so as not to disturb adjacent materials while still penetrating through all layers of the material sampled. Each sample was sealed in the appropriately sized plastic baggie and the bag then labeled with a unique identification number. The sample number, description, and location were then recorded on a log and plotted on a floor plan of the structure or area. Sampling tools were cleaned after collecting each sample. Any excess dust or debris from the sample location was cleaned using a moistened cloth. Whenever possible, samples were collected from previously damaged portions of the material in order to minimize damage to the material.

A total of 147 samples were submitted to EMSL Analytical in Cinnaminson, New Jersey. EMSL is accredited under the NIST/NVLAP program for asbestos in bulk material by polarized light microscopy (PLM) and the State of California for asbestos analysis. NIST/NVLAP lab code 101048-0, California ELAP Certificate No. 1406.

The analyses of the samples in this report were performed using PLM in accordance with EPA method 600/R-93/116. The phase abundances provided are visually estimated and expressed as percent area. Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent (< 1%). In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content.

Some of the samples in this report were further analyzed using the point count method. These analyses were performed using gravimetric matrix reduction and PLM in accordance with the EPA method 600/R-93/116 July 1993. The asbestos concentration was determined using the semi-quantitative point count method. On a per sample basis, the accuracy and precision of point count results are not known. The result should lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory using the point count method. The limit of detection for this analytical method is 0.25 percent using 400 points and 0.10 percent using 1000 points (visual area estimates).

2.3 Regulatory Limits

Government agencies have promulgated different regulatory threshold levels to classify materials containing asbestos. The levels of asbestos content and the terms used to classify them differ. Listed below are the current regulatory agencies that have defined materials containing asbestos, along with the respective action levels, regulatory terminology and applicability:

Table 1: Applicable Regulations

Agency / Regulation	Regulatory Code	Action Level (% Weight)	Terminology	Applicability
CAL OSHA	8 CCR Section 341.6(c)	> 0.1%	Asbestos-Containing Construction Material (ACCM)	Removal Work in California
Fed OSHA	29 CFR Section 1926.1101(b)	> 1.0%	Asbestos-Containing Material (ACM)	Removal Work in United States
NESHAP	40 CFR Part 61, Subpart M	> 1.0% and Friable	Regulated Asbestos-Containing Material (RACM)	Transport and Disposal of Waste in United States
SCAQMD	RULE 1403	>1.0%	Asbestos-Containing Material (ACM)	Removal Work, Transport and Disposal of Waste in SCAQMD District

2.4 Homogeneous Sample Materials Table

Homogeneous materials are defined as surfacing materials, thermal system insulation (TSI), or miscellaneous materials that are uniform in color and texture. Homogenous sample areas are the areas where homogenous materials are located. Multiple sample locations are selected within each homogenous sample area to be a true representation of each homogenous material. Typically, a minimum of three (3) samples must be collected from each homogeneous area when sampling materials that may have variable asbestos content because it was batch mixed or applied by different contractors. High asbestos content variability is especially true of surfacing materials (i.e., sprayed-on and/or troweled-on materials like plaster, fireproofing, and acoustic ceiling plaster) and TSI used to insulate pipes, boilers, tanks or ducts to prevent heat loss. As many as 9 samples may be collected of surfacing materials when they cover large surface areas.

Materials that appear to be homogeneous may in fact be different materials, installed at different times and have different material content in terms of asbestos; only laboratory testing can determine whether they are really the same homogeneous area. The below table presents the homogenous materials identified during the assessment and the asbestos content of those identified materials. The homogenous materials found to contain asbestos are listed in **bold** type with ACM highlighted in **yellow**.

Table 2: Homogenous Building Materials & Asbestos Content: Building 2 (Small House Structure)

Homogenous Material Number	Material Description	Location	Asbestos Content (% Weight)	Material Quantity *	Friability **	Condition
1	Drywall & Joint Compound	Interior	None Detected	---	---	---
2	Wallpaper	Bedroom 1	None Detected	---	---	---
3	Window Putty	Exterior	None Detected	---	---	---
4	Sink Undercoating	Kitchen	None Detected	---	---	---
5	Mastic for FRP	Restroom 2	None Detected	---	---	---
6	4” White Ceramic Tiles & Mastic	Living Room Countertop	None Detected	---	---	---
7	White Ceramic Floor Tile, Mortar & Grout	Restroom 1 Restroom 2	None Detected	---	---	---
8	Tan VFT & Mastic	Bedroom 1 Under Wood Flooring)	None Detected	---	---	---
9	**Beige VFT**	**Closet 1**	**20-30% Chrysotile**	**36 SF**	**Non-Friable**	**Good**
	Mastic for Beige VFT	Closet 1	None Detected	---	---	---
10	Brown VSF & Mastic	Closet 3	None Detected	---	---	---

Homogenous Material Number	Material Description	Location	Asbestos Content (% Weight)	Material Quantity *	Friability **	Condition
11	**Tan VFT & Mastic**	**Kitchen**	**2-3% Chrysotile**	**155 SF**	**Non-Friable**	**Good**
12	Roof Core	Roof	None Detected	---	---	---
13	Roofing Mastic	Roof	None Detected	---	---	---

* All quantities are approximations and should be verified by an abatement contractor.
** Non-friable materials may be rendered friable during removal by mechanical or other aggressive methods.

- **Table 3: Homogenous Building Materials & Asbestos Content: Building 1 (Main Building)**

Homogenous Material Number	Material Description	Location	Asbestos Content (% Weight)	Material Quantity *	Friability **	Condition
14	Drywall & Skim Coat	2nd Floor 1st Floor	None Detected	---	---	---
	Drywall Joint Compound	**2nd Floor 1st Floor**	**2-3% Chrysotile**	**126,000 SF**	**Non-Friable**	**Good**
15	Acoustic Texture Ceiling	1st Floor	None Detected	---	---	---
16	Brown Covebase & Mastic	Utility Room 6 Utility Room 7 Room 106 Room 110 Room 159	None Detected	---	---	---
17	1'x1' Ceiling Tiles	Room 158 Room 106	None Detected	---	---	---
18	2'x4' Ceiling Tiles	Room 202 Room 226	None Detected	---	---	---
19	**Sink Undercoating**	**Room 149**	**3% Chrysotile**	**9 SF**	**Non-Friable**	**Good**
20	White Sink Caulking	Restroom 13 Restroom 2	None Detected	---	---	---
21	Gray Stone Grout	Lobby Exterior	None Detected	---	---	---
22	**Stucco**	**Exterior**	**0.2% Chrysotile**	**16,000 SF**	**Non-Friable**	**Good**
23	**Tan Carpet Adhesive**	**Changing Room 1**	**4% Chrysotile**	**72 SF**	**Non-Friable**	**Good**
24	White Speckled VSF & Mastic	Room 126	None Detected	---	---	---
25	Green Speckled VSF & Mastic	Restroom 3	None Detected	---	---	---

Homogenous Material Number	Material Description	Location	Asbestos Content (% Weight)	Material Quantity *	Friability **	Condition
26	**Gray Pebble VSF**	**Utility Room 7 Room 149**	**15% Chrysotile**	**750**	**Non-Friable**	**Good**
	Mastic for Gray Pebble VSF	Utility Room 7 Room 149	None Detected	---	---	---
27	12" White VFT & Mastic	Room 106 Room 158 Room 159	None Detected	---	---	---
28	12" Cream VFT & Mastic	Room 250 2nd Floor Hall	None Detected	---	---	---
29	12" Blue Marbled VFT & Mastic	Room 155 Room 158	None Detected	---	---	---
30	**12" Gray with White VFT**	**Utility Room 2**	**6% Chrysotile**	**150**	**Non-Friable**	**Good**
	Mastic for 12" Gray with White VFT	Utility Room 2	None Detected	---	---	---
31	12" Brown Marble VFT Mastic	Room 137	None Detected	---	---	---
32	12" Green Marble VFT & Mastic	1st Floor Lobby 2nd Floor Staff Lounge	None Detected	---	---	---
33	12" Gray VFT & Mastic	2nd Floor Staff Lounge Windowed Hallway Outside Room 248	None Detected	---	---	---
34	Light Green VFT & Mastic	Lobby	None Detected	---	---	---
35	Floor Texture Coating	Room 130	None Detected	---	---	---
36	1' White Tile, Grout & Mastic	Restroom 12 Restroom 13	None Detected	---	---	---
37	1' Tan Tile, Grout & Mastic	Restroom 9 Restroom 10	None Detected	---	---	---
38	4" Blue Tiles, Grout & Mastic	Restroom 3 Restroom 12	None Detected	---	---	---
39	4" Blue Tiles, Grout & Mastic	Changing Room Restroom 5	None Detected	---	---	---
40	4"x4" Pink Wall Tiles and Mastic	Restroom 4 Restroom 6	None Detected	---	---	---

Homogenous Material Number	Material Description	Location	Asbestos Content (% Weight)	Material Quantity *	Friability **	Condition
40	**Drywall Joint Compound Behind 4"x4" Pink Wall Tiles**	**Restroom 4 Restroom 6**	**2% Chrysotile**	**See Homogenous #14**	**Non-Friable**	**Good**
41	4" Brown Tiles, Grout & Mastic	Kitchen 16D Utility Room 6	None Detected	---	---	---
42	4" Salmon Tiles & Grout	Restroom 13 Utility Room 6	None Detected	---	---	---
43	4"x4" Black Wall Tiles & Mastic	Restroom 9	None Detected	---	---	---
44	Roof Core	North Roof	None Detected	---	---	---
45	Black / White Penetration Mastic	North Roof	< 0.1% Chrysotile	---	---	---
46	**Black Roofing Mastic**	**North Roof**	**4% Chrysotile**	**120 SF**	**Non-Friable**	**Good**
47	Gray HVAC Mastic	North Roof – HVAC Ducting	None Detected	---	---	---
48	White HVAC Mastic	North Roof – HVAC Ducting	None Detected	---	---	---
49	**Gray HVAC Coating**	**Center Roof – HVAC Ducting**	**4% Chrysotile**	**90 SF**	**Non-Friable**	**Good**
50	**White Vent Coating**	**Center Roof – HVAC Ducting**	**5% Chrysotile**	**65 SF**	**Non-Friable**	**Good**
51	**Penetration Mastic**	**Center Roof**	**5% Chrysotile**	**85 SF**	**Non-Friable**	**Good**
52	Roof Core	Center Roof	None Detected	---	---	---

* All quantities are approximations and should be verified by an abatement contractor.
** Non-friable materials may be rendered friable during removal by mechanical or other aggressive methods.

2.5 Asbestos Recommendations

If materials found to contain asbestos and/or presumed to contain asbestos may be impacted during renovation or demolition activities, by law, they must first be abated and properly disposed of by a licensed asbestos abatement contractor prior to such work. Contractors are licensed for asbestos-related work by the California Department of Industrial Relations (DIR) Department of Occupational Safety and Health (DOSH). A list of contractors with current licenses may be found at:
https://www.dir.ca.gov/databases/doshacru/acrusearch.html.

Any suspect materials, that are not identified above and may be impacted during work activities, must be presumed to contain asbestos until laboratory analysis of an adequate number of samples proves otherwise.

It is highly recommended that abatement monitoring be performed by the asbestos consultant if asbestos abatement is to be performed while non-abatement persons (employees, tenants, other building occupants, or general public) are present in adjacent areas. Abatement monitoring includes the collection of air samples in adjacent areas to demonstrate that asbestos fibers are not migrating out of the regulated areas. In addition to air sampling, the monitoring includes oversight of the abatement contractor to ensure that the work is being conducted in compliance with all applicable regulations and in accordance with the scope of work and abatement specifications. Such abatement monitoring services can reduce risk and limit the legal liabilities of the building owner.

3. Lead-Based Paint Assessment

A total of 500 XRF readings were collected to test painted and coated surfaces for lead-based paint (LBP). The results are summarized in Section 3.1 and the table of results attached in Appendix III.

3.1 Lead Results Summary

The following building components were found to be coated with LBP:

Building 1: Main Structure -

- **White Metal Drain – Room 160 - 1 mg/cm^2**
- **White Ceramic Wall - Restroom #14 - 23.5 mg/cm^2**
- **Pink Ceramic Wall Tile - Restroom #6 - 21.8 mg/cm^2**
- **Blue Ceramic Wall - Restroom #5 - 21.7 mg/cm^2**
- **White Ceramic Wall Tile - Restroom #3 - 21.1 mg/cm^2**
- **Pink Ceramic Wall Tile - Restroom #3 - 25.9 mg/cm^2**
- **Blue Ceramic Wall Tile - Changing Room - 22.8 mg/cm^2**
- **White Porcelain Sink – Room 105 B - 30 mg/cm^2**
- **Tan Ceramic Wall Tile - Restroom #1 - 12.7 mg/cm^2**
- **Tan Ceramic Wall - Restroom #2 - 22.3 mg/cm^2**
- **White Porcelain Sink - Room 142 - 56 mg/cm^2**
- **Light-Blue Ceramic Tile - Pool 130 - 18.9 mg/cm^2**
- **Tan Ceramic Wall Tile - Women's Restroom - 5.3 mg/cm^2**
- **Blue Ceramic Wall - Men's Restroom - 17.8 mg/cm^2**
- **Pink Ceramic Tile - Women's Restroom - 23.4 mg/cm^2**
- **White Ceramic Tile - 209 - 29.4 mg/cm^2**

Building 2: Small House Structure -

- **Tan Wood Wall - Kitchen – 1.3 to 2.0 mg/cm^2**
- **Blue Wood Window Frame - Bedroom #3 - 2.8 mg/cm^2**
- **Blue Wood Window Seal - Bedroom #3 - 2 mg/cm^2**
- **White Wood Door - Hallway - 4.5 mg/cm^2**
- **Brown Wood Wall - Exterior - 5.3 mg/cm^2**
- **Dark Brown Wood Trim - Exterior - 3 mg/cm^2**
- **Dark Brown Wood Window-Frame - Exterior - 6.4 mg/cm^2**
- **Dark Brown Wood Window Seal - Exterior - 3.2 mg/cm^2**
- **Brown Wood Wall - Exterior - 10 mg/cm^2**
- **Brown Wood Door Frame - Exterior - 3.6 mg/cm^2**

- **Brown Wood Door - Exterior - 4.3 mg/cm^2**
- **Brown Wood Window Seal - Exterior - 1.1 mg/cm^2**
- **Brown Wood Wall - Exterior - 5.9 mg/cm^2**
- **Brown Wood Facia - Exterior - 6.5 mg/cm^2**
- **Brown Wood Eves - Exterior - 6.5 mg/cm^2**
- **Brown Wood Window Frame - Exterior - 1.4 mg/cm^2**

None of the other painted or coated components tested by XRF are at or above the respective levels considered to be lead-based paint (LBP); however, paint may contain detectable levels of lead in the coatings which make work impacting those surfaces subject to the Cal / OSHA Lead in Construction Standard (Title 8 CCR 1532.1).

3.2 Methodology

XRF testing of the painted surfaces was performed in general accordance with Chapter 7 of the HUD Guide Lines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. In every "room equivalent" within the tested property, one representative surface of each "testing combination" was tested. Multiple readings were collected to resolve inconsistencies in the test results.

The method employed was X-ray fluorescence (XRF) using a Heuresis PE 200i Cobalt 57. The instrument was operated in "Quick Mode," where the duration for each test result is determined by a combination of the:

- actual reading relative to the designated action level;
- age of the radioactive source; and
- substrate on which the test was taken.

The instrument's calibration was verified according to the manufacturer's specifications in compliance with the Performance Characteristic Sheet (PCS) developed for this instrument. The readings from this instrument produce a 95% confidence level that the "lead" reading accurately reflects the actual level of lead in the tested surfaces, relative to the federal action level.

3.3 Regulatory Limits

Government agencies have promulgated different regulatory threshold levels to classify Lead-Based Paint. Some of the established "levels" are quantified in different units of measurement. Listed below are the current regulatory agencies that have defined LBP, along with the respective action level:

Agency	Ordinance #	Action level (mg / cm^2)	Action level (ppm)
HUD / EPA	24 CFR 35.86 & 40 CFR 745.103	1.0 mg / cm^2	5,000 ppm
L.A. County	Title 11, 11.28.010	0.7 mg / cm^2	Not Specified
OSHA / CAL OSHA	29 CFR 1926.62 & Title 8, 1532.1	Not Specified	600 ppm

The Federal threshold for lead-based paint, 0.5 percent by weight, is higher than the local Los Angeles County action level and the lower of the two thresholds is the one that everyone within Los Angeles County must adhere to. In recognition of the various action levels the testing results are classified as follows for this report:

- Painted surfaces with readings at or above 0.7 mg / cm^2 are considered Positive
- Painted surfaces with readings below 0.7 mg / cm^2 are considered Negative

The individual readings have been provided in the XRF Results Table located in Appendix III. Any future change in action levels by one of the regulating agencies may affect the classification of results.

For purposes of this survey, any material containing any detectable level of lead is subject to OSHA's Lead Exposure in Construction Rule (29 CFR Part 1926) and CAL/ OSHA Lead in Construction Standard (Title 8 CCR 1532.1). Any work that impacts these materials must be performed in accordance with these and any other applicable standards.

3.4 Lead Recommendations

All lead laden components identified in this report shall be demolished or abated by certified lead trained personnel in accordance with all applicable federal, state and local regulations. All suspected lead laden components shall undergo paint film stabilization before components are removed by manual intact methods. LBP that will be impacted by hot work (welding, torch cutting, etc.) must be removed from the component by lead abatement workers to allow a minimum of 6 inches clearance on either side of the location of the hot work to prevent the volatilization of lead into the air.

Paint / surface coatings that were tested and found to have lead concentrations below the LBP threshold (i.e. 0.7 mg/cm^2) may still contain detectable concentrations of lead. Thus, work impacting those surfaces are subject to the Cal/OSHA Lead in Construction Standard 1532.1. This standard requires that respiratory protection and containment is used when performing "trigger tasks" until results of personal air monitoring indicate that workers are not exposed to lead above the action level or permissible exposure level. Additionally, the demolition or removal of lead or components with lead coatings is subject to Title 17, Division 1, Chapter 8 of the California Code of Regulations.

Should the contractor choose not to remove the identified LBP materials and demolish the structure in its entirety with the lead-paint components in place, it is recommended that the contractor stabilize the LBP components prior to demolition and then collect samples representative of the entire mass of the prospective waste stream. These samples should then be analyzed according to the United States Environmental Protection Agency (EPA) and the California Department of Toxic Substances Control (DTSC) prior to disposal facility acceptance.

4.0 Limitations

The inspection and testing report is based on the condition of the subject property existing and apparent on the precise time and exact date of the inspection. Not all conditions may be apparent on the inspection and testing date due to weather conditions, inoperable systems, inaccessibility of areas of the subject property, or for other reasons.

EFI Global has prepared this report for the exclusive use of its client. EFI Global, in performing its professional services, has applied scientific judgment that it believes is consistent with industry standards. EFI Global inspected structures and/or contents in a good faith effort to observe pertinent detail. Due to the limitations of time, access, and other variables, certain details may have been overlooked. EFI Global has relied in good faith upon the information and representations of others in the preparation of this report and the opinions expressed herein. Accordingly, EFI Global accepts no responsibility for deficiencies, omissions, misrepresentations, or fraudulent acts of persons interviewed.

EFI Global assumes no liability for any loss, injury, claim, or damage arising directly or indirectly from any use or reliance on this report or the opinions expressed herein. EFI Global makes no warranty, express or implied. This

report is limited only to the samples taken and locations sampled. Additional sampling may be needed to further identify other pollutants or asbestos affected areas inside the property.

Since destructive investigation was not performed during the survey, the report may not reveal concealed asbestos-containing materials. Subsequently, additional investigation including construction documents review and/or destructive investigation is recommended as a precaution to prevent accidental exposure when construction or demolition is planned for this facility.

Thank you for the opportunity to work with you on this project. Please contact the undersigned at (310) 854-6300, if you have questions or if additional services are necessary.

Prepared by:

Heriberto Romero
DOSH Certified Site Surveillance Technician No.15-5572
CDPH Certifies Lead Sampling Technician No. LRC-00002172

Reviewed by:

Michael Pinkerton
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Reviewed by:

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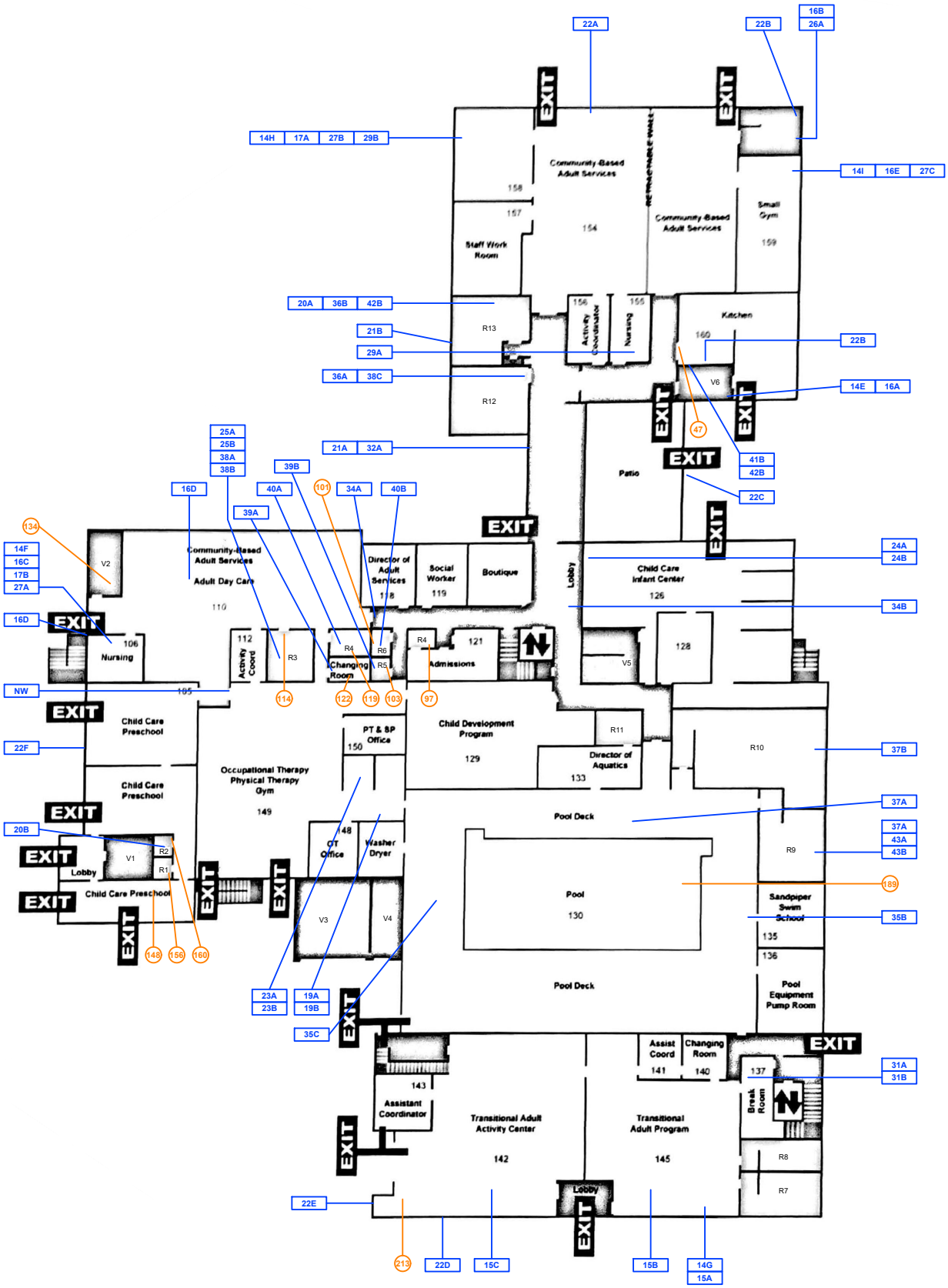
APPENDICES:

I. Site Diagrams
II. Asbestos Analysis Results and Chains of Custody
III. Lead XRF Results Table
IV. Personnel Certifications

APPENDIX I
Site Diagram



LEGEND

##	NEGATIVE ASBESTOS SAMPLE
##	POSITIVE ASBESTOS SAMPLE
##	POSITIVE LEAD SAMPLE

NOT TO SCALE

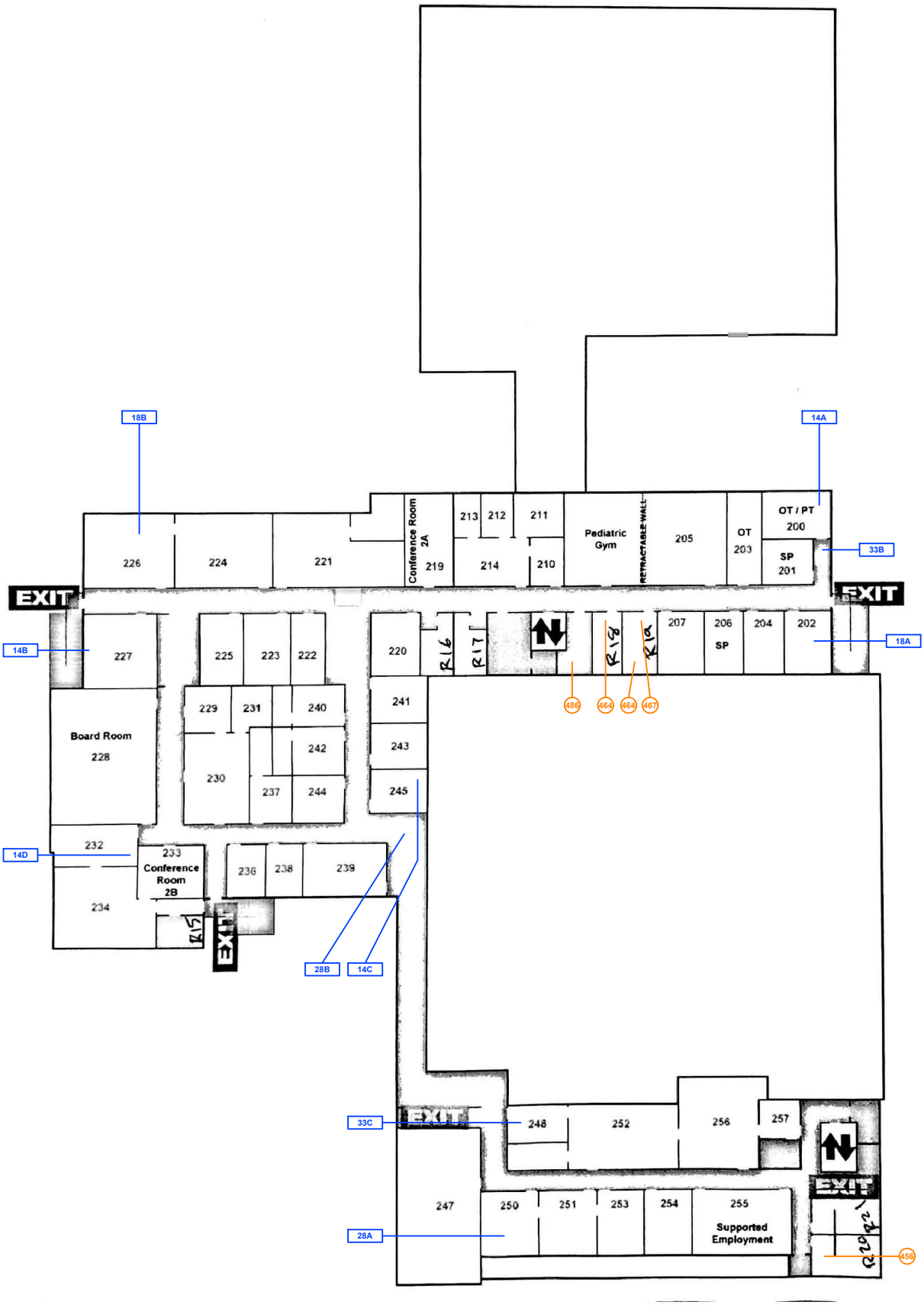
MAIN BUILDING: FLOOR 1

1800 E. LA VETA AVE,
ORANGE, CA 92866

efi global

PN: 045.04081	FIGURE 1
DT: 8/13/2020	
DB: HM	CB: RH

K:\AE 2020\Projects 2020\045 Projects 2020\045.04081_1800 E La Veta Ave Orange CA_ACM LBP\045.04081_Reports\CAD\045.04081



LEGEND

##	NEGATIVE ASBESTOS SAMPLE
##	POSITIVE ASBESTOS SAMPLE
##	POSITIVE LEAD SAMPLE

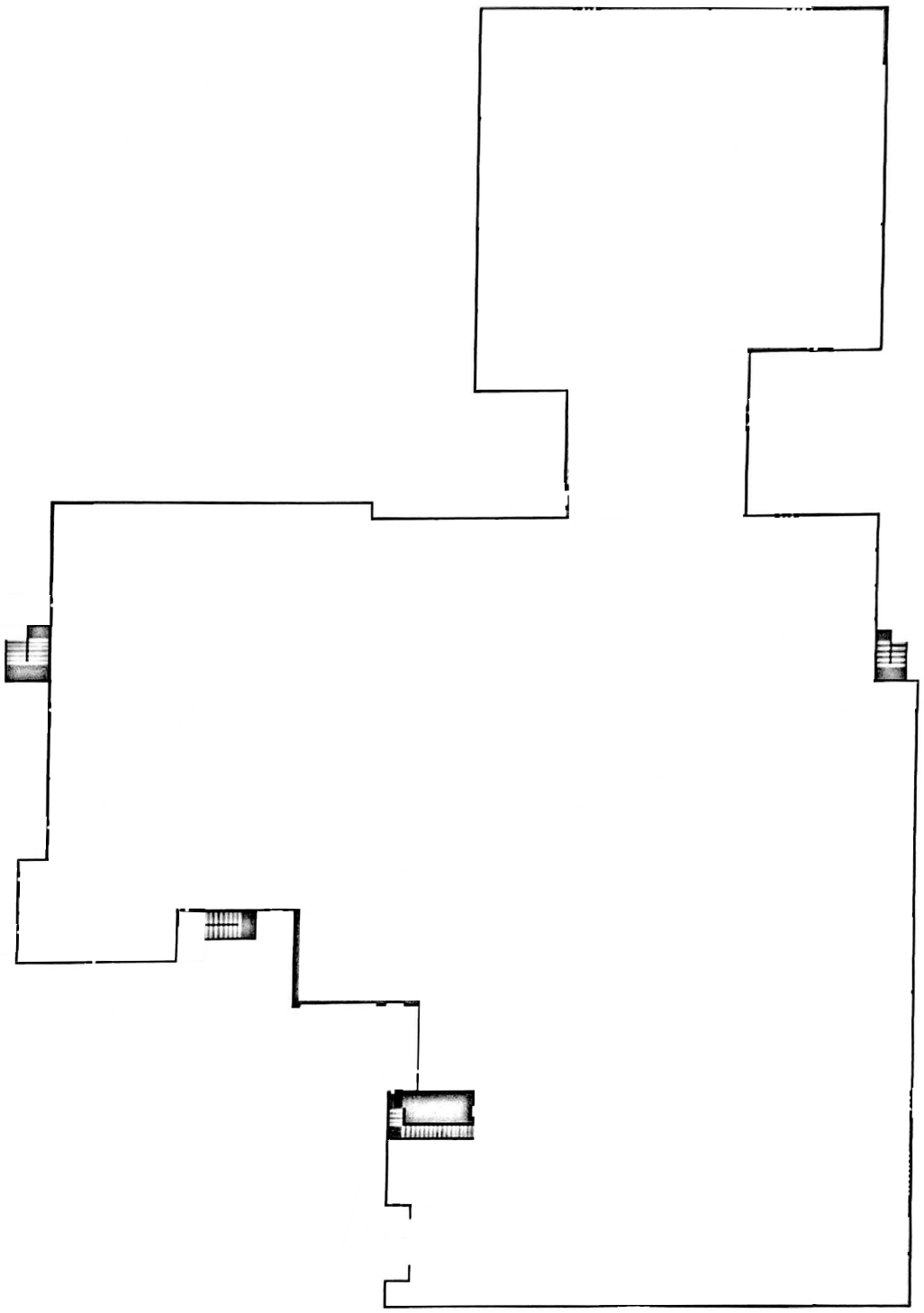
NOT TO SCALE

MAIN BUILDING: FLOOR 2

1800 E. LA VETA AVE,
ORANGE, CA 92866

efi global

PN: 045.04081	FIGURE 2
DT: 8/13/2020	
DB: HM	CB: RH



LEGEND

NEGATIVE ASBESTOS SAMPLE

POSITIVE ASBESTOS SAMPLE

(##) POSITIVE LEAD SAMPLE

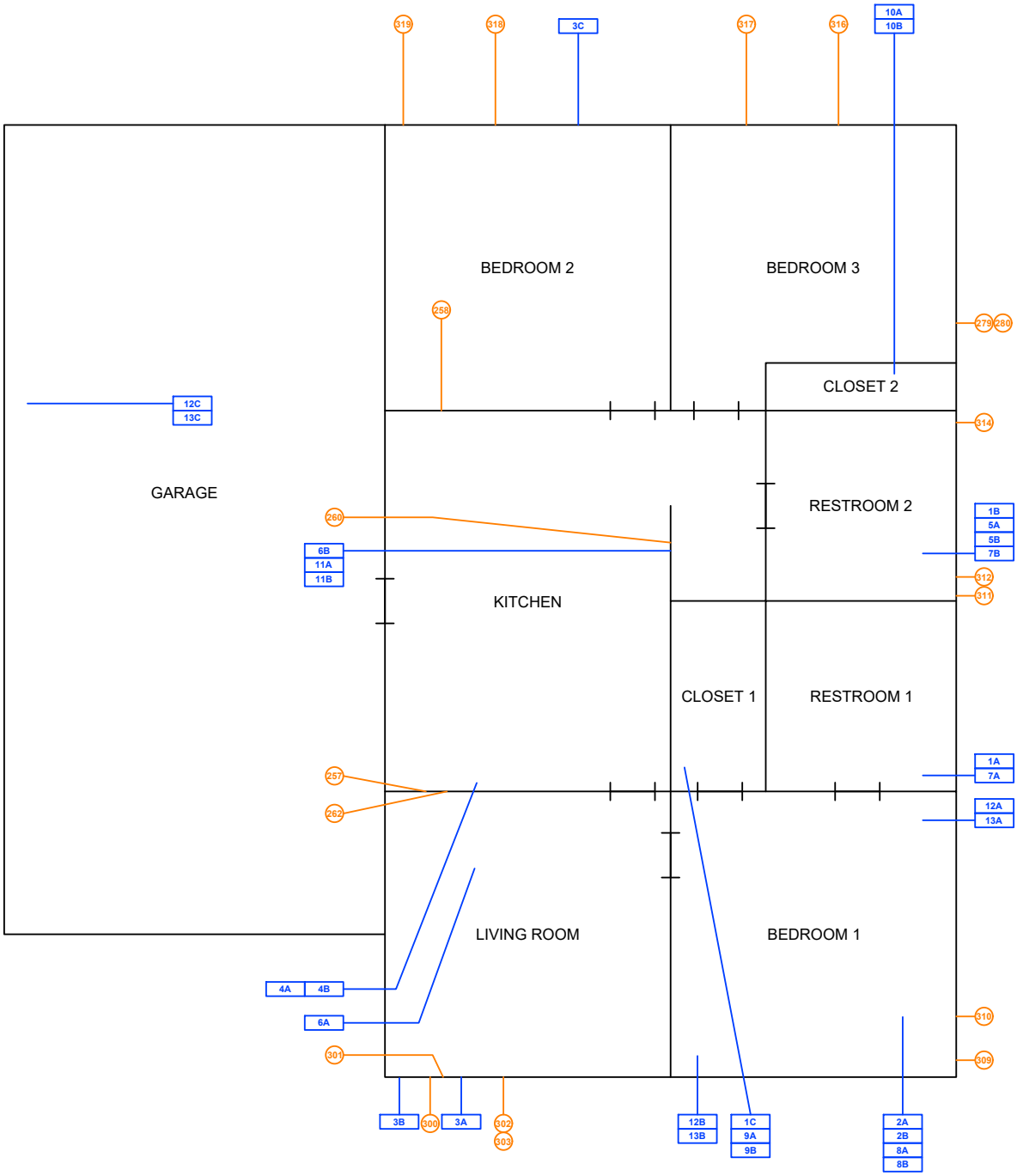
NOT TO SCALE

MAIN BUILDING: ROOF

1800 E. LA VETA AVE,
ORANGE, CA 92866

efi global

PN:045.04081	FIGURE
DT: 8/13/2020	3
DB: HM CB: RH	



LEGEND

NEGATIVE ASBESTOS SAMPLE

POSITIVE ASBESTOS SAMPLE

POSITIVE LEAD SAMPLE

NOT TO SCALE

BUILDING B

1800 E. LA VETA AVE,
ORANGE, CA 92866

efi global

PN:045.04081	FIGURE 4
DT: 8/13/2020	
DB: HM CB: RH	

K:\AE 2020\Projects 2020\045 Projects 2020\045.04081_1800 E La Veta Ave Orange CA_ACM LBP\045.04081_Reports\CAD\045.04081

APPENDIX II
Asbestos Analysis Results and Chain of Custody

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077
Tel/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order:	042019621
Customer ID:	32ANDE85
Customer PO:	
Project ID:	

Attention:	Heriberto Romero	**Phone:**	(888) 705-6300
	EFI Global, Inc.	**Fax:**	
	5261 West Imperial Highway	**Received Date:**	08/13/2020 10:20 AM
	Los Angeles, CA 90045	**Analysis Date:**	08/17/2020
		Collected Date:	08/07/2020
Project:	045.04081 / 585 House		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
1A-Drywall *042019621-0001*	Restroom 1 - N - Drywall Systems	Brown/White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1A-Joint Compound *042019621-0001A*	Restroom 1 - N - Drywall Systems	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1B-Drywall *042019621-0002*	Restroom 2 - E - Drywall Systems	Brown/White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
1B-Joint Compound *042019621-0002A*	Restroom 2 - E - Drywall Systems	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1C-Drywall *042019621-0003*	Closet 1 - NE - Drywall Systems	Brown/White Fibrous Homogeneous	20% Cellulose 3% Glass	77% Non-fibrous (Other)	None Detected
1C-Joint Compound *042019621-0003A*	Closet 1 - NE - Drywall Systems	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2A *042019621-0004*	Bedroom 1 - E - Wallpaper	Brown Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
2B *042019621-0005*	Bedroom 1 - W - Wallpaper	Brown Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
3A *042019621-0006*	Exterior - E - Window Putty	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3B *042019621-0007*	Exterior - SE - Window Putty	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3C *042019621-0008*	Exterior - W - Window Putty	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4A *042019621-0009*	Kitchen - E - Sink Undercoating - White	White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
4B *042019621-0010*	Kitchen - E - Sink Undercoating - White	White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
5A *042019621-0011*	Restroom 2 - N - FRP Backing Mastic - Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5B *042019621-0012*	Restroom 2 - W - FRP Backing Mastic - Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6A-Counter Top Tile *042019621-0013*	Living Room - E - Counter Top Tile - 4x4 White	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 08/18/2020 07:34:22

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http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order: 042019621
Customer ID: 32ANDE85
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
6A-Grout *042019621-0013A*	Living Room - E - Grout	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6A-Counter Top Tile 2 *042019621-0013B*	Living Room - E - Counter Top Tile - 4x4 White	Brown/Tan Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
6A-Thinset *042019621-0013C*	Living Room - E - Thinset	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6A-Adhesive *042019621-0013D*	Living Room - E - Adhesive	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6B-Counter Top Tile *042019621-0014*	Kitchen - N - Counter Top Tile - 4x4 White	White/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6B-Grout *042019621-0014A*	Kitchen - N - Grout	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6B-Thinset *042019621-0014B*	Kitchen - N - Thinset	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6B-Adhesive *042019621-0014C*	Kitchen - N - Adhesive	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6B-Counter Top 2 *042019621-0014D*	Kitchen - N - Counter Top Tile - 4x4 White	Brown Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
7A-Floor Tile *042019621-0015*	Restroom 1 - N - Floor Tile - White	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7A-Grout *042019621-0015A*	Restroom 1 - N - Grout	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7A-Thinset *042019621-0015B*	Restroom 1 - N - Thinset	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7B-Floor Tile *042019621-0016*	Restroom 2 - S - Floor Tile - White	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7B-Grout *042019621-0016A*	Restroom 2 - S - Grout	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7B-Thinset *042019621-0016B*	Restroom 2 - S - Thinset	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7B-Adhesive *042019621-0016C*	Restroom 2 - S - Adhesive	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8A-VFT *042019621-0017*	Bedroom 1 - Under Wood Flooring - N - VFT - Tan	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8A-Mastic *042019621-0017A*	Bedroom 1 - Under Wood Flooring - N - Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8B-VFT *042019621-0018*	Bedroom 1 - Under Wood Flooring - N - VFT - Tan	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order: 042019621
Customer ID: 32ANDE85
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
8B-Mastic *042019621-0018A*	Bedroom 1 - Under Wood Flooring - N - Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9A-VFT *042019621-0019*	Closet 1 - N - VFT - Beige	Beige Fibrous Homogeneous	30% Cellulose 10% Synthetic	60% Non-fibrous (Other)	None Detected
9A-Adhesive *042019621-0019A*	Closet 1 - N - Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9A-VFT 2 *042019621-0019B*	Closet 1 - N - VFT	Tan Fibrous Homogeneous	30% Cellulose	50% Non-fibrous (Other)	20% Chrysotile
9B-VFT *042019621-0020*	Closet 1 - S - VFT - Beige	Beige Fibrous Homogeneous	25% Synthetic 15% Glass	60% Non-fibrous (Other)	None Detected
9B-Adhesive *042019621-0020A*	Closet 1 - S - Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9B-VFT 2 *042019621-0020B*	Closet 1 - S - VFT	Tan Fibrous Homogeneous		70% Non-fibrous (Other)	30% Chrysotile
10A *042019621-0021*	Closet 3 - N - VSF - Brown	Brown Fibrous Homogeneous	25% Cellulose 5% Synthetic	70% Non-fibrous (Other)	None Detected
10B *042019621-0022*	Closet 3 - S - VSF - Brown	Brown/Gray Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected
11A-VSF *042019621-0023*	Kitchen - W - VSF - Tan	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11A-Adhesive *042019621-0023A*	Kitchen - W - Adhesive	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11A-VSF 2 *042019621-0023B*	Kitchen - W - VFT	Tan Fibrous Homogeneous	25% Cellulose 5% Synthetic	70% Non-fibrous (Other)	None Detected
11A-Floor Tile *042019621-0023C*	Kitchen - W - Floor Tile	Tan Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
11A-Mastic *042019621-0023D*	Kitchen - W - Mastic	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
11B-VSF *042019621-0024*	Kitchen - E - VSF - Tan	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11B-Adhesive *042019621-0024A*	Kitchen - E - Adhesive	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11B-VSF 2 *042019621-0024B*	Kitchen - E - VSF	Tan Fibrous Homogeneous	25% Synthetic 15% Glass	60% Non-fibrous (Other)	None Detected
11B-Adhesive 2 *042019621-0024C*	Kitchen - E - Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11B-Floor Tile *042019621-0024D*	Kitchen - E - Floor Tile	Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

Initial report from: 08/18/2020 07:34:22

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http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order: 042019621
Customer ID: 32ANDE85
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
11B-Mastic *042019621-0024E*	Kitchen - E - Mastic	Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
12A-Shingle *042019621-0025*	Roof - N - Roof Core	Tan/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
12A-Tar Paper *042019621-0025A*	Roof - N - Roof Core	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
12B-Shingle *042019621-0026*	Roof - E - Roof Core	Tan/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
12B-Tar Paper *042019621-0026A*	Roof - E - Roof Core	Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
12C-Shingle *042019621-0027*	Roof - S - Roof Core	Tan/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
12C-Tar Paper *042019621-0027A*	Roof - S - Roof Core	Black Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
13A *042019621-0028*	Roof - N - Roofing Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13B *042019621-0029*	Roof - E - Roofing Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13C *042019621-0030*	Roof - S - Roofing Mastic	Brown/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)
Daniel Blake (24)
John Witcraft (31)
Sarah Kleinbrahm (9)

Samantha Rundstrom, Laboratory Manager
or Other Approved Signatory

Initial report from: 08/18/2020 07:34:22

042019621

efi global **Laboratory Chain of Custody**

Turn Around Time - (Circle) *Please select based on laboratory being used: 3hr 6hr 24hr 48hr (72hr) Standard

EFI Global Project No.:	Project Name:	Sampling By:	Number of Samples:	Date(s) Collected:	Page No.:		Total Pages
045.04081	585 House	H.Romero	30	8/7/20	1	Of	4

Sample No.:	Sample Location & Comments	Start Flow Rate / End Flow Rate	Start Time / Stop Time	Total Volume / Area/SQFT	Type of Analysis / Sample Serial Number
	Please				Analysis Type: PLM / Serial No.:
	See				Analysis Type: Bulk / Serial No.:
	Attached				Analysis Type: / Serial No.:
					Analysis Type: / Serial No.:
					Analysis Type: / Serial No.:
					Analysis Type: / Serial No.:
					Analysis Type: / Serial No.:
					Analysis Type: / Serial No.:
					Analysis Type: / Serial No.:

RECEIVED EMLAB MADISON, NJ 2020 AUG 13 AM 11:26

Relinquished By (Print & Sign) (Date & Time)	Received By (Print & Sign) (Date & Time)
Heriberto Romero 8/10/20	CM A 8/13/20 10:20a
Relinquished By (Print & Sign) (Date & Time)	Received By (Print & Sign) (Date & Time)

Special Instructions:	Stop Positive: Yes / No	E-mail to Additional Party:
		Heriberto.Romero@EFIGlobal.com

30

OrderID: 042019621

efi global

042019621

ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: _____ **PROJECT NAME:** _____

PROJECT LOCATION: 585 House **DATE:** 8/7/20 **COMPLETED BY:** H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
1A	Drywall Systems	Restroom 1 - N		F / NF (G) D SD	(S) / TSI / MISC
↓B	↓	↓ 2 - E		F / NF G D SD	S / TSI / MISC
↓C	↓	Closet 1 - NE		F / NF G D SD	S / TSI / MISC
2A	Wallpaper	Bedroom 1 - E	90	F / (NF) (G) D SD	S / TSI / (MISC)
↓B	↓	↓ - W		F / NF G D SD	S / TSI / MISC
3A	Window Putty	Exterior - E	30	F / (NF) (G) D SD	S / TSI / MISC
↓B	↓	↓ - SE		F / NF G D SD	S / TSI / MISC
↓C	↓	↓ - W		F / NF G D SD	S / TSI / MISC
4A	Sink undercoating (white)	Kitchen - E	10	F / (NF) (G) D SD	S / TSI / (MISC)
↓B	↓ ↓	↓ - E		F / NF G D SD	S / TSI / MISC
5A	FRP Backing Mastic (Black)	Restroom 2 - N	90	F / (NF) (G) D SD	S / TSI / (MISC)
↓B	↓	↓ - W		F / NF G D SD	S / TSI / MISC

042019621

efi global

ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: 045.04081 PROJECT NAME: _____

PROJECT LOCATION: 585 House DATE: 8/7/20 COMPLETED BY: H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
6A	Counter Top Tile (4x4 white)	Living Room - E		F / NF G D SD	S / TSI / MISC
↓B	↓	Kitchen - N		F / NF G D SD	S / TSI / MISC
7A	Floor Tile white	Restroom 1 - N		F / NF G D SD	S / TSI / MISC
↓B	↓	↓ 2 - S		F / NF G D SD	S / TSI / MISC
8A	VFT (Tan)	Bedroom 1 under wood flooring - N		F / NF G D SD	S / TSI / MISC
↓B	↓	↓ ↓ - N		F / NF G D SD	S / TSI / MISC
9A	VSF (Beige) + Adhesive	Closet 1 - N		F / NF G D SD	S / TSI / MISC
↓B	↓ + ↓	↓ - S		F / NF G D SD	S / TSI / MISC
10A	VSF (Brown)	Closet 3 - N		F / NF G D SD	S / TSI / MISC
↓B	↓	↓ - S		F / NF G D SD	S / TSI / MISC
11A	VSF (Tan) + layers + Adhesives	Kitchen - W		F / NF G D SD	S / TSI / MISC
↓B	↓ ↓ ↓	↓ - E		F / NF G D SD	S / TSI / MISC

PAGE 3 OF ___

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OrderID: 042019621

Page 3 Of 4

042019621

efi global

ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: 045.04081 PROJECT NAME: _____

PROJECT LOCATION: 585 House DATE: 8/7/20 COMPLETED BY: H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
12A	Roof Core	Roof - N	1,200	F / NF G D SD	S / TSI / MISC
B	↓	- E		F / NF G D SD	S / TSI / MISC
C	↓	- S		F / NF G D SD	S / TSI / MISC
13A	Roofing Mastic	- N	20	F / NF G D SD	S / TSI / MISC
B	↓	- E		F / NF G D SD	S / TSI / MISC
C	↓	- S		F / NF G D SD	S / TSI / MISC
				F / NF G D SD	S / TSI / MISC
				F / NF G D SD	S / TSI / MISC
				F / NF G D SD	S / TSI / MISC
				F / NF G D SD	S / TSI / MISC
				F / NF G D SD	S / TSI / MISC
				F / NF G D SD	S / TSI / MISC

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2020 AUG 13 AM 11:25
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PAGE 4 OF ___

Page 4 Of 4

OrderID: 042019621

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com / cinnasblab@EMSL.com

EMSL Order ID: 042019627
Customer ID: 32ANDE85
Customer PO:
Project ID:

Attn: Heriberto Romero
EFI Global, Inc.
5261 West Imperial Highway
Los Angeles, CA 90045

Phone: (888) 705-6300
Fax:
Collected:
Received: 8/13/2020
Analyzed: 8/25/2020

Proj: 045.04081 / 1800 E. Laveta

Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 14A-Drywall **Lab Sample ID:** **042019627-0001**
Sample Description: 2nd Floor - Room 200-E/Drywall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Brown/White	20.0%	80.0%	None Detected	

Client Sample ID: 14A-Joint Compound **Lab Sample ID:** **042019627-0001A**
Sample Description: 2nd Floor - Room 200-E/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	98.0%	**2% Chrysotile**	

Client Sample ID: 14B-Drywall **Lab Sample ID:** **042019627-0002**
Sample Description: 2nd Floor - Room 227 - N/Drywall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Brown/White	20.0%	80.0%	None Detected	

Client Sample ID: 14B-Joint Compound **Lab Sample ID:** **042019627-0002A**
Sample Description: 2nd Floor - Room 227 - N/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	98.0%	**2% Chrysotile**	

Client Sample ID: 14C-Drywall **Lab Sample ID:** **042019627-0003**
Sample Description: 2nd Floor - Room 245 - NE/Drywall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Brown/White	20.0%	80.0%	None Detected	

Client Sample ID: 14C-Joint Compound **Lab Sample ID:** **042019627-0003A**
Sample Description: 2nd Floor - Room 245 - NE/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	97.0%	**3% Chrysotile**	

Client Sample ID: 14D-Drywall **Lab Sample ID:** **042019627-0004**
Sample Description: 2nd Floor - Room 232 - SW/Drywall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Brown/White	20.0%	80.0%	None Detected	

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Client Sample ID: 14D-Joint Compound **Lab Sample ID:** **042019627-0004A**
Sample Description: 2nd Floor - Room 232 - SW/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	98.0%	**2% Chrysotile**	

Client Sample ID: 14D-Texture **Lab Sample ID:** **042019627-0004B**
Sample Description: 2nd Floor - Room 232 - SW/Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 14E-Drywall **Lab Sample ID:** **042019627-0005**
Sample Description: 1st Floor - Utility Rm 6 - SE/Drywall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Brown/White	20.0%	80.0%	None Detected	

Client Sample ID: 14E-Joint Compound **Lab Sample ID:** **042019627-0005A**
Sample Description: 1st Floor - Utility Rm 6 - SE/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 14E-Texture **Lab Sample ID:** **042019627-0005B**
Sample Description: 1st Floor - Utility Rm 6 - SE/Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 14F-Drywall **Lab Sample ID:** **042019627-0006**
Sample Description: 1st Floor - Room 106 - SE/Drywall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Brown/White	20.0%	80.0%	None Detected	

Client Sample ID: 14F-Joint Compound **Lab Sample ID:** **042019627-0006A**
Sample Description: 1st Floor - Room 106 - SE/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	98.0%	**2% Chrysotile**	

Client Sample ID: 14F-Texture **Lab Sample ID:** **042019627-0006B**
Sample Description: 1st Floor - Room 106 - SE/Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

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Client Sample ID: 14G-Drywall **Lab Sample ID:** **042019627-0007**
Sample Description: 1st Floor - Room 145 - SE/Drywall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Brown/White	20.0%	80.0%	None Detected	

Client Sample ID: 14G-Joint Compound **Lab Sample ID:** **042019627-0007A**
Sample Description: 1st Floor - Room 145 - SE/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 14H-Drywall **Lab Sample ID:** **042019627-0008**
Sample Description: 1st Floor - Room 158 - NW/Drywall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Brown/White	20.0%	80.0%	None Detected	

Client Sample ID: 14H-Joint Compound **Lab Sample ID:** **042019627-0008A**
Sample Description: 1st Floor - Room 158 - NW/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 14H-Texture **Lab Sample ID:** **042019627-0008B**
Sample Description: 1st Floor - Room 158 - NW/Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 14I-Drywall **Lab Sample ID:** **042019627-0009**
Sample Description: 1st Floor - Room 159 - NE/Drywall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Brown/White	15.0%	85.0%	None Detected	

Client Sample ID: 14I-Joint Compound **Lab Sample ID:** **042019627-0009A**
Sample Description: 1st Floor - Room 159 - NE/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 14I-Texture **Lab Sample ID:** **042019627-0009B**
Sample Description: 1st Floor - Room 159 - NE/Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

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Client Sample ID: 15A **Lab Sample ID:** **042019627-0010**
Sample Description: 1st Floor - Room 145 - E/Acoustic Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 15B **Lab Sample ID:** **042019627-0011**
Sample Description: 1st Floor Room 145 - S/Acoustic Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 15C **Lab Sample ID:** **042019627-0012**
Sample Description: 1st Floor - Room 142 - N/Acoustic Texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 16A-Adhesive **Lab Sample ID:** **042019627-0013**
Sample Description: Utility Room 6 - SE/Adhesive (Tan)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Tan	0.0%	100.0%	None Detected	

Client Sample ID: 16A-Cove Base **Lab Sample ID:** **042019627-0013A**
Sample Description: Utility Room 6 - SE/Cove Base (Brown)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 16B-Adhesive **Lab Sample ID:** **042019627-0014**
Sample Description: Utility Room 7 - E/Adhesive (Tan)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Tan	0.0%	100.0%	None Detected	

Client Sample ID: 16B-Cove Base **Lab Sample ID:** **042019627-0014A**
Sample Description: Utility Room 7 - E/Cove Base (Brown)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 16C-Adhesive **Lab Sample ID:** **042019627-0015**
Sample Description: 1st Floor - Room 106 - S/Adhesive (Tan)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Tan/Yellow	0.0%	100.0%	None Detected	

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Client Sample ID: 16C-Cove Base **Lab Sample ID:** **042019627-0015A**
Sample Description: 1st Floor - Room 106 - S/Cove Base (Gray)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 16D-Adhesive **Lab Sample ID:** **042019627-0016**
Sample Description: 1st Floor - Room 110 - N/Adhesive (Tan)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Tan	0.0%	100.0%	None Detected	

Client Sample ID: 16D-Cove Base **Lab Sample ID:** **042019627-0016A**
Sample Description: 1st Floor - Room 110 - N/Cove Base (Gray)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 16E-Adhesive **Lab Sample ID:** **042019627-0017**
Sample Description: 1st Floor - Room 159 - NE/Adhesive (Tan)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Tan/White	5.0%	95.0%	None Detected	Result includes a small amount of inseparable attached material

Client Sample ID: 16E-Cove Base **Lab Sample ID:** **042019627-0017A**
Sample Description: 1st Floor - Room 159 - NE/Cove Base (Gray)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 17A **Lab Sample ID:** **042019627-0018**
Sample Description: 1st Floor - Room 158 - NW/Ceiling Tile (12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Gray/White	90.0%	10.0%	None Detected	

Client Sample ID: 17B **Lab Sample ID:** **042019627-0019**
Sample Description: 1st Floor - Room 106 - W/Ceiling Tile (12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray/White	80.0%	20.0%	None Detected	

Client Sample ID: 18A **Lab Sample ID:** **042019627-0020**
Sample Description: 2nd Floor - Room 202 - E/Ceiling Tile (24x48)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Tan/White	80.0%	20.0%	None Detected	

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Client Sample ID: 18B **Lab Sample ID:** **042019627-0021**
Sample Description: 2nd Floor - Room 226 - S/Ceiling Tile (24x48)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray/White	80.0%	20.0%	None Detected	

Client Sample ID: 19A **Lab Sample ID:** **042019627-0022**
Sample Description: 1st Floor - Room 149 - S/Sink Under Coating

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray/White	0.0%	97.0%	**3% Chrysotile**	

Client Sample ID: 19B **Lab Sample ID:** **042019627-0023**
Sample Description: 1st Floor - Room 149 - S/Sink Under Coating

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray/White	0.0%	97.0%	**3% Chrysotile**	

Client Sample ID: 23A **Lab Sample ID:** **042019627-0024**
Sample Description: Changing Rm 1 - S/Carpet Adhesive (Tan)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Tan/White	0.0%	96.0%	**4% Chrysotile**	Result includes a small amount of inseparable attached linoleum.

Client Sample ID: 20A **Lab Sample ID:** **042019627-0025**
Sample Description: Restroom 13 - N/Sink Caulking (White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 20B **Lab Sample ID:** **042019627-0026**
Sample Description: Restroom 2 - N/Sink Caulking (White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 21A **Lab Sample ID:** **042019627-0027**
Sample Description: Lobby - N/Stone Grout (Gray)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 21B **Lab Sample ID:** **042019627-0028**
Sample Description: Exterior - W/Stone Grout (Gray)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

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Client Sample ID: 22A ***Lab Sample ID:*** **042019627-0029**

Sample Description: Exterior - N/Stucco

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	**<1% Chrysotile**	
1000 PLM Pt Ct	8/25/2020	Gray	0.00%	99.90%	**0.1% Chrysotile**	

Client Sample ID: 22B ***Lab Sample ID:*** **042019627-0030**

Sample Description: Exterior - NE/Stucco

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	**<1% Chrysotile**	
1000 PLM Pt Ct	8/25/2020	Gray	0.00%	99.80%	**0.2% Chrysotile**	

Client Sample ID: 22C ***Lab Sample ID:*** **042019627-0031**

Sample Description: Exterior - E/Stucco

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	**<1% Chrysotile**	
1000 PLM Pt Ct	8/25/2020	Gray	0.0%	100.0%	**<0.1% Chrysotile**	

Client Sample ID: 22D ***Lab Sample ID:*** **042019627-0032**

Sample Description: Exterior - S/Stucco

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 22E ***Lab Sample ID:*** **042019627-0033**

Sample Description: Exterior - SW/Stucco

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 22F ***Lab Sample ID:*** **042019627-0034**

Sample Description: Exterior -W/Stucco

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	**<1% Chrysotile**	
1000 PLM Pt Ct	8/25/2020	Gray	0.00%	99.80%	**0.2% Chrysotile**	

Client Sample ID: 22G ***Lab Sample ID:*** **042019627-0035**

Sample Description: Exterior -W/Stucco

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	**<1% Chrysotile**	
1000 PLM Pt Ct	8/25/2020	Gray	0.00%	99.90%	**0.1% Chrysotile**	

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Client Sample ID: 23B **Lab Sample ID:** **042019627-0036**
Sample Description: Changing Rm 1-N/Carpet Adhesive (Tan)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Tan/White	0.0%	96.0%	**4% Chrysotile**	Result includes a small amount of inseparable attached material

Client Sample ID: 24A **Lab Sample ID:** **042019627-0037**
Sample Description: Room 126 - NW/VSF (White Speckled)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	15.0%	85.0%	None Detected	

Client Sample ID: 24B **Lab Sample ID:** **042019627-0038**
Sample Description: Room 126 - N/VSF (White Speckled)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	25.0%	75.0%	None Detected	

Client Sample ID: 25A **Lab Sample ID:** **042019627-0039**
Sample Description: Restroom 3 - W/VSF (Green Speckled)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Green	23.0%	77.0%	None Detected	

Client Sample ID: 25B **Lab Sample ID:** **042019627-0040**
Sample Description: Restroom 3 - NW/VSF (Green Speckled)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Green	35.0%	65.0%	None Detected	

Client Sample ID: 26A-VSF **Lab Sample ID:** **042019627-0041**
Sample Description: Utility Room 7 - E/VSF (Gray Pebble Pattern)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	20.0%	80.0%	None Detected	

Client Sample ID: 26A-Mastic **Lab Sample ID:** **042019627-0041A**
Sample Description: Utility Room 7 - E/Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Yellow	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached leveler.

Client Sample ID: 26B-VSF **Lab Sample ID:** **042019627-0042**
Sample Description: Utility Room 7 - E/VSF (Gray Pebble Pattern)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	20.0%	80.0%	None Detected	

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Client Sample ID: 26B-Mastic ***Lab Sample ID:*** **042019627-0042A**
Sample Description: Utility Room 7 - E/Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Yellow	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached leveler.

Client Sample ID: 26C-VSF ***Lab Sample ID:*** **042019627-0043**
Sample Description: Room 149 - NW/VSF (Gray Pebble Pattern)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	20.0%	65.0%	**15% Chrysotile**	Sample is not homogeneous with others in HA group.

Client Sample ID: 26C-Mastic ***Lab Sample ID:*** **042019627-0043A**
Sample Description: Room 149 - NW/Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Yellow	0.0%	100.0%	None Detected	Result includes a small amount of inseparable attached leveler.

Client Sample ID: 27A-VFT ***Lab Sample ID:*** **042019627-0044**
Sample Description: Room 106 - SW/VFT (White 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 27A-Adhesive ***Lab Sample ID:*** **042019627-0044A**
Sample Description: Room 106 - SW/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 27B-VFT ***Lab Sample ID:*** **042019627-0045**
Sample Description: Room 158 - NW/VFT (White 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 27B-Adhesive ***Lab Sample ID:*** **042019627-0045A**
Sample Description: Room 158 - NW/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 27C-VFT ***Lab Sample ID:*** **042019627-0046**
Sample Description: Room 159 - NE/VFT (White 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

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Client Sample ID: 27C-Adhesive **Lab Sample ID:** **042019627-0046A**
Sample Description: Room 159 - NE/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 28A-VFT **Lab Sample ID:** **042019627-0047**
Sample Description: 2nd Floor Room 250 - E/VFT (Cream 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 28A-Adhesive **Lab Sample ID:** **042019627-0047A**
Sample Description: 2nd Floor Room 250 - E/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 28B-VFT **Lab Sample ID:** **042019627-0048**
Sample Description: 2nd Floor Hall - Center/VFT (Cream 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 28B-Adhesive **Lab Sample ID:** **042019627-0048A**
Sample Description: 2nd Floor Hall - Center/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 29A-VFT **Lab Sample ID:** **042019627-0049**
Sample Description: Room 155 - SE/VFT (Blue Marbled 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Blue	0.0%	100.0%	None Detected	

Client Sample ID: 29A-Adhesive **Lab Sample ID:** **042019627-0049A**
Sample Description: Room 155 - SE/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 29B-VFT **Lab Sample ID:** **042019627-0050**
Sample Description: Room 158 - NW/VFT (Blue Marbled 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Blue	0.0%	100.0%	None Detected	

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Client Sample ID: 29B-Adhesive **Lab Sample ID:** **042019627-0050A**
Sample Description: Room 158 - NW/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 30A-VFT **Lab Sample ID:** **042019627-0051**
Sample Description: Utility Room 2 - N/VFT (Gray with White Streaks 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray/White	0.0%	94.0%	**6% Chrysotile**	

Client Sample ID: 30A-Adhesive **Lab Sample ID:** **042019627-0051A**
Sample Description: Utility Room 2 - N/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Tan	0.0%	100.0%	None Detected	

Client Sample ID: 30B-VFT **Lab Sample ID:** **042019627-0052**
Sample Description: Utility Room 2 - S/VFT (Gray with White Streaks 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	94.0%	**6% Chrysotile**	

Client Sample ID: 30B-Adhesive **Lab Sample ID:** **042019627-0052A**
Sample Description: Utility Room 2 - S/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Tan	0.0%	100.0%	None Detected	

Client Sample ID: 31A-VFT **Lab Sample ID:** **042019627-0053**
Sample Description: Room 137 - NW/VFT (Brown Marbled 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 31A-Adhesive **Lab Sample ID:** **042019627-0053A**
Sample Description: Room 137 - NW/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 31B-VFT **Lab Sample ID:** **042019627-0054**
Sample Description: Room 137 - W/VFT (Brown Marbled 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Brown	0.0%	100.0%	None Detected	

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Client Sample ID: 31B-Adhesive **Lab Sample ID:** **042019627-0054A**
Sample Description: Room 137 - W/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 32A-VFT **Lab Sample ID:** **042019627-0055**
Sample Description: 1st Floor - Lobby - N/VFT (Green Marbled 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 32A-Adhesive **Lab Sample ID:** **042019627-0055A**
Sample Description: 1st Floor - Lobby - N/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 32B-VFT **Lab Sample ID:** **042019627-0056**
Sample Description: 2nd Floor - Staff Lounge - SW/VFT (Green Marbled 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 32B-Adhesive **Lab Sample ID:** **042019627-0056A**
Sample Description: 2nd Floor - Staff Lounge - SW/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 32C-VFT **Lab Sample ID:** **042019627-0057**
Sample Description: 2nd Floor - Staff Lounge - S/VFT (Green Marbled 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 32C-Adhesive **Lab Sample ID:** **042019627-0057A**
Sample Description: 2nd Floor - Staff Lounge - S/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 33A-VFT **Lab Sample ID:** **042019627-0058**
Sample Description: 2nd Floor - Staff Lounge - S/VFT (Grey 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

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Client Sample ID: 33A-Adhesive **Lab Sample ID:** **042019627-0058A**
Sample Description: 2nd Floor - Staff Lounge - S/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black/Yellow	5.0%	95.0%	None Detected	

Client Sample ID: 33B-VFT **Lab Sample ID:** **042019627-0059**
Sample Description: 2nd Floor Windowed Hall - N/VFT (Grey 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 33B-Adhesive **Lab Sample ID:** **042019627-0059A**
Sample Description: 2nd Floor Windowed Hall - N/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 33C-VFT **Lab Sample ID:** **042019627-0060**
Sample Description: 2nd Floor - In Front of Room 248 - W/VFT (Grey 12x12)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 33C-Adhesive **Lab Sample ID:** **042019627-0060A**
Sample Description: 2nd Floor - In Front of Room 248 - W/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 34A-VFT **Lab Sample ID:** **042019627-0061**
Sample Description: Lobby - SW/VFT (Light Green)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 34A-Adhesive **Lab Sample ID:** **042019627-0061A**
Sample Description: Lobby - SW/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 34B-VFT **Lab Sample ID:** **042019627-0062**
Sample Description: Lobby - S/VFT (Light Green)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Green	0.0%	100.0%	None Detected	

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Client Sample ID: 34B-Adhesive **Lab Sample ID:** **042019627-0062A**
Sample Description: Lobby - S/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 35A **Lab Sample ID:** **042019627-0063**
Sample Description: Room 130 - N/Floor Texture Coating

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 35B **Lab Sample ID:** **042019627-0064**
Sample Description: Room 130 - E/Floor Texture Coating

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 35C **Lab Sample ID:** **042019627-0065**
Sample Description: Room 130 - W/Floor Texture Coating

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 36A-Floor Tile **Lab Sample ID:** **042019627-0066**
Sample Description: Restroom 12 NE/Floor Tile (1x1 White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 36A-Grout **Lab Sample ID:** **042019627-0066A**
Sample Description: Restroom 12 NE/Grout

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 36A-Leveler **Lab Sample ID:** **042019627-0066B**
Sample Description: Restroom 12 NE/Leveler

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 36B-Floor Tile **Lab Sample ID:** **042019627-0067**
Sample Description: Restroom 13 N/Floor Tile (1x1 White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

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Client Sample ID: 36B-Grout ***Lab Sample ID:*** **042019627-0067A**
Sample Description: Restroom 13 N/Grout

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 36B-Leveler ***Lab Sample ID:*** **042019627-0067B**
Sample Description: Restroom 13 N/Leveler

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 37A-Floor Tile ***Lab Sample ID:*** **042019627-0068**
Sample Description: Restroom 9/Floor Tile (1x1 Tan)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Tan/White	0.0%	100.0%	None Detected	

Client Sample ID: 37A-Grout ***Lab Sample ID:*** **042019627-0068A**
Sample Description: Restroom 9/Grout

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 37B-Floor Tile ***Lab Sample ID:*** **042019627-0069**
Sample Description: Restroom 10/Floor Tile (1x1 Tan)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Tan	0.0%	100.0%	None Detected	

Client Sample ID: 37B-Grout ***Lab Sample ID:*** **042019627-0069A**
Sample Description: Restroom 10/Grout

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 37B-Leveler ***Lab Sample ID:*** **042019627-0069B**
Sample Description: Restroom 10/Leveler

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray/White	0.0%	100.0%	None Detected	

Client Sample ID: 38A-Wall Tile ***Lab Sample ID:*** **042019627-0070**
Sample Description: Restroom 3/Wall Tile (4x4 Blue)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

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Client Sample ID: 38A-Grout **Lab Sample ID:** **042019627-0070A**
Sample Description: Restroom 3/Grout

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 38A-Leveler **Lab Sample ID:** **042019627-0070B**
Sample Description: Restroom 3/Leveler

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 38A-Mastic **Lab Sample ID:** **042019627-0070C**
Sample Description: Restroom 3/Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 38B-Wall Tile **Lab Sample ID:** **042019627-0071**
Sample Description: Restroom 3/Wall Tile (4x4 Blue)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 38B-Leveler **Lab Sample ID:** **042019627-0071A**
Sample Description: Restroom 3/Leveler

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 38B-Mastic **Lab Sample ID:** **042019627-0071B**
Sample Description: Restroom 3/Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 38C-Wall Tile **Lab Sample ID:** **042019627-0072**
Sample Description: Restroom 12/Wall Tile (4x4 Blue)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 38C-Grout **Lab Sample ID:** **042019627-0072A**
Sample Description: Restroom 12/Grout

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

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Client Sample ID: 38C-Plaster ***Lab Sample ID:*** **042019627-0072B**
Sample Description: Restroom 12/Plaster

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 39A ***Lab Sample ID:*** **042019627-0073**
Sample Description: Chaning Room - W/Wall Tile (4x4 Blue)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Blue	0.0%	100.0%	None Detected	

Client Sample ID: 39B-Wall Tile ***Lab Sample ID:*** **042019627-0074**
Sample Description: Restroom 5 - E/Wall Tile (4x4 Blue)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 39B-Grout ***Lab Sample ID:*** **042019627-0074A**
Sample Description: Restroom 5 - E/Grout

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 40A-Wall Tile ***Lab Sample ID:*** **042019627-0075**
Sample Description: Restroom 4 - S/Wall Tile (Pink 4x4)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Pink	0.0%	100.0%	None Detected	

Client Sample ID: 40A-Leveler ***Lab Sample ID:*** **042019627-0075A**
Sample Description: Restroom 4 - S/Leveler

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 40A-Joint Compound ***Lab Sample ID:*** **042019627-0075B**
Sample Description: Restroom 4 - S/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	98.0%	**2% Chrysotile**	

Client Sample ID: 40B-Wall Tile ***Lab Sample ID:*** **042019627-0076**
Sample Description: Restroom 6 - N/Wall Tile (Pink 4x4)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Pink	0.0%	100.0%	None Detected	

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Client Sample ID: 40B-Plaster ***Lab Sample ID:*** **042019627-0076A**
Sample Description: Restroom 6 - N/Plaster

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 40B-Joint Compound ***Lab Sample ID:*** **042019627-0076B**
Sample Description: Restroom 6 - N/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	98.0%	**2% Chrysotile**	

Client Sample ID: 41A-Wall Tile ***Lab Sample ID:*** **042019627-0077**
Sample Description: Kitchen 160 - S/Wall Tile (Brown 4x4)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 41A-Grout ***Lab Sample ID:*** **042019627-0077A**
Sample Description: Kitchen 160 - S/Grout

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 41A-Leveler ***Lab Sample ID:*** **042019627-0077B**
Sample Description: Kitchen 160 - S/Leveler

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 41A-Joint Compound ***Lab Sample ID:*** **042019627-0077C**
Sample Description: Kitchen 160 - S/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 41B-Wall Tile ***Lab Sample ID:*** **042019627-0078**
Sample Description: Utility Rm 6 - SE/Wall Tile (Brown 4x4)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Brown	0.0%	100.0%	None Detected	

Client Sample ID: 41B-Grout ***Lab Sample ID:*** **042019627-0078A**
Sample Description: Utility Rm 6 - SE/Grout

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Brown	0.0%	100.0%	None Detected	

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Client Sample ID: 41B-Leveler **Lab Sample ID:** **042019627-0078B**
Sample Description: Utility Rm 6 - SE/Leveler

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 41B-Joint Compound **Lab Sample ID:** **042019627-0078C**
Sample Description: Utility Rm 6 - SE/Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 42A-Wall Tile **Lab Sample ID:** **042019627-0079**
Sample Description: Restroom 13 - N/Wall Tile (Salmon 4x4)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Pink	0.0%	100.0%	None Detected	

Client Sample ID: 42A-Grout **Lab Sample ID:** **042019627-0079A**
Sample Description: Restroom 13 - N/Grout

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 42B-Wall Tile **Lab Sample ID:** **042019627-0080**
Sample Description: Utility Rm 6 - N/Wall Tile (Salmon 4x4)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 42B-Grout **Lab Sample ID:** **042019627-0080A**
Sample Description: Utility Rm 6 - N/Grout

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 43A **Lab Sample ID:** **042019627-0081**
Sample Description: Restroom 9 - W/Wall Tile (Black 4x4)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White/Black	0.0%	100.0%	None Detected	

Client Sample ID: 43B **Lab Sample ID:** **042019627-0082**
Sample Description: Restroom 9 - W/Wall Tile (Black 4x4)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Black	0.0%	100.0%	None Detected	

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Client Sample ID: 46C **Lab Sample ID:** **042019627-0083**
Sample Description: North Roof - S/Roofing Mastic (Black)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	0.0%	96.0%	**4% Chrysotile**	

Client Sample ID: 44A-Tar Felt **Lab Sample ID:** **042019627-0084**
Sample Description: North Rolled on Roof - East/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Black	75.0%	25.0%	None Detected	

Client Sample ID: 44A-Tar **Lab Sample ID:** **042019627-0084A**
Sample Description: North Rolled on Roof - East/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 44B-Tar Felt **Lab Sample ID:** **042019627-0085**
Sample Description: North Rolled on Roof - East/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Black	70.0%	30.0%	None Detected	

Client Sample ID: 44B-Tar **Lab Sample ID:** **042019627-0085A**
Sample Description: North Rolled on Roof - East/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 44C-Tar Felt **Lab Sample ID:** **042019627-0086**
Sample Description: North Rolled on Roof - North/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: 44C-Tar **Lab Sample ID:** **042019627-0086A**
Sample Description: North Rolled on Roof - North/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 44C-Membrane **Lab Sample ID:** **042019627-0086B**
Sample Description: North Rolled on Roof - North/Membrane

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray	20.0%	80.0%	None Detected	

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Client Sample ID: 44D-Tar Felt **Lab Sample ID:** **042019627-0087**
Sample Description: North Rolled on Roof - North Center/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: 44D-Tar **Lab Sample ID:** **042019627-0087A**
Sample Description: North Rolled on Roof - North Center/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 44E-Tar Felt **Lab Sample ID:** **042019627-0088**
Sample Description: North Rolled on Roof - South Center/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	60.0%	40.0%	None Detected	

Client Sample ID: 44E-Tar **Lab Sample ID:** **042019627-0088A**
Sample Description: North Rolled on Roof - South Center/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 44F-Tar Felt **Lab Sample ID:** **042019627-0089**
Sample Description: North Rolled on Roof - Northeast/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	60.0%	40.0%	None Detected	

Client Sample ID: 44F-Tar **Lab Sample ID:** **042019627-0089A**
Sample Description: North Rolled on Roof - Northeast/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 44F-Backing **Lab Sample ID:** **042019627-0089B**
Sample Description: North Rolled on Roof - Northeast/Backing

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Brown	98.0%	2.0%	None Detected	

Client Sample ID: 44G-Tar Felt **Lab Sample ID:** **042019627-0090**
Sample Description: North Rolled on Roof - NorthWest/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	60.0%	40.0%	None Detected	

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Client Sample ID: 44G-Tar **Lab Sample ID:** **042019627-0090A**
Sample Description: North Rolled on Roof - NorthWest/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 44G-Backing **Lab Sample ID:** **042019627-0090B**
Sample Description: North Rolled on Roof - NorthWest/Backing

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Brown	98.0%	2.0%	None Detected	

Client Sample ID: 45A **Lab Sample ID:** **042019627-0091**
Sample Description: North Roof - N/Roofing Mastic (Black/White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White/Black	25.0%	75.0%	**<1% Chrysotile**	
1000 PLM PtCt Grav. Red.	8/25/2020	White/Black	0.0%	100%	**<0.1% Chrysotile**	

Client Sample ID: 45B **Lab Sample ID:** **042019627-0092**
Sample Description: North Roof - C/Roofing Mastic (Black/White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	White/Black	25.0%	75.0%	**<1% Chrysotile**	Result includes a small amount of inseparable attached material
1000 PLM PtCt Grav. Red.	8/25/2020	White/Black	0.0%	100%	**<0.1% Chrysotile**	

Client Sample ID: 45C **Lab Sample ID:** **042019627-0093**
Sample Description: North Roof - S/Roofing Mastic (Black/White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Black	40.0%	60.0%	None Detected	

Client Sample ID: 46A **Lab Sample ID:** **042019627-0094**
Sample Description: North Roof - N/Roofing Mastic (Black)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray/Black	0.0%	96.0%	**4% Chrysotile**	

Client Sample ID: 46B **Lab Sample ID:** **042019627-0095**
Sample Description: North Roof - C/Roofing Mastic (Black)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray/Black	0.0%	96.0%	**4% Chrysotile**	

Client Sample ID: 47A **Lab Sample ID:** **042019627-0096**
Sample Description: North Roof - C/HVAC Mastic (Smooth Gray)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray	6.0%	94.0%	None Detected	

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Client Sample ID: 47B **Lab Sample ID:** **042019627-0097**
Sample Description: North Roof - S/HVAC Mastic (Smooth Gray)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/14/2020	Gray/White	6.0%	94.0%	None Detected	

Client Sample ID: 47C **Lab Sample ID:** **042019627-0098**
Sample Description: North Roof - S/HVAC Mastic (Smooth Gray)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray/White	0.0%	100.0%	None Detected	

Client Sample ID: 48A **Lab Sample ID:** **042019627-0099**
Sample Description: North Roof - S/HVAC Mastic (Textured White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 48B **Lab Sample ID:** **042019627-0100**
Sample Description: North Roof - S/HVAC Mastic (Textured White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 48C **Lab Sample ID:** **042019627-0101**
Sample Description: North Roof - E/HVAC Mastic (Textured White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 49A **Lab Sample ID:** **042019627-0102**
Sample Description: Center Roof - HVAC Ducting - SW/HVAC Coating (Grey)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 49B **Lab Sample ID:** **042019627-0103**
Sample Description: Center Roof - HVAC Ducting - E/HVAC Coating (Grey)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	White/Black	0.0%	96.0%	**4% Chrysotile**	

Client Sample ID: 49C **Lab Sample ID:** **042019627-0104**
Sample Description: Center Roof - HVAC Ducting - Center/HVAC Coating (Grey)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Client Sample ID: 50A-Coating **Lab Sample ID:** **042019627-0105**
Sample Description: Center Roof - HVAC Ducting - S. Center/Vent Coating (White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 50A-Mastic **Lab Sample ID:** **042019627-0105A**
Sample Description: Center Roof - HVAC Ducting - S. Center/Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Black	0.0%	95.0%	**5% Chrysotile**	

Client Sample ID: 50B-Coating **Lab Sample ID:** **042019627-0106**
Sample Description: Center Roof - HVAC Ducting - Center/Vent Coating (White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 50B-Mastic **Lab Sample ID:** **042019627-0106A**
Sample Description: Center Roof - HVAC Ducting - Center/Mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Black	0.0%	95.0%	**5% Chrysotile**	

Client Sample ID: 50C **Lab Sample ID:** **042019627-0107**
Sample Description: Center Roof - HVAC Ducting - W. Center/Vent Coating (White)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	White/Black	0.0%	95.0%	**5% Chrysotile**	

Client Sample ID: 51A **Lab Sample ID:** **042019627-0108**
Sample Description: Center Roof - at 3 Pipes - S/Penetration Mastic (White/Black)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	White/Black	0.0%	100.0%	None Detected	

Client Sample ID: 51B **Lab Sample ID:** **042019627-0109**
Sample Description: Center Roof - Roof Hatch - Center/Penetration Mastic (White/Black)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	White/Black	0.0%	95.0%	**5% Chrysotile**	

Client Sample ID: 51C **Lab Sample ID:** **042019627-0110**
Sample Description: Center Roof - Roof Hatch - SW/Penetration Mastic (White/Black)

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	0.0%	95.0%	**5% Chrysotile**	

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Client Sample ID: 52A **Lab Sample ID:** **042019627-0111**
Sample Description: Center Roof - Roof Hatch - SE/Roof Core

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: 52B-Tar Felt **Lab Sample ID:** **042019627-0112**
Sample Description: Center Roof - Roof Hatch - S/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: 52B-Tar **Lab Sample ID:** **042019627-0112A**
Sample Description: Center Roof - Roof Hatch - S/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 52C-Tar Felt **Lab Sample ID:** **042019627-0113**
Sample Description: Center Roof - Roof Hatch - Center/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: 52C-Tar **Lab Sample ID:** **042019627-0113A**
Sample Description: Center Roof - Roof Hatch - Center/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 52D-Tar Felt **Lab Sample ID:** **042019627-0114**
Sample Description: Center Roof - Roof Hatch - N/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: 52D-Tar **Lab Sample ID:** **042019627-0114A**
Sample Description: Center Roof - Roof Hatch - N/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/15/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 52E-Tar Felt **Lab Sample ID:** **042019627-0115**
Sample Description: Center Roof - Roof Hatch - W/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	65.0%	35.0%	None Detected	

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Client Sample ID: 52E-Tar **Lab Sample ID:** **042019627-0115A**
Sample Description: Center Roof - Roof Hatch - W/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 52F-Tar Felt **Lab Sample ID:** **042019627-0116**
Sample Description: South Roof - S/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	60.0%	40.0%	None Detected	

Client Sample ID: 52F-Tar **Lab Sample ID:** **042019627-0116A**
Sample Description: South Roof - S/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 52F-Shingle **Lab Sample ID:** **042019627-0116B**
Sample Description: South Roof - S/Shingle

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Gray/Black	20.0%	80.0%	None Detected	

Client Sample ID: 52G-Tar Felt **Lab Sample ID:** **042019627-0117**
Sample Description: South Roof - SE/Tar Felt

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	60.0%	40.0%	None Detected	

Client Sample ID: 52G-Tar **Lab Sample ID:** **042019627-0117A**
Sample Description: South Roof - SE/Tar

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	8/17/2020	Black	0.0%	100.0%	None Detected	

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Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116

Analyst(s):

Daniel Blake	1000 PLM Pt Ct (3)
Gregory Barry	PLM 1000 PC - Gravimetric (2) 1000 PLM Pt Ct (2)
John Witcraft	PLM (20)
Kyle DeKarski	PLM (67)
Mark Shuts	PLM (21)
Michelle Quach	PLM (50)
Rachel Irwin	PLM (46)

Reviewed and approved by:

Samantha Rundstrom, Laboratory Manager
or Other Approved Signatory

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, LA #04127

Initial report from: 08/17/202017:58:45

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Laboratory Chain of Custody

Turn Around Time - (Circle)
*Please select based on laboratory being used

3hr 6hr 24hr 48hr (72hr)

Standard

04294627

EFI Global Project No.:	Project Name:	Sampling By:	Number of Samples:	Date(s) Collected:	Page No.:		Total Pages
045.04081	1800 E. LaVeta	Heriberto R.	117	8/7/20	1	Of	11

Sample No.:	Sample Location & Comments	Start Flow Rate / End Flow Rate	Start Time / Stop Time	Total Volume / Area/SQFT	Type of Analysis / Sample Serial Number
	Please				Analysis Type: PLM
	See				Serial No.: Bulk
	Attached				Analysis Type:
					Serial No.:
					Analysis Type:
					Serial No.:
					Analysis Type:
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ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: ________ PROJECT NAME: ________

PROJECT LOCATION: ________ DATE: ________ COMPLETED BY: H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
14A	Drywall System	2nd Floor - Room200 - E		F / NF G D SD	S / TSI / MISC
B	↓	Room227 - N		F / NF G D SD	S / TSI / MISC
C	↓	Room245 - NE		F / NF G D SD	S / TSI / MISC
D	↓	Room232 - SW		F / NF G D SD	S / TSI / MISC
E	↓	1st Floor - Utility Rm 6 - SE		F / NF G D SD	S / TSI / MISC
F	↓	- Room106 - SE		F / NF G D SD	S / TSI / MISC
G	↓	- 145 - SE		F / NF G D SD	S / TSI / MISC
H	↓	- 158 - NW		F / NF G D SD	S / TSI / MISC
I	↓	- 159 - NE		F / NF G D SD	S / TSI / MISC
15A	Acoustic Texture	1st Floor - Room 145 - E		F / NF G D SD	S / TSI / MISC
B	↓	- - S		F / NF G D SD	S / TSI / MISC
C	↓	- Room142 - N		F / NF G D SD	S / TSI / MISC

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ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: _____ **PROJECT NAME:** _____

PROJECT LOCATION: _____ **DATE:** _____ **COMPLETED BY:** H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
16A	Adhesive (Tan) + Covebase (Brown)	Utility Room 6 - SE		F / NF G D SD	S / TSI / MISC
B	+ Covebase (Brown)	Utility Room 7 - E		F / NF G D SD	S / TSI / MISC
C	+ Covebase (Gray)	1st Floor - Room 106 - S		F / NF G D SD	S / TSI / MISC
D	+	- Room 110 - N		F / NF G D SD	S / TSI / MISC
E	+	- Room 159 - NE		F / NF G D SD	S / TSI / MISC
17A	Ceiling Tile (12x12)	- Room 158 - NW		F / NF G D SD	S / TSI / MISC
B		- 106 - W		F / NF G D SD	S / TSI / MISC
18A	Ceiling Tile (24x18)	2nd Floor - 202 - E		F / NF G D SD	S / TSI / MISC
B		- 226 - S		F / NF G D SD	S / TSI / MISC
19A	Sink undercoating	1st Floor - Room 149 - S		F / NF G D SD	S / TSI / MISC
B		- S		F / NF G D SD	S / TSI / MISC
23A	Carpet Adhesive (Tan)	changing Rm 1 - S		F / NF G D SD	S / TSI / MISC

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ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: _____ **PROJECT NAME:** _____

PROJECT LOCATION: _____ **DATE:** _____ **COMPLETED BY:** H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
20A	Sink Caulking (White)	Restroom 13 - N		F / NF G D SD	S / TSI / MISC
↓ B	↓	↓ 2 - N		F / NF G D SD	S / TSI / MISC
21A	Stone Grout (Gray)	Lobby - N		F / NF G D SD	S / TSI / MISC
↓ B	↓	Exterior - W		F / NF G D SD	S / TSI / MISC
22A	Stucco	↓ - N		F / NF G D SD	S / TSI / MISC
B	↓	- NE		F / NF G D SD	S / TSI / MISC
C	↓	- E		F / NF G D SD	S / TSI / MISC
D	↓	- S		F / NF G D SD	S / TSI / MISC
E	↓	- SW		F / NF G D SD	S / TSI / MISC
F	↓	- W		F / NF G D SD	S / TSI / MISC
↓ G	↓	↓ - W		F / NF G D SD	S / TSI / MISC
23B	Carpet Adhesive (Tan)	Changing Rm 1 - N		F / NF G D SD	S / TSI / MISC

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ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: ____________ PROJECT NAME: ____________

PROJECT LOCATION: ____________ DATE: ____________ COMPLETED BY: H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
24A	VSF (white Speckled)	Room 126 - NW		F / NF G D SD	S / TSI / MISC
↓B	↓	↓ - N		F / NF G D SD	S / TSI / MISC
25A	VSF (Green Speckled)	Restroom 3 - W		F / NF G D SD	S / TSI / MISC
↓B	↓	↓ - NW		F / NF G D SD	S / TSI / MISC
26A	VSF (Gray Pebble Pattern)	Utility Room 7 - E		F / NF G D SD	S / TSI / MISC
↓B	↓	↓ - E		F / NF G D SD	S / TSI / MISC
↓C	↓	Room 149 - NW		F / NF G D SD	S / TSI / MISC
27A	VFT (white 12x12) + Adhesive	Room 106 - SW		F / NF G D SD	S / TSI / MISC
B	↓	158 - NW		F / NF G D SD	S / TSI / MISC
↓C	↓	↓ 159 - NE		F / NF G D SD	S / TSI / MISC
28A	VFT (Cream 12x12) + Adhesive	2nd Floor - Room 250 - E		F / NF G D SD	S / TSI / MISC
↓B	↓	↓ Hall - Center		F / NF G D SD	S / TSI / MISC

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ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: _____ **PROJECT NAME:** _____

PROJECT LOCATION: _____ **DATE:** _____ **COMPLETED BY:** H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
29A	VFT (Blue Marbled 12x12) +Adhesive	Room 155 - SE		F / NF G D SD	S / TSI / MISC
↓ B	↓ ↓	Room 158 - NW		F / NF G D SD	S / TSI / MISC
30A	VFT (Gray with white streaks 12x12 Adhesive	Utility Room 2 - N		F / NF G D SD	S / TSI / MISC
↓ B	↓ ↓	↓ - S		F / NF G D SD	S / TSI / MISC
31A	VFT (Brown Marbled 12x12) +Adhesive	Room 137 - NW		F / NF G D SD	S / TSI / MISC
↓ B	↓ ↓	↓ - W		F / NF G D SD	S / TSI / MISC
32A	VFT (Green Marbled 12x12) +Adhesive	1st Floor - Lobby - N		F / NF G D SD	S / TSI / MISC
↓ B	↓ ↓	2nd Floor - Staff lounge - SW		F / NF G D SD	S / TSI / MISC
↓ C	↓ ↓	↓ ↓ - S		F / NF G D SD	S / TSI / MISC
33A	VFT (Grey 12x12) +Adhesive	Staff lounge - S		F / NF G D SD	S / TSI / MISC
↓ B	+	windowed Hall - N		F / NF G D SD	S / TSI / MISC
↓ C	+ ↓	In Front of Room 248 - W		F / NF G D SD	S / TSI / MISC

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ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: _____ PROJECT NAME: _____

PROJECT LOCATION: _____ DATE: _____ COMPLETED BY: H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
34A	VFT (light Green) + Adhesive	Lobby - SW		F / NF G D SD	S / TSI / MISC
↓ B	↓ ↓	Lobby - S		F / NF G D SD	S / TSI / MISC
35A	Floor Texture Coating	Room 130 - N		F / NF G D SD	S / TSI / MISC
↓ B	↓	↓ - E		F / NF G D SD	S / TSI / MISC
↓ C	↓	↓ - W		F / NF G D SD	S / TSI / MISC
36A	Floor Tile (1x1 white)	Restroom 12 NE		F / NF G D SD	S / TSI / MISC
↓ B	↓	↓ 13 N		F / NF G D SD	S / TSI / MISC
37A	Floor Tile (1x1 Tan)	Restroom 9		F / NF G D SD	S / TSI / MISC
↓ B	↓	↓ 10		F / NF G D SD	S / TSI / MISC
38A	Wall Tile (4x4 Blue)	Restroom 3		F / NF G D SD	S / TSI / MISC
↓ B	↓	↓ 3		F / NF G D SD	S / TSI / MISC
↓ C	↓	↓ 12		F / NF G D SD	S / TSI / MISC

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ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: ____________ **PROJECT NAME:** ____________

PROJECT LOCATION: ____________ **DATE:** ____________ **COMPLETED BY:** H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
39A	Wall Tile (Blue 4x4)	Changing Room - W		F / NF G D SD	S / TSI / MISC
↓ B	↓	Restroom 5 - E		F / NF G D SD	S / TSI / MISC
40A	Wall Tile (Pink 4x4)	Restroom 4 - S		F / NF G D SD	S / TSI / MISC
↓ B	↓	Restroom 6 - N		F / NF G D SD	S / TSI / MISC
41A	Wall Tile (Brown 4x4)	Kitchen 160 - S		F / NF G D SD	S / TSI / MISC
↓ B	↓	Utility Rm 6 - SE		F / NF G D SD	S / TSI / MISC
42A	Wall tile (Salmond 4x4)	Restroom 13 - N		F / NF G D SD	S / TSI / MISC
↓ B	↓	Utility Rm 6 - N		F / NF G D SD	S / TSI / MISC
43A	Wall Tile (Black 4x4)	Restroom 9 - W		F / NF G D SD	S / TSI / MISC
↓ B	↓	↓ - W		F / NF G D SD	S / TSI / MISC
46C	Roofing Mastic (Black)	North Roof - S		F / NF G D SD	S / TSI / MISC
				F / NF G D SD	S / TSI / MISC

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ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: _____ PROJECT NAME: _____

PROJECT LOCATION: Roofs DATE: _____ COMPLETED BY: H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
44A	Roof Core	North Rolled on Roof - East		F / NF G D SD	S / TSI / MISC
B		- East		F / NF G D SD	S / TSI / MISC
C		- North		F / NF G D SD	S / TSI / MISC
D		- N. Center		F / NF G D SD	S / TSI / MISC
E		- S. Center		F / NF G D SD	S / TSI / MISC
F		- N. East		F / NF G D SD	S / TSI / MISC
G		- N. West		F / NF G D SD	S / TSI / MISC
45A	Roofing Mastic (Black/White)	North Roof - N		F / NF G D SD	S / TSI / MISC
B		- C		F / NF G D SD	S / TSI / MISC
C		- S		F / NF G D SD	S / TSI / MISC
46A	Roofing Mastic (Black)	- N		F / NF G D SD	S / TSI / MISC
B		- C		F / NF G D SD	S / TSI / MISC

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ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: ____ PROJECT NAME: ____

PROJECT LOCATION: ____ DATE: ____ COMPLETED BY: H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
47A	HVAC Mastic (smooth Gray)	North Roof - Center		F / NF G D SD	S / TSI / MISC
B	↓	- S		F / NF G D SD	S / TSI / MISC
C	↓	- S		F / NF G D SD	S / TSI / MISC
48A	(textured white)	- S		F / NF G D SD	S / TSI / MISC
B	↓	- S		F / NF G D SD	S / TSI / MISC
C	↓	- E		F / NF G D SD	S / TSI / MISC
49A	HVAC Coating (Grey)	Center Roof - HVAC Ducting - SW		F / NF G D SD	S / TSI / MISC
B	↓	- E		F / NF G D SD	S / TSI / MISC
C	↓	- Center		F / NF G D SD	S / TSI / MISC
50A	Vent Coating (white)	- S.Center		F / NF G D SD	S / TSI / MISC
B	↓	- Center		F / NF G D SD	S / TSI / MISC
C	↓	- W.Center		F / NF G D SD	S / TSI / MISC

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ASBESTOS FIELD BULK SAMPLE TABLE

PROJECT NUMBER: _____ **PROJECT NAME:** _____

PROJECT LOCATION: _____ **DATE:** _____ **COMPLETED BY:** H.R.

SAMPLE NUMBER	SAMPLE DESCRIPTION	SAMPLE LOCATION	APPROX. SQUARE FOOTAGE	CONDITION	HOMOGENOUS APPLICATION
51A	Penetration Mastic (White/Black)	Center Roof - at 3 pipes - S		F / NF G D SD	S / TSI / MISC
B		Roof Hatch - center		F / NF G D SD	S / TSI / MISC
C		- SW		F / NF G D SD	S / TSI / MISC
52A	Roof Core (Gravel roofing)	SE		F / NF G D SD	S / TSI / MISC
B		S		F / NF G D SD	S / TSI / MISC
C		Center		F / NF G D SD	S / TSI / MISC
D	- Parapet	N		F / NF G D SD	S / TSI / MISC
E	- Parapet	W		F / NF G D SD	S / TSI / MISC
F	- Parapet	South Roof S		F / NF G D SD	S / TSI / MISC
G		SE		F / NF G D SD	S / TSI / MISC
				F / NF G D SD	S / TSI / MISC
				F / NF G D SD	S / TSI / MISC

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APPENDIX III
Lead XRF Results

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Project No.: 045.04081

Rehabilitation Institute of Southern California - 1800 E La Veta Avenue 585 South Tustin Street, Orange, CA 92866

Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
1800 E La Veta Avenue - 1st Floor										
8/6/2020	**1**	**1.2**	**0.3**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/6/2020	**2**	**1.1**	**0.2**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/6/2020	**3**	**1.1**	**0.2**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/6/2020	4	0.1	0.3	NEG	---	---	CALIBRATION	---	---	---
8/6/2020	5	0.2	0.3	NEG	12	West	Red	Ceramic	Wall	Intact
8/6/2020	6	0	0.3	NEG	12	South	Blue	Ceramic	Floor	Intact
8/6/2020	7	-0.3	0.3	NEG	12	South	White	Ceramic	Wall Tile	Intact
8/6/2020	8	0	0.3	NEG	12	North	Green	Metal	Stall	Poor
8/6/2020	9	0	0.3	NEG	12	South	Tan	Drywall	Celing	Intact
8/6/2020	10	-0.1	0.3	NEG	12	South	White	Wood	Coduit	Intact
8/6/2020	11	-0.1	0.3	NEG	12	South	Grey	Metal	Door	Fair
8/6/2020	12	0.1	0.3	NEG	13	West	Turquoies	Ceramic	Wall Tile	Intact
8/6/2020	13	0.2	0.3	NEG	13	West	Pink	Ceramic	Wall Tile	Fair
8/6/2020	14	0.3	0.2	NEG	13	West	Peach	Ceramic	Wall Tile	Fair
8/6/2020	15	0.2	0.3	NEG	13	west	Tan	Ceramic	Floor Tile	Fair
8/6/2020	16	0.1	0.3	NEG	13	East	White	Drywall	Ceiling	Intact
8/6/2020	17	-0.3	0.3	NEG	13	West	White	Porcelain	Urinal	Intact
8/6/2020	18	0	0.3	NEG	13	West	Green	Metal	Door Frame	Intact
8/6/2020	19	0	0.3	NEG	13	East	Grey	Wood	Door	Intact
8/6/2020	20	-0.1	0.3	NEG	13	South	White	Wood	Cabinet	Intact
8/6/2020	21	0	0.3	NEG	15B	West	White	Drywall	Wall	Intact
8/6/2020	22	0	0.3	NEG	15B	South	Brown	Metal	Door Frame	Intact
8/6/2020	23	-0.1	0.2	NEG	15B	South	Brown	Wood	Door	Intact
8/6/2020	24	0	0.3	NEG	15B	South	Blue	VFT	Floor	Intact
8/6/2020	25	0.1	0.3	NEG	15B	South	White	VFT	Floor	Intact
8/6/2020	26	0	0.3	NEG	Utility #7	South	Tan	Drywall	Wall	Intact
8/6/2020	27	0	0.3	NEG	Utility #7	East	Black	Metal	Ladder	Intact
8/6/2020	28	0.1	0.3	NEG	Utility #7	West	Tan	Drywall	Ceiling	Intact
8/6/2020	29	0	0.3	NEG	Utility #7	East	Tan	Metal	Roof	Intact
8/6/2020	30	0.2	0.3	NEG	Utility #7	West	Tan	Door Metal	Door Frame	Intact
8/6/2020	31	0.1	0.3	NEG	Utility #7	West	Tan	VSF	Flooring	Intact
8/6/2020	32	0	0.3	NEG	155	North	Purple	Drywall	Wall	Intact

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Project No.: 045.04081

Rehabilitation Institute of Southern California - 1800 E La Veta Avenue 585 South Tustin Street, Orange, CA 92866

Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/6/2020	33	0.1	0.3	NEG	155	North	Green	Metal	Window Frame	Intact
8/6/2020	34	-0.2	0.3	NEG	155	North	Green	Wood	Door	Intact
8/6/2020	35	0	0.2	NEG	155	North	White	Cardboard	Ceiling Tile	Intact
8/6/2020	36	0.1	0.3	NEG	456	South	Yellow	Drywall	Wall	Intact
8/6/2020	37	0.2	0.3	NEG	456	East	Blue	VFT	Floor	Intact
8/6/2020	38	0	0.3	NEG	456	East	White	VFT	Floor	Intact
8/6/2020	39	0	0.3	NEG	154	South	Tan	Drywall	Wall	Intact
8/6/2020	40	0	0.3	NEG	154	West	Brown	Wood	Baseboard	Intact
8/6/2020	41	0	0.3	NEG	154	West	Tan	Wood	Cabinet	Intact
8/6/2020	42	-0.2	0.3	NEG	154	West	Tan	Metal	Door Frame	Intact
8/6/2020	43	-0.1	0.3	NEG	154	West	Tan	Wood	Door	Intact
8/6/2020	44	0	0.3	NEG	160	West	White	Wood	Panel Wall	Intact
8/6/2020	45	-0.1	0.3	NEG	160	West	Red	Ceramic	Floor	Intact
8/6/2020	46	-0.4	0.3	NEG	160	West	Red	Ceramic	Baseboard	Intact
8/6/2020	**47**	**1**	**0.2**	**POS**	**160**	**West**	**White**	**Metal**	**Drain**	**Intact**
8/6/2020	48	-0.1	0.3	NEG	160	West	Brown	Metal	Door Frame	Intact
8/6/2020	49	0.1	0.3	NEG	160	West	Blue	Metal	Door	Intact
8/6/2020	50	0.4	0.2	NEG	160	West	Tan	Metal	Drain	Intact
8/6/2020	51	0.1	0.3	NEG	Utility #6	South	Grey	Drywall	Wall	Intact
8/6/2020	52	0.4	0.2	NEG	Utility #6	South	Tan	Ceramic	Wall Tile	Intact
8/6/2020	53	0.2	0.3	NEG	Utility #6	West	Grey	Ceramic	Wall Tile	Intact
8/6/2020	54	0.2	0.3	NEG	Utility #6	West	Red	Ceramic	Floor Tile	Intact
8/6/2020	55	0	0.3	NEG	Utility #6	West	Blue	Metal	Conduit	Intact
8/6/2020	56	0	0.3	NEG	Utility #6	West	Blue	Metal	Panel	Intact
8/6/2020	57	0.2	0.3	NEG	Utility #6	East	Tan	Metal	Pipe Electrical	Intact
8/6/2020	58	0.1	0.3	NEG	Lobby	North	White	Drywall	Wall	Intact
8/6/2020	59	-0.2	0.2	NEG	Lobby	West	Green	Wood	Baseboard	Intact
8/6/2020	60	0.1	0.3	NEG	Lobby	East	Light-Brown	VFT	Floor	Intact
8/6/2020	61	0	0.3	NEG	Lobby	East	Green	VFT	Floor	Intact
8/6/2020	62	-0.1	0.3	NEG	Lobby	West	White	Drywall	Wall	Intact
8/6/2020	63	-0.1	0.3	NEG	Lobby	South	White	Metal	Elevator Door	Intact
8/6/2020	64	-0.1	0.2	NEG	Lobby	South	White	Ceiling Tile	Ceiling	Intact
8/6/2020	65	0	0.3	NEG	Lobby	South	White	Metal	T-Bar	Intact

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Project No.: 045.04081

Rehabilitation Institute of Southern California - 1800 E La Veta Avenue 585 South Tustin Street, Orange, CA 92866

Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/6/2020	66	0.1	0.3	NEG	Utility #5	West	Tan	Drywall	Wall	Intact
8/6/2020	67	0	0.3	NEG	Utility #5	West	Brown	Wood	Baseboard	Intact
8/6/2020	68	0.1	0.3	NEG	Utility #5	West	Grey	Sheet Ceramic	Floor	Intact
8/6/2020	69	-0.2	0.3	NEG	Utility #5	West	Brown	Wood	Door	Intact
8/6/2020	70	0	0.3	NEG	Utility #5	West	Brown	Wood	Window Frame	Intact
8/6/2020	71	0.2	0.3	NEG	126	North	Tan	Drywall	Wall	Intact
8/6/2020	72	0.1	0.3	NEG	126	West	White	VFT	Floor	Intact
8/6/2020	73	0	0.3	NEG	126	East	Brown	Wood	Baseboard	Intact
8/6/2020	74	-0.2	0.3	NEG	126	South	Brown	Metal	Doorframe	Intact
8/6/2020	75	0	0.3	NEG	126	South	Brown	Wood	Door	Intact
8/6/2020	76	0.1	0.3	NEG	128	West	Tan	Drywall	Wall	Intact
8/6/2020	77	0.1	0.3	NEG	128	West	Brown	Wood	Baseboard	Intact
8/6/2020	78	0	0.3	NEG	128	West	Tan	Cork	Board	Intact
8/6/2020	79	-0.2	0.3	NEG	128	West	Brown	Wood	Door	Intact
8/6/2020	80	-0.1	0.3	NEG	128	West	Brown	Wood	Door-Frame	Intact
8/6/2020	81	-0.6	0.3	NEG	129	South	White	Concrete	Wall	Intact
8/6/2020	82	0.3	0.2	NEG	129	North	Tan	Drywall	Wall	Intact
8/6/2020	83	0.2	0.3	NEG	129	North	Green	Drywall	Wall	Intact
8/6/2020	84	0	0.3	NEG	129	North	White	Wood	Molding	Intact
8/6/2020	85	0.1	0.3	NEG	129	North	White	Metal	T-Bar	Intact
8/6/2020	86	0.1	0.3	NEG	129	West	Tan	Wood	Wall	Intact
8/6/2020	87	0	0.3	NEG	129	West	White	VSF	Floor	Intact
8/6/2020	88	0	0.3	NEG	Boutique	West	Grey	Drywall	Wall	Intact
8/6/2020	89	0	0.2	NEG	Boutique	East	White	Wood	Baseboard	Intact
8/6/2020	90	-0.1	0.3	NEG	Boutique	East	Green	Wood	Door	Intact
8/6/2020	91	0	0.2	NEG	Boutique	East	Green	Wood	Door Frame	Intact
8/6/2020	92	0	0.3	NEG	119	West	White	Drywall	Wall	Intact
8/6/2020	93	-0.1	0.3	NEG	119	West	Blue	VFT	Floor	Intact
8/6/2020	94	0.1	0.3	NEG	119	West	White	VFT	Floor	Intact
8/6/2020	95	0	0.3	NEG	121	South	White	Drywall	Wall	Intact
8/6/2020	96	0	0.2	NEG	121	South	White	Ceiling Tile	Ceiling	Intact
8/6/2020	**97**	**23.5**	**0.3**	**POS**	**Restroom #14**	**South**	**White**	**Ceramic**	**Wall**	**Intact**

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Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/6/2020	98	0.1	0.3	NEG	Restroom #14	South	Grey	Ceramic	Floor	Intact
8/6/2020	99	0.1	0.3	NEG	Restroom #14	South	White	Drywall	Ceiling	Intact
8/6/2020	100	0	0.3	NEG	Restroom #14	South	White	Porcelain	Toilet	Intact
8/6/2020	**101**	**21.8**	**0.3**	**POS**	**Restroom #6**	**West**	**Pink**	**Ceramic**	**Wall Tile**	**Intact**
8/6/2020	102	-0.4	0.3	NEG	Restroom #6	South	White	Porcelain	Sink	Intact
8/6/2020	103	0	0.3	NEG	Restroom #6	South	Green	Wood	Door	Intact
8/6/2020	104	0	0.3	NEG	Restroom #6	South	Green	Wood	Door Frame	Intact
8/6/2020	**105**	**21.7**	**0.3**	**POS**	**Restroom #5**	**West**	**Blue**	**Ceramic**	**Wall**	**Intact**
8/6/2020	106	0	0.3	NEG	Restroom #5	West	White	Drywall	Ceiling	Intact
8/6/2020	107	0.2	0.3	NEG	Room 110	East	Purple	Drywall	Wall	Intact
8/6/2020	108	0.1	0.3	NEG	Room 110	North	Green	Drywall	Wall	Intact
8/6/2020	109	-0.3	0.3	NEG	Room 110	South	Cream	Metal	Post	Intact
8/6/2020	110	0.3	0.3	NEG	Room 110	West	Blue	VFT	Floor	Intact
8/6/2020	111	0.1	0.3	NEG	Room 110	West	White	VFT	Floor	Intact
8/6/2020	112	0.2	0.3	NEG	Room 110	West	Purple	Conduit	Electric Post	Intact
8/6/2020	113	0	0.3	NEG	Room 110	West	Green	Wood	Cabinets	Intact
8/6/2020	**114**	**21.1**	**0.3**	**POS**	**Restrom #3**	**North**	**White**	**Ceramic**	**Wall Tile**	**Intact**
8/6/2020	115	0.1	0.3	NEG	Restrom #3	North	White	Drywall	Wall	Intact
8/6/2020	116	0	0.3	NEG	Restrom #3	North	Green	Sheet Vinal	Floor	Intact
8/6/2020	117	-0.6	0.3	NEG	Restrom #3	North	White	Porcelain	SInk	Intact
8/6/2020	118	0.1	0.3	NEG	Room 112	North	Green	Drywall	Wall	Intact
8/6/2020	**119**	**25.9**	**0.3**	**POS**	**Restroom #3**	**East**	**Pink**	**Ceramic**	**Wall Tile**	**Intact**
8/6/2020	120	0	0.3	NEG	Restrom #3	East	White	Drywall	Ceiling	Intact
8/6/2020	121	0	0.3	NEG	Restrom #3	East	White	Porcelain	Urinal	Intact
8/6/2020	**122**	**22.8**	**0.3**	**POS**	**Changing Room**	**West**	**Blue**	**Ceramic**	**Wall Tile**	**Intact**
8/6/2020	123	-0.1	0.3	NEG	Changing Room	West	Grey	Ceramic	Tile Floor	Intact
8/6/2020	124	0	0.3	NEG	Changing Room	West	Light-Blue	Ceramic	Tile Floor	Intact

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Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/6/2020	125	0	0.3	NEG	Changing Room	West	Blue	Ceramic	Tile Floor	Intact
8/6/2020	126	0.2	0.3	NEG	149	West	White	Drywall	Post	Intact
8/6/2020	127	0	0.3	NEG	149	West	Blue	Drywall	Wall	Intact
8/6/2020	128	0.1	0.3	NEG	149	North	Tan	Drywall	Wall	Intact
8/6/2020	129	0.1	0.3	NEG	149	West	Tan	Drywall	Ceiling	Intact
8/6/2020	130	0.1	0.3	NEG	149	East	Tan	Laminate	Floor	Intact
8/6/2020	131	0	0.3	NEG	149	West	Blue	Wood	Shelf	Intact
8/6/2020	132	0.1	0.3	NEG	Utility #2	East	Tan	Drywall	Wall	Intact
8/6/2020	133	0	0.3	NEG	Utility #2	East	Green	Drywall	Ceiling	Intact
8/6/2020	134	0.7	0.1	NEG	Utility #2	East	Grey	VFT	Floor	Intact
8/6/2020	135	0.1	0.2	NEG	105 A	North	Blue	Fiser Board	Wall	Intact
8/6/2020	136	0	0.3	NEG	105 A	East	Blue	Drywall	Wall	Intact
8/6/2020	137	0.1	0.3	NEG	105 A	East	White	Drywall	Wall	Intact
8/6/2020	138	0.1	0.3	NEG	105 A	East	Yellow	Wood	Cabinet	Intact
8/6/2020	139	-0.4	0.3	NEG	105 A	North	Blue	Wood	Molding	Intact
8/6/2020	140	0.1	0.3	NEG	105 A	North	Green	Drywall	Wall	Intact
8/6/2020	141	0.1	0.2	NEG	105 A	South	Green	Wood	Cabinet	Intact
8/6/2020	142	0	0.3	NEG	105 A	South	Yellow	Metal	Frame	Intact
8/6/2020	143	-0.1	0.3	NEG	105 A	West	Grey	Metal	Window Frame	Intact
8/6/2020	144	0	0.3	NEG	105 B	North	White	Drywall	Wall	Intact
8/6/2020	145	0	0.3	NEG	105 B	North	Green	Floor	Floor	Intact
8/6/2020	146	-0.1	0.3	NEG	105 B	East	Yellow	Wood	Door	Intact
8/6/2020	147	0.2	0.3	NEG	105 B	East	Yellow	Metal	Door Frame	Intact
8/6/2020	**148**	**30**	**0**	**POS**	**105 B**	**North**	**White**	**Porcelain**	**Sink**	**Intact**
8/6/2020	149	0	0.3	NEG	105 B	North	White	Metal	T-Bar	Intact
8/6/2020	150	0	0.2	NEG	105 B	North	White	Ceiling Tile	Ceiling	Intact
8/6/2020	151	0.1	0.3	NEG	Utility #1	North	White	Drywall	Wall	Intact
8/6/2020	152	0.1	0.3	NEG	Utility #1	South	Yellow	Metal	Door Frame	Intact
8/6/2020	153	-0.1	0.3	NEG	Utility #1	West	Yellow	Wood	Door	Intact
8/6/2020	154	0.1	0.3	NEG	Utility #1	West	Yellow	Metal	Door Frame	Intact
8/6/2020	155	0	0.3	NEG	Restroom #1	West	White	Drywall	White	Intact
8/6/2020	**156**	**12.7**	**0.3**	**POS**	**Restroom #1**	**West**	**Tan**	**Ceramic**	**Wall Tile**	**Intact**

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Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/6/2020	157	-0.3	0.3	NEG	Restroom #1	West	White	Porcelain	Sink	Intact
8/6/2020	158	0	0.3	NEG	Restroom #1	West	White	Drywall	Celinng	Intact
8/6/2020	159	0	0.3	NEG	Restroom #2	West	White	Drywall	Wall	Intact
8/6/2020	**160**	**22.3**	**0.3**	**POS**	**Restroom #2**	**South**	**Tan**	**Ceramic**	**Wall**	**Intact**
8/6/2020	161	-0.1	0.3	NEG	Restroom #2	South	White	Porcelain	Toilet	Intact
8/6/2020	162	-0.2	0.3	NEG	Restroom #2	West	White	porcelain	Toilet	Intact
8/6/2020	163	0.1	0.3	NEG	Restroom #10	East	Green	Drywall	Wall	Intact
8/6/2020	164	0.3	0.3	NEG	Restroom #10	East	Brown	Ceramic	Wall Tile	Intact
8/6/2020	165	-0.2	0.3	NEG	Restroom #10	North	White	Ceramic	Wall Tile	Intact
8/6/2020	166	0.2	0.3	NEG	Restroom #10	South	Tan	Ceramic	Floor Tile	Intact
8/6/2020	167	0	0.3	NEG	Restroom #10	South	Tan	Ceramic	Floor Tile	Intact
8/6/2020	168	0	0.3	NEG	Restroom #10	East	White	Ceramic	Tile Baseboard	Intact
8/6/2020	169	0.3	0.2	NEG	Restroom #10	East	White	Porcelain	Sink	Intact
8/6/2020	170	-0.4	0.3	NEG	Restroom #10	North	Green	Concrete	Wall	Intact
8/6/2020	171	-0.2	0.3	NEG	Restrom #9	East	Green	Concrete	Wall	Intact
8/6/2020	172	0.2	0.3	NEG	Restrom #9	East	Black	Ceramic	Wall Tile	Intact
8/6/2020	173	0.5	0.1	NEG	Restrom #9	East	White	Ceramic	Wall Tile	Intact
8/6/2020	174	0.1	0.3	NEG	Restrom #9	East	Tan	Ceramic	Floor Tile	Intact
8/6/2020	175	-0.1	0.3	NEG	Restrom #9	East	White	Ceramic	Trim Tile	Intact
8/6/2020	176	0	0.3	NEG	Restrom #9	East	Brown	Ceramic	Tile	Intact
8/6/2020	177	-0.1	0.3	NEG	Restrom #9	East	Black	Ceramic	Tileboard	Intact
8/6/2020	178	0.1	0.3	NEG	Restrom #9	North	Tan	Metal	Stals	Intact
8/6/2020	179	-0.4	0.3	NEG	Restrom #9	East	White	Porcelain	Toilet	Intact
8/6/2020	180	-0.1	0.3	NEG	Restrom #9	West	Blue	Metal	Door Frame	Intact
8/6/2020	181	0.1	0.3	NEG	135	South	Grey	Drywall	Wall	Intact

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Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/6/2020	182	0.1	0.3	NEG	135	North	Blue	Wood	Door	Intact
8/6/2020	183	-0.3	0.2	NEG	135	East	Blue	Wood	Vent	Intact
8/6/2020	184	-0.1	0.3	NEG	135	West	Grey	Plaster	wall	Intact
8/6/2020	185	0.2	0.3	NEG	135	North	Grey	plaster	Ceiling	Intact
8/6/2020	186	0	0.3	NEG	Restroom 15	East	Grey	Drywall	Wall	Intact
8/6/2020	187	0.3	0.3	NEG	Restroom 15	East	White	FRP	Wall	Intact
8/6/2020	188	0.6	0.1	NEG	Restroom 15	East	White	Porcelain	Sink	Intact
8/6/2020	189	-0.1	0.3	NEG	Restroom 15	East	Grey	Ceramic	Wall Tile	Intact
8/6/2020	190	-0.2	0.3	NEG	Restroom 15	East	Dark Grey	Ceramic	Floor	Intact
8/6/2020	191	0	0.3	NEG	Restroom 15	East	White	Ceramic	Floor	Intact
8/6/2020	192	0.2	0.3	NEG	Restroom 15	East	Grey	Ceramic	Baseboard	Intact
8/6/2020	193	0	0.3	NEG	145	East	Blue	Drywall	Wall	Intact
8/6/2020	194	0.1	0.3	NEG	145	East	Green	Drywall	Post	Intact
8/6/2020	195	0.1	0.3	NEG	145	North	Blue	Epoxy	Floor	Intact
8/6/2020	196	-0.2	0.2	NEG	145	North	Green	Wood	Baseboard	Intact
8/6/2020	197	-0.1	0.3	NEG	145	North	Green	Metal	Door Frame	Intact
8/6/2020	198	-0.6	0.3	NEG	Restroom #8	South	Tan	Ceramic	Tile Wall	Intact
8/6/2020	199	0.2	0.3	NEG	Restroom #8	South	Green	Metal	Stall	Intact
8/6/2020	200	-0.3	0.3	NEG	Restroom #8	South	White	Porcelain	Sink	Intact
8/6/2020	201	-0.4	0.3	NEG	Restroom #7	South	Tan	Ceramic	Wall Tile	Intact
8/6/2020	202	-0.4	0.3	NEG	Restroom #7	South	White	Porcelain	Sink	Intact
8/6/2020	203	-0.1	0.2	NEG	Restroom #7	East	Tan	Wood	Cabinet	Intact
8/6/2020	204	0	0.3	NEG	Restroom #7	North	White	Drywall	Wall	Intact
8/6/2020	205	0.2	0.3	NEG	Room 141	West	White	Drywall	Wall	Intact
8/6/2020	206	0	0.3	NEG	Room 141	West	Tan	VSF	Floor	Intact
8/6/2020	207	-0.1	0.3	NEG	Room 141	West	Green	Metal	Door-Frame	Intact
8/6/2020	208	0	0.3	NEG	Room 141	West	Green	Wood	Door	Intact
8/6/2020	209	0	0.3	NEG	Room 141	South	White	Metal	Window Frame	Intact
8/6/2020	210	-0.1	0.3	NEG	Room 142	West	Green	Concrete	Wall	Intact
8/6/2020	211	0	0.3	NEG	Room 142	East	Blue	Drywall	Wall	Intact
8/6/2020	212	0	0.3	NEG	Room 142	East	White	Ceramic	Wall-Tile	Intact
8/6/2020	**213**	**56**	**0**	**POS**	**Room 142**	**East**	**White**	**Porcelain**	**Sink**	**Intact**
8/6/2020	214	-0.1	0.3	NEG	Room 142	East	Green	Wood	Baseboard	Intact

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Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/6/2020	215	0.1	0.3	NEG	Room 142	East	Green	Metal	Post	Intact
8/6/2020	**216**	**18.9**	**0.3**	**POS**	**Pool 130**	**North**	**Light-Blue**	**Ceramic**	**Tile**	**Intact**
8/6/2020	217	0	0.3	NEG	Pool 130	North	Blue	Ceramic	Tile	Intact
8/6/2020	218	0.1	0.3	NEG	Pool 130	North	Blue	Ceramic	Tile Wall	Intact
8/6/2020	219	0	0.3	NEG	Pool 130	North	Black	Metal	Fence	Intact
8/6/2020	**220**	**1.1**	**0.3**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/6/2020	**221**	**1.1**	**0.3**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/6/2020	**222**	**1.2**	**0.3**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/6/2020	223	0	0.3	NEG	---	---	CALIBRATION	---	---	---
8/7/2020	**224**	**1.2**	**0.3**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/7/2020	**225**	**1.2**	**0.3**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/7/2020	**226**	**1.2**	**0.3**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/7/2020	227	-0.3	0.2	NEG	---	---	CALIBRATION	---	---	---
585 South Tustin - House										
8/7/2020	228	0.2	0.2	NEG	Bedroom 1	South	Blue	Wood	Wall	Intact
8/7/2020	229	0.2	0.2	NEG	Bedroom 1	East	Blue	Wood	Wall	Intact
8/7/2020	230	0.1	0.3	NEG	Bedroom 1	North	Blue	Wood	Wall	Intact
8/7/2020	231	0	0.3	NEG	Bedroom 1	West	Blue	Wood	Wall	Intact
8/7/2020	232	0.3	0.2	NEG	Bedroom 1	West	Blue	Wood	Window Frame	Intact
8/7/2020	233	0	0.2	NEG	Bedroom 1	West	Blue	Wood	Window Seal	Intact
8/7/2020	234	0.2	0.3	NEG	Bedroom 1	West	Blue	Wood	Baseboard	Intact
8/7/2020	235	0.3	0.2	NEG	Bedroom 1	West	Blue	Wood	Door Frame	Intact
8/7/2020	236	0	0.2	NEG	Bedroom 1	West	Blue	Wood	Door	Intact
8/7/2020	237	0	0.3	NEG	Bedroom 1	West	White	Wood	Crown Molding	Intact
8/7/2020	238	0.1	0.3	NEG	Bedroom 1	West	Blue	Wood	Ceiling	Intact
8/7/2020	239	0.2	0.2	NEG	Bathroom 1	West	White	Drywall	Wall	Intact
8/7/2020	240	0.1	0.3	NEG	Bathroom 1	North	Green	Drywall	Wal	Intact
8/7/2020	241	0	0.2	NEG	Bathroom 1	West	Varnish	Wood	Wall	Intact
8/7/2020	242	0.1	0.2	NEG	Bathroom 1	North	Grey	Drywall	Wall	Intact
8/7/2020	243	0.1	0.3	NEG	Bathroom 1	North	White	Porcelain	Sink	Intact
8/7/2020	244	-0.2	0.3	NEG	Bathroom 1	North	White	Porcelain	Toilet	Intact
8/7/2020	245	0.1	0.3	NEG	Bathroom 1	North	White	Drywall	Celing	Intact
8/7/2020	246	0.1	0.3	NEG	Bathroom 1	North	White	Wood	Baseboard	Intact

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Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/7/2020	247	-0.3	0.3	NEG	Bathroom 1	North	Blue	Ceramic	Tile	Intact
8/7/2020	248	0.2	0.3	NEG	Bathroom 1	North	Tan	Ceramic	Tile	Intact
8/7/2020	249	0.1	0.2	NEG	Living Room	North	Blue	Wood	Wall	Intact
8/7/2020	250	0.1	0.3	NEG	Living Room	West	Blue	Wood	Wall	Intact
8/7/2020	251	0.2	0.3	NEG	Living Room	South	Blue	Wood	Wall	Intact
8/7/2020	252	0	0.2	NEG	Living Room	East	Blue	Wood	Wall	Intact
8/7/2020	253	0	0.2	NEG	Living Room	East	Blue	Wood	Ceiling	Intact
8/7/2020	254	-0.1	0.2	NEG	Living Room	East	White	Wood	Window Frame	Intact
8/7/2020	255	0.1	0.2	NEG	Living Room	East	White	Wood	Seal	Intact
8/7/2020	256	-0.8	0.3	NEG	Living Room	West	White	Ceramic	Tile	Intact
8/7/2020	**257**	**2**	**0.3**	**POS**	**Kitchen**	**North**	**Tan**	**Wood**	**Wall**	**Intact**
8/7/2020	**258**	**1.9**	**0.3**	**POS**	**Kitchen**	**West**	**Tan**	**Wood**	**Wall**	**Intact**
8/7/2020	259	0.2	0.3	NEG	Kitchen	South	Tan	Drywall	Wall	Intact
8/7/2020	**260**	**1.3**	**0.3**	**POS**	**Kitchen**	**East**	**Tan**	**Wood**	**Wall**	**Intact**
8/7/2020	261	0.1	0.3	NEG	Kitchen	North	White	Ceramic	Tile	Intact
8/7/2020	262	0.7	0.1	NEG	Kitchen	North	Tan	Wood	Cabinet	Intact
8/7/2020	263	0.2	0.3	NEG	Bedroom #2	North	Brown	Wood	Wall	Intact
8/7/2020	264	0	0.3	NEG	Bedroom #2	East	Brown	Wood	Wall	Intact
8/7/2020	265	0	0.3	NEG	Bedroom #2	South	Brown	Wood	Wall	Intact
8/7/2020	266	0	0.3	NEG	Bedroom #2	West	Brown	Wood	Wall	Intact
8/7/2020	267	0.1	0.3	NEG	Bedroom #2	West	White	Wood	Ceiling	Intact
8/7/2020	268	0.2	0.3	NEG	Bedroom #2	West	White	Wood	Window Seal	Intact
8/7/2020	269	0.2	0.3	NEG	Bedroom #2	West	White	Wood	Window Frame	Intact
8/7/2020	270	0.5	0.1	NEG	Bedroom #2	West	White	Wood	Blasé board	Intact
8/7/2020	271	0	0.2	NEG	Bedroom #2	West	White	Wood	Door Frame	Intact
8/7/2020	272	0	0.3	NEG	Bedroom #2	West	White	Wood	Door	Intact
8/7/2020	273	0.1	0.3	NEG	Bedroom #2	West	Brown	Drywall	Wall	Intact
8/7/2020	274	0	0.3	NEG	Bedroom #3	North	Blue	Wood	Wall	Intact
8/7/2020	275	-0.1	0.3	NEG	Bedroom #3	West	Blue	Wood	Wall	Intact
8/7/2020	276	-0.1	0.3	NEG	Bedroom #3	South	Blue	Wood	Wall	Intact
8/7/2020	277	0.1	0.2	NEG	Bedroom #3	East	Blue	Wood	Wall	Intact
8/7/2020	278	0	0.3	NEG	Bedroom #3	East	White		Celing	Intact
8/7/2020	**279**	**2.8**	**0.3**	**POS**	**Bedroom #3**	**East**	**Blue**	**Wood**	**Window Frame**	**Intact**

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Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/7/2020	**280**	**2**	**0.3**	**POS**	**Bedroom #3**	**East**	**Blue**	**Wood**	**Window Seal**	**Intact**
8/7/2020	281	0.2	0.3	NEG	Bath #2	North	Tan	Wood	Wall	Intact
8/7/2020	282	0	0.2	NEG	Bath #2	West	Tan	Wood	Wall	Intact
8/7/2020	283	0.1	0.3	NEG	Bath #2	South	Tan	Wood	Wall	Intact
8/7/2020	284	0.1	0.3	NEG	Bath #2	East	White	Wood	Wall	Intact
8/7/2020	285	0	0.3	NEG	Bath #2	East	White	Wood	Ceiling	Intact
8/7/2020	286	0.2	0.3	NEG	Bath #2	East	White	Wood	Door Frame	Intact
8/7/2020	287	0.2	0.2	NEG	Bath #2	East	White	Wood	Baseboard	Intact
8/7/2020	288	0.2	0.3	NEG	Bath #2	East	White	Wood	Window Frame	Intact
8/7/2020	289	-0.2	0.3	NEG	Bath #2	East	White	Wood	Floor	Intact
8/7/2020	290	-0.5	0.3	NEG	Bath #2	East	Tan	Ceramic	Sink	Intact
8/7/2020	291	0.1	0.2	NEG	Bath #2	East	White	Porcelain	Wall	Intact
8/7/2020	292	0.1	0.2	NEG	Hallway	East	White	Drywall	Wall	Intact
8/7/2020	293	0.1	0.2	NEG	Hallway	East	White	Drywall	Wall	Intact
8/7/2020	294	0	0.3	NEG	Hallway	East	White	Drywall	Wall	Intact
8/7/2020	295	0.1	0.2	NEG	Hallway	East	White	Cardboard	Ceiling Tile	Intact
8/7/2020	296	0.4	0.2	NEG	Hallway	East	Varnish	Wood	Cabinet	Intact
8/7/2020	297	0.1	0.3	NEG	Hallway	East	White	Wood	Door Frame	Intact
8/7/2020	**298**	**4.5**	**0.3**	**POS**	**Hallway**	**East**	**White**	**Wood**	**Door**	**Intact**
8/7/2020	299	0.3	0.2	NEG	Exterior	South	Yellow	Wood	Wall	Intact
8/7/2020	**300**	**5.3**	**0.3**	**POS**	**Exterior**	**East**	**Brown**	**Wood**	**Wall**	**Intact**
8/7/2020	**301**	**3**	**0.3**	**POS**	**Exterior**	**East**	**Dark Brown**	**Wood**	**Trim**	**Intact**
8/7/2020	**302**	**6.4**	**0.3**	**POS**	**Exterior**	**East**	**Dark Brown**	**Wood**	**Window-Frame**	**Intact**
8/7/2020	**303**	**3.2**	**0.3**	**POS**	**Exterior**	**East**	**Dark Brown**	**Wood**	**Window Seal**	**Intact**
8/7/2020	304	0	0.3	NEG	Exterior	East	Dark Brown	Wood	Post	Intact
8/7/2020	305	-0.1	0.3	NEG	Exterior	East	Red	Wood	Door	Intact
8/7/2020	306	0.1	0.2	NEG	Exterior	East	Brown	Metal	Facia	Intact
8/7/2020	307	0.5	0.1	NEG	Exterior	East	Brown	Wood	Eves	Intact
8/7/2020	308	0	0.3	NEG	Exterior	East	Brown	Wood	Eves	Intact
8/7/2020	**309**	**10**	**0.3**	**POS**	**Exterior**	**North**	**Brown**	**Wood**	**Wall**	**Intact**
8/7/2020	310	0.7	0.1	NEG	Exterior	North	Brown	Wood	Eves	Intact
8/7/2020	**311**	**3.6**	**0.3**	**POS**	**Exterior**	**North**	**Brown**	**Wood**	**Door Frame**	**Intact**
8/7/2020	**312**	**4.3**	**0.3**	**POS**	**Exterior**	**North**	**Brown**	**Wood**	**Door**	**Intact**

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Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/7/2020	313	0.5	0.1	NEG	Exterior	North	Brown	Wood	Window Frame	Intact
8/7/2020	**314**	**1.1**	**0.3**	**POS**	**Exterior**	**North**	**Brown**	**Wood**	**Window Seal**	**Intact**
8/7/2020	315	0	0.3	NEG	Exterior	North	Brown	Wood	Attic Hatch	Intact
8/7/2020	**316**	**5.9**	**0.3**	**POS**	**Exterior**	**West**	**Brown**	**Wood**	**Wall**	**Intact**
8/7/2020	**317**	**6.5**	**0.3**	**POS**	**Exterior**	**West**	**Brown**	**Wood**	**Facia**	**Intact**
8/7/2020	**318**	**6.5**	**0.3**	**POS**	**Exterior**	**West**	**Brown**	**Wood**	**Eves**	**Intact**
8/7/2020	**319**	**1.4**	**0.2**	**POS**	**Exterior**	**West**	**Brown**	**Wood**	**Window Frame**	**Intact**
8/7/2020	320	0.4	0.2	NEG	Exterior	North	Brown	Wood	Window Seal	Intact
8/7/2020	321	0.1	0.3	NEG	Garage	South	White	Drywall	Wall	Intact
8/7/2020	322	0	0.3	NEG	Garage	West	White	Drywall	Wall	Intact
8/7/2020	323	0.1	0.3	NEG	Garage	North	White	Drywall	Wall	Intact
8/7/2020	324	-0.3	0.3	NEG	Garage	East	White	Brick	Wall	Intact
8/7/2020	325	0.1	0.3	NEG	Garage	East	Blue	Metal	Door Frame	Intact
1800 La Veta - 2nd Floor										
8/7/2020	326	-0.1	0.3	NEG	Garage	East	Blue	Metal	Door	Intact
8/7/2020	327	0	0.3	NEG	257	North	White	Drywall	Wall	Intact
8/7/2020	328	0.1	0.3	NEG	257	West	White	Drywall	Wall	Intact
8/7/2020	329	0.1	0.3	NEG	257	South	White	Drywall	Wall	Intact
8/7/2020	330	0	0.3	NEG	257	East	White	Drywall	Wall	Intact
8/7/2020	331	-0.1	0.3	NEG	257	East	Tan	Metal	Door Frame	Intact
8/7/2020	332	-0.1	0.3	NEG	257	East	Tan	Wood	Door	Intact
8/7/2020	333	0	0.3	NEG	257	East	Tan	Wood	Window Frame	Intact
8/7/2020	334	0.1	0.3	NEG	256	North	White	Drywall	Wall	Intact
8/7/2020	335	0	0.3	NEG	256	West	White	Drywall	Wall	Intact
8/7/2020	336	0.1	0.3	NEG	256	East	White	Drywall	Wall	Intact
8/7/2020	337	0.2	0.3	NEG	256	South	White	Drywall	Wall	Intact
8/7/2020	338	0.1	0.3	NEG	256	South	White	Metal	T-Bar	Intact
8/7/2020	339	-0.2	0.2	NEG	256	South	Tan	Metal	Door Frame	Intact
8/7/2020	340	0.1	0.3	NEG	252	North	White	Drywall	Wall	Intact
8/7/2020	341	0.2	0.3	NEG	252	West	White	Drywall	Wall	Intact
8/7/2020	342	0.1	0.3	NEG	252	East	White	Drywall	Wall	Intact
8/7/2020	343	0.1	0.3	NEG	252	South	White	Drywall	Wall	Intact
8/7/2020	344	0.1	0.3	NEG	252	North	White	Drywall	Pillar	Intact

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Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/7/2020	345	-0.1	0.3	NEG	252	North	Brown	Wood	Chair Rail	Intact
8/7/2020	346	0.1	0.3	NEG	248	North	White	Drywall	Wall	Intact
8/7/2020	347	0	0.3	NEG	248	West	White	Drywall	Wall	Intact
8/7/2020	348	-0.1	0.3	NEG	248	East	White	Drywall	Wall	Intact
8/7/2020	349	0.1	0.3	NEG	248	East	White	Drywall	Wall	Intact
8/7/2020	350	0.2	0.3	NEG	Restroom 14	South	Yellow	Ceramic	Tile	Intact
8/7/2020	351	-0.6	0.3	NEG	Restroom 14	South	Pink	Ceramic	Tile	Intact
8/7/2020	352	0.4	0.2	NEG	Restroom 14	South	Orange	Ceramic	Tile	Intact
8/7/2020	353	-0.2	0.3	NEG	Restroom 14	South	White	Porcelain	Sink	Intact
8/7/2020	354	-0.1	0.3	NEG	Restroom 14	South	White	Porcelain	Urinal	Intact
8/7/2020	355	0	0.3	NEG	Restroom 14	West	Purple	Metal	Door Frame	Intact
8/7/2020	**356**	**5.3**	**0.3**	**POS**	**W Restroom**	**West**	**Tan**	**Ceramic**	**Wall Tile**	**Intact**
8/7/2020	357	0.3	0.3	NEG	W Restroom	West	Grey	Ceramic	Floor	Intact
8/7/2020	358	0.5	0.1	NEG	W Restroom	West	White	Porcelain	Sink	Intact
8/7/2020	359	0.1	0.3	NEG	250	North	White	Drywall	Wall	Intact
8/7/2020	360	0	0.3	NEG	250	West	White	Drywall	Wall	Intact
8/7/2020	361	0	0.3	NEG	250	South	White	Drywall	Wall	Intact
8/7/2020	362	0.1	0.3	NEG	250	East	White	Drywall	Wall	Intact
8/7/2020	363	-0.1	0.3	NEG	250	East	Blue	Metal	Door Frame	Intact
8/7/2020	364	-0.1	0.3	NEG	250	East	Blue	Wood	Door	Intact
8/7/2020	365	0.1	0.3	NEG	254	North	Grey	Drywall	Wall	Intact
8/7/2020	366	0	0.3	NEG	254	West	Grey	Drywall	Wall	Intact
8/7/2020	367	0	0.3	NEG	254	South	Grey	Drywall	Wall	Intact
8/7/2020	368	0	0.3	NEG	254	East	Grey	Drywall	Wall	Intact
8/7/2020	369	-0.1	0.3	NEG	254	East	Red	Metal	Door Frame	Intact
8/7/2020	370	-0.1	0.3	NEG	254	East	Red	Wood	Door	Intact
8/7/2020	371	0	0.3	NEG	253	North	Grey	Drywall	Wall	Intact
8/7/2020	372	0.1	0.3	NEG	253	West	Grey	Drywall	Wall	Intact
8/7/2020	373	0	0.3	NEG	253	South	Grey	Drywall	Wall	Intact
8/7/2020	374	0	0.3	NEG	253	East	Grey	Drywall	Wall	Intact
8/7/2020	375	0	0.3	NEG	253	East	Red	Metal	Door Frame	Intact
8/7/2020	376	-0.1	0.3	NEG	253	East	Red	Wood	Door	Intact
8/7/2020	377	0.2	0.3	NEG	251	East	Dark Grey	Drywall	Wall	Intact

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Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/7/2020	378	0.1	0.3	NEG	251	North	Dark Grey	Drywall	Wall	Intact
8/7/2020	379	0	0.3	NEG	251	West	Dark Grey	Drywall	Wall	Intact
8/7/2020	380	0.1	0.3	NEG	251	East	Dark Grey	Drywall	Wall	Intact
8/7/2020	381	0.1	0.3	NEG	251	South	Red	Metal	Door Frame	Intact
8/7/2020	382	-0.1	0.3	NEG	251	South	Red	Metal	Door	Intact
8/7/2020	383	0.2	0.3	NEG	250	North	Grey	Drywall	Wall	Intact
8/7/2020	384	0.2	0.3	NEG	250	West	Grey	Drywall	Wall	Intact
8/7/2020	385	0.2	0.3	NEG	250	South	Grey	Drywall	Wall	Intact
8/7/2020	386	0.2	0.3	NEG	250	East	Grey	Drywall	Wall	Intact
8/7/2020	387	0	0.3	NEG	250	East	Red	Metal	Door Frame	Intact
8/7/2020	388	0	0.3	NEG	250	East	Red	Wood	Door	Intact
8/7/2020	389	0.1	0.3	NEG	252	North	White	Drywall	Wall	Intact
8/7/2020	390	0.1	0.3	NEG	252	East	White	Drywall	Wall	Intact
8/7/2020	391	0.1	0.3	NEG	252	West	White	Drywall	Wall	Intact
8/7/2020	392	0	0.3	NEG	252	South	White	Drywall	Wall	Intact
8/7/2020	393	0	0.3	NEG	252	North	Red	Metal	Door Frame	Intact
8/7/2020	394	-0.1	0.3	NEG	252	North	Red	Wood	Door	Intact
8/7/2020	395	0	0.2	NEG	252	North	Grey	Wood	Door Rail	Intact
8/7/2020	396	0.1	0.3	NEG	239	North	White	Drywall	Wall	Intact
8/7/2020	397	0.1	0.3	NEG	239	South	White	Drywall	Wall	Intact
8/7/2020	398	-0.1	0.3	NEG	239	East	White	Drywall	Wall	Intact
8/7/2020	399	0	0.3	NEG	239	East	White	Drywall	Wall	Intact
8/7/2020	400	0.1	0.3	NEG	239	South	White	Wood	Window Seal	Intact
8/7/2020	401	0.1	0.3	NEG	236	North	White	Drywall	Wall	Intact
8/7/2020	402	0.1	0.3	NEG	236	West	White	Drywall	Wall	Intact
8/7/2020	403	0.1	0.3	NEG	236	South	White	Drywall	Wall	Intact
8/7/2020	404	0.1	0.3	NEG	236	East	White	Drywall	Wall	Intact
8/7/2020	405	0.2	0.3	NEG	236	East	Green	Metal	Door Frame	Intact
8/7/2020	406	0	0.3	NEG	236	East	Green	Wood	Door	Intact
8/7/2020	407	0	0.3	NEG	236	East	White	Wood	Baseboard	Intact
8/7/2020	408	0.2	0.3	NEG	230	North	Grey	Drywall	Wall	Intact
8/7/2020	409	0.2	0.3	NEG	230	West	Grey	Drywall	Wall	Intact
8/7/2020	410	0.2	0.3	NEG	230	South	Grey	Drywall	Wall	Intact

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Date	Sample #	Pb (mg/cm2)	+/-	Result	Room	Direction	Color	Substrate	Component	Condition
8/7/2020	411	0.2	0.3	NEG	230	East	Grey	Drywall	Wall	Intact
8/7/2020	412	0	0.2	NEG	230	East	White	Wood	Wood wall	Intact
8/7/2020	413	0.2	0.3	NEG	230	East	Green	Metal	Door Frame	Intact
8/7/2020	414	-0.2	0.2	NEG	230	East	Green	Wood	Door	Intact
8/7/2020	415	0	0.2	NEG	234	North	Varnish	Wood	Wall	Intact
8/7/2020	416	-0.1	0.3	NEG	234	West	Varnish	Wood	Wall	Intact
8/7/2020	417	0	0.3	NEG	234	South	Varnish	Wood	Wall	Intact
8/7/2020	418	0	0.2	NEG	234	East	Varnish	Wood	Wall	Intact
8/7/2020	419	0.1	0.3	NEG	232	North	White	Drywall	Wall	Intact
8/7/2020	420	0.1	0.3	NEG	232	West	White	Drywall	Wall	Intact
8/7/2020	421	0.2	0.3	NEG	232	South	White	Drywall	Wall	Intact
8/7/2020	422	0	0.3	NEG	232	East		Wood	Wall	Intact
8/7/2020	423	-0.1	0.3	NEG	232	East	White	Metal	T-Bar	Intact
8/7/2020	424	0.1	0.3	NEG	228	North	Green	Drywall	Wall	Intact
8/7/2020	425	0.2	0.3	NEG	228	West	Green	Drywall	Wall	Intact
8/7/2020	426	0.2	0.3	NEG	228	South	Green	Drywall	Wall	Intact
8/7/2020	427	0.2	0.3	NEG	228	East	Green	Drywall	Wall	Intact
8/7/2020	428	0.1	0.2	NEG	228	North		Wood	Cabinet	Intact
8/7/2020	429	0.1	0.3	NEG	230	North	White	Drywall	Wall	Intact
8/7/2020	430	0.2	0.3	NEG	230	West	White	Drywall	Wall	Intact
8/7/2020	431	0	0.3	NEG	230	South	White	Drywall	Wall	Intact
8/7/2020	432	0.2	0.3	NEG	230	East	White	Drywall	Wall	Intact
8/7/2020	433	0	0.2	NEG	230	East	Green	Wood	Chair Rail	Intact
8/7/2020	434	0	0.3	NEG	231	East	White	Drywall	Wall	Intact
8/7/2020	435	0	0.3	NEG	231	East	White	Drywall	Wall	Intact
8/7/2020	436	0.1	0.3	NEG	231	East	White	Drywall	Wall	Intact
8/7/2020	437	0.1	0.3	NEG	231	East	White	Drywall	Wall	Intact
8/7/2020	438	0	0.3	NEG	231	North	White	Wood	Baseboard	Intact
8/7/2020	439	0.1	0.3	NEG	226	North	White	Drywall	Wall	Intact
8/7/2020	440	0.1	0.3	NEG	226	West	White	Drywall	Wall	Intact
8/7/2020	441	0	0.3	NEG	226	South	White	Drywall	Wall	Intact
8/7/2020	442	0.1	0.3	NEG	226	East	White	Drywall	Wall	Intact
8/7/2020	443	0.1	0.3	NEG	226	North	Green	Wood	Baseboard	Intact

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8/7/2020	444	0.4	0.2	NEG	224	North	White	Drywall	Wall	Intact
8/7/2020	445	0.4	0.2	NEG	224	West	White	Drywall	Wall	Intact
8/7/2020	446	0.4	0.2	NEG	224	South	White	Drywall	Wall	Intact
8/7/2020	447	0.4	0.2	NEG	224	East	White	Drywall	Wall	Intact
8/7/2020	448	-0.1	0.3	NEG	224	South	Green	Wood	Door Frame	Intact
8/7/2020	449	-0.1	0.3	NEG	221	North	White	Drywall	Wall	Intact
8/7/2020	450	0	0.3	NEG	221	West	White	Drywall	Wall	Intact
8/7/2020	451	0	0.3	NEG	221	South	White	Drywall	Wall	Intact
8/7/2020	452	0	0.3	NEG	221	East	White	Drywall	Wall	Intact
8/7/2020	453	0.1	0.3	NEG	223	North	Green	Drywall	Wall	Intact
8/7/2020	454	-0.2	0.3	NEG	223	North	Green	Wood	Chair Rail	Intact
8/7/2020	455	-0.2	0.3	NEG	223	North	White	Wood	Baseboard	Intact
8/7/2020	456	0.1	0.3	NEG	222	North	White	Drywall	Wall	Intact
8/7/2020	457	-0.1	0.3	NEG	222	North	Green	Wood	Door Frame	Intact
8/7/2020	458	0	0.3	NEG	222	North	Green	Wood	Door	Intact
8/7/2020	459	0.3	0.3	NEG	240	North	Green	Drywall	Wall	Intact
8/7/2020	460	0.1	0.3	NEG	240	North	Green	Metal	Door Frame	Intact
8/7/2020	461	-0.1	0.3	NEG	240	North	Green	Wood	Door	Intact
8/7/2020	**462**	**17.8**	**0.3**	**POS**	**Mens Restroom**	**North**	**Blue**	**Ceramic**	**Wall**	**Intact**
8/7/2020	463	-0.3	0.3	NEG	Mens Restroom	North	White	Porcelain	Sink	Intact
8/7/2020	**464**	**23.4**	**0.3**	**POS**	**Womens Restroom**	**North**	**Pink**	**Ceramic**	**Tile**	**Intact**
8/7/2020	465	0.3	0.3	NEG	Womens Restroom	North	White	Porcelain	Sink	Intact
8/7/2020	466	0.2	0.3	NEG	216	East	White	Cast Iron	Sink	Intact
8/7/2020	**467**	**29.4**	**0.3**	**POS**	**209**	**West**	**White**	**Ceramic**	**Tile**	**Intact**
8/7/2020	468	-0.1	0.3	NEG	209	West	White	Porcelain	Sink	Intact
8/7/2020	469	-0.2	0.3	NEG	209	West	Tan	Ceramic	Floor	Intact
8/7/2020	470	0.1	0.3	NEG	205	West	Yellow	Drywall	Wall	Intact
8/7/2020	471	0.1	0.3	NEG	205	West	Grey	VFT	Floor	Intact
8/7/2020	472	0.1	0.3	NEG	205	West	White	VFT	Floor	Intact

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8/7/2020	473	0.2	0.3	NEG	205	North	Yellow	Wood	Door Frame	Intact
8/7/2020	474	-0.1	0.3	NEG	202	West	Light Green	Drywall	Walll	Intact
8/7/2020	475	0.2	0.3	NEG	202	South	Green	Drywall	Wall	Intact
8/7/2020	476	0.2	0.3	NEG	202	North	Green	Wood	Baseboard	Intact
8/7/2020	477	0	0.3	NEG	201	North	Blue	Drywall	Wall	Intact
8/7/2020	478	0.1	0.3	NEG	201	South	Blue	Wood	Baseboard	Intact
8/7/2020	479	-0.1	0.2	NEG	Exterior Room	South	White	Wood	Wind barrier	Intact
8/7/2020	480	0.1	0.3	NEG	Exterior Room	South		Wood	Trim	Intact
8/7/2020	481	-0.1	0.3	NEG	Exterior Room	South	Tan	stucco	Wall	Intact
8/7/2020	482	0.1	0.3	NEG	Exterior Room	South	Tan	Metal	Wall	Intact
8/7/2020	483	0	0.3	NEG	Stairwell	South	White	Drywall	Wall	Intact
8/7/2020	484	0	0.3	NEG	Stairwell	South	Grey	VFT	Floor	Intact
8/7/2020	485	0	0.3	NEG	Stairwell	South	White	Wood	Storage	Intact
8/7/2020	486	0.7	0.1	NEG	Stairwell	South	Green	Metal	Door Frame	Intact
8/7/2020	487	0.1	0.2	NEG	Stairwell	West	Green	Wood	Door	Intact
8/7/2020	488	-0.2	0.3	NEG	Exterior	West	Tan	stucco	Wall	Intact
8/7/2020	489	0	0.3	NEG	Exterior	West	Blue	Metal	Gutter	Intact
8/7/2020	490	0.4	0.2	NEG	Exterior	West		Metal	Stair Hand Rail	Intact
8/7/2020	491	0.1	0.3	NEG	Exterior	East	Red	Brick	Wall	Intact
8/7/2020	492	0.5	0.1	NEG	Exterior	West	Tan	stucco	Wall	Intact
8/7/2020	493	0.4	0.2	NEG	Exterior	North	White	stucco	Wall	Intact
8/7/2020	494	0	0.3	NEG	Exterior	East	Tan	Metal	door?	Intact
8/7/2020	495	-0.4	0.3	NEG	Exterior	North	Tan	stucco	Wall	Intact
8/7/2020	496	-0.3	0.3	NEG	Exterior	South	Tan	stucco	Wall	Intact
8/7/2020	**497**	**1.1**	**0.2**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/7/2020	**498**	**1.1**	**0.2**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/7/2020	**499**	**1.1**	**0.2**	**POS**	**---**	**---**	**CALIBRATION**	**---**	**---**	**---**
8/7/2020	500	-0.2	0.3	NEG	---	---	CALIBRATION	---	---	---

APPENDIX IV
Personnel Certifications

STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Asbestos Certification & Training Unit
2424 Arden Way, Suite 495
Sacramento, CA 95825-2417
(916) 574-2993 Office (916) 483-0572 Fax
http://www.dir.ca.gov/dosh/asbestos.html acru@dir.ca.gov

907074549C 328

June 20, 2019

EFI Global
Benjamin P Curry
5261 West Imperial Highway
Los Angeles CA 90045

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email with any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Jeff Ferrell
Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached (Revised 01/10/2019)

California Department of PublicHealth

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:	CERTIFICATE TYPE:	NUMBER:	EXPIRATION DATE:
	Lead Inspector/Assessor	LRC-00000208	4/5/2021
	Lead Supervisor	LRC-00000207	4/5/2021

Benjamin Curry

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

STATE OF CALIFORNIA — Gavin Newsom, Governor

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Asbestos Certification & Training Unit
2424 Arden Way, Suite 495
Sacramento, CA 95825-2417
(916) 574-2993 Office http://www.dir.ca.gov/dosh/asbestos.html acru@dir.ca.gov

511255572T 405 409

April 20, 2020

Heriberto Romero
1818 E. 84th Street
Los Angeles CA 90001

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please notify our office via U.S. Postal Service or other carrier of any changes in your mailing or work address within 15 days of the change.

Sincerely,

Jeff Ferrell
Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached 08/2019

California Department of PublicHealth

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:	CERTIFICATE TYPE:	NUMBER:	EXPIRATION DATE:
	Lead Sampling Technician	LRC-00001469	6/13/2020
	Lead Supervisor	LRC-00001468	6/13/2020

Jacob Pulliam

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

Attachment 9. USFWS IPaC

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Orange County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Coastal California Gnatcatcher Polioptila californica californica Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Reptiles

NAME	STATUS
Southwestern Pond Turtle Actinemys pallida Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4768	Proposed Threatened

Fishes

NAME	STATUS
Santa Ana Sucker Catostomus santaanae There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-

golden-eagles-may-occur-project-action

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week

12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

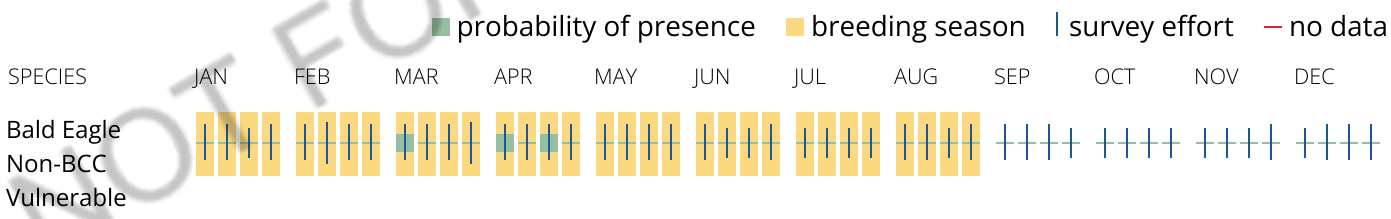
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Clark's Grebe Aechmophorus clarkii — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Willet Tringa semipalmata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

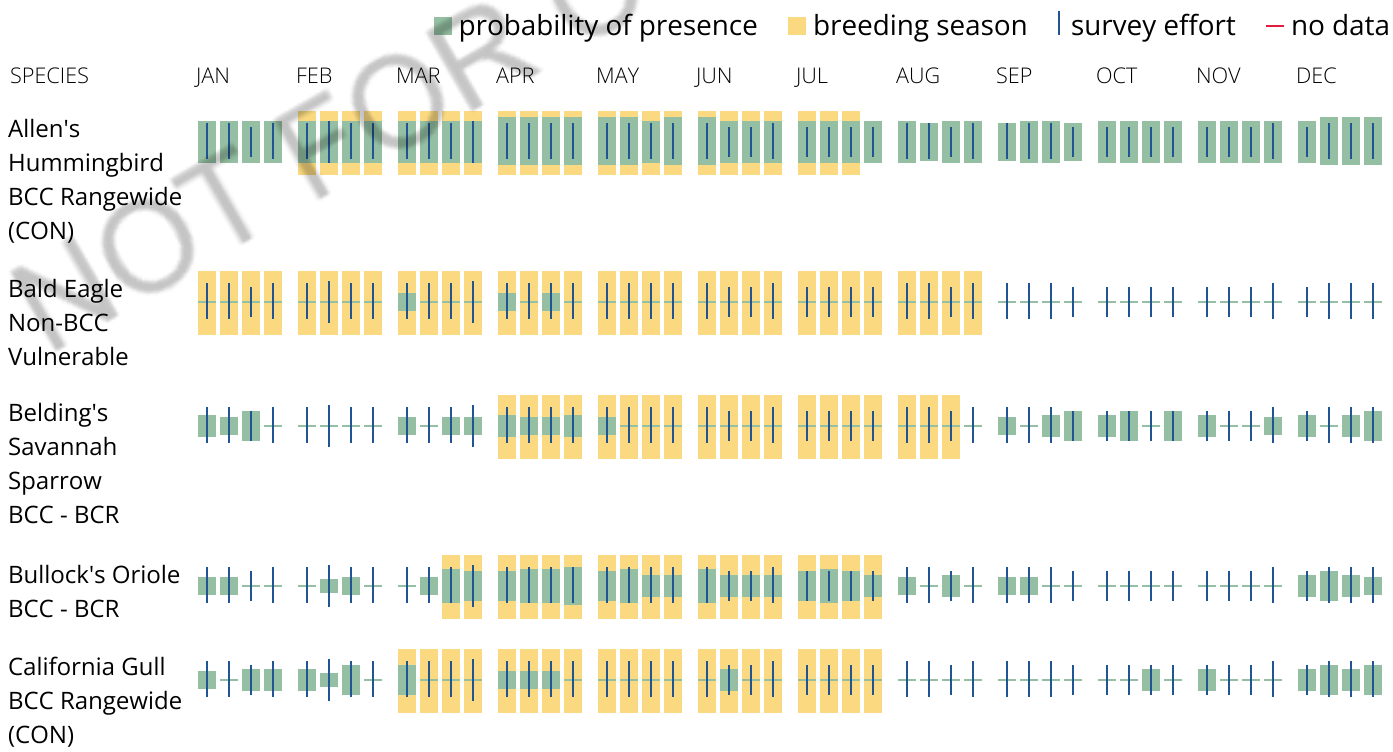
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

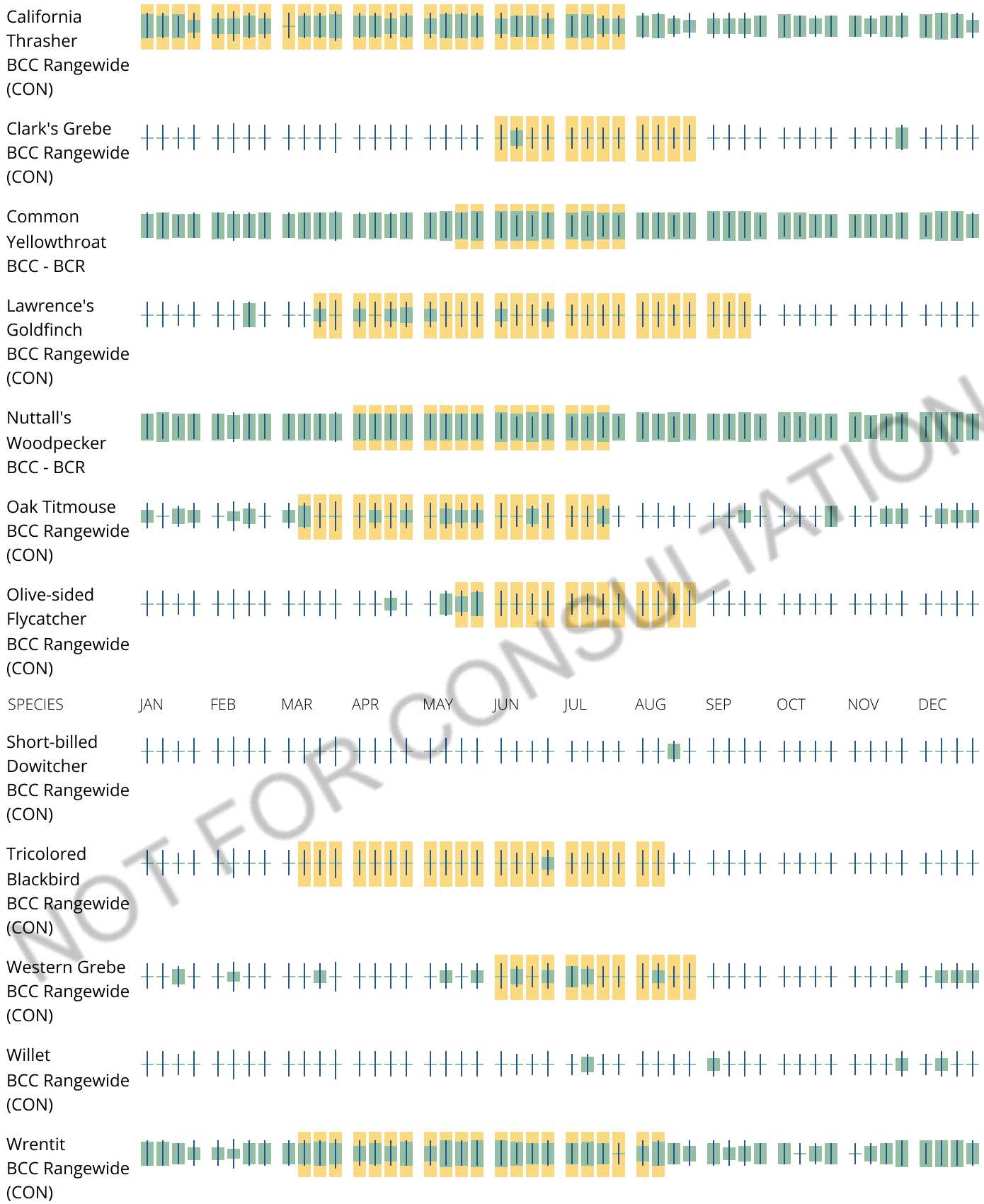
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);

2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

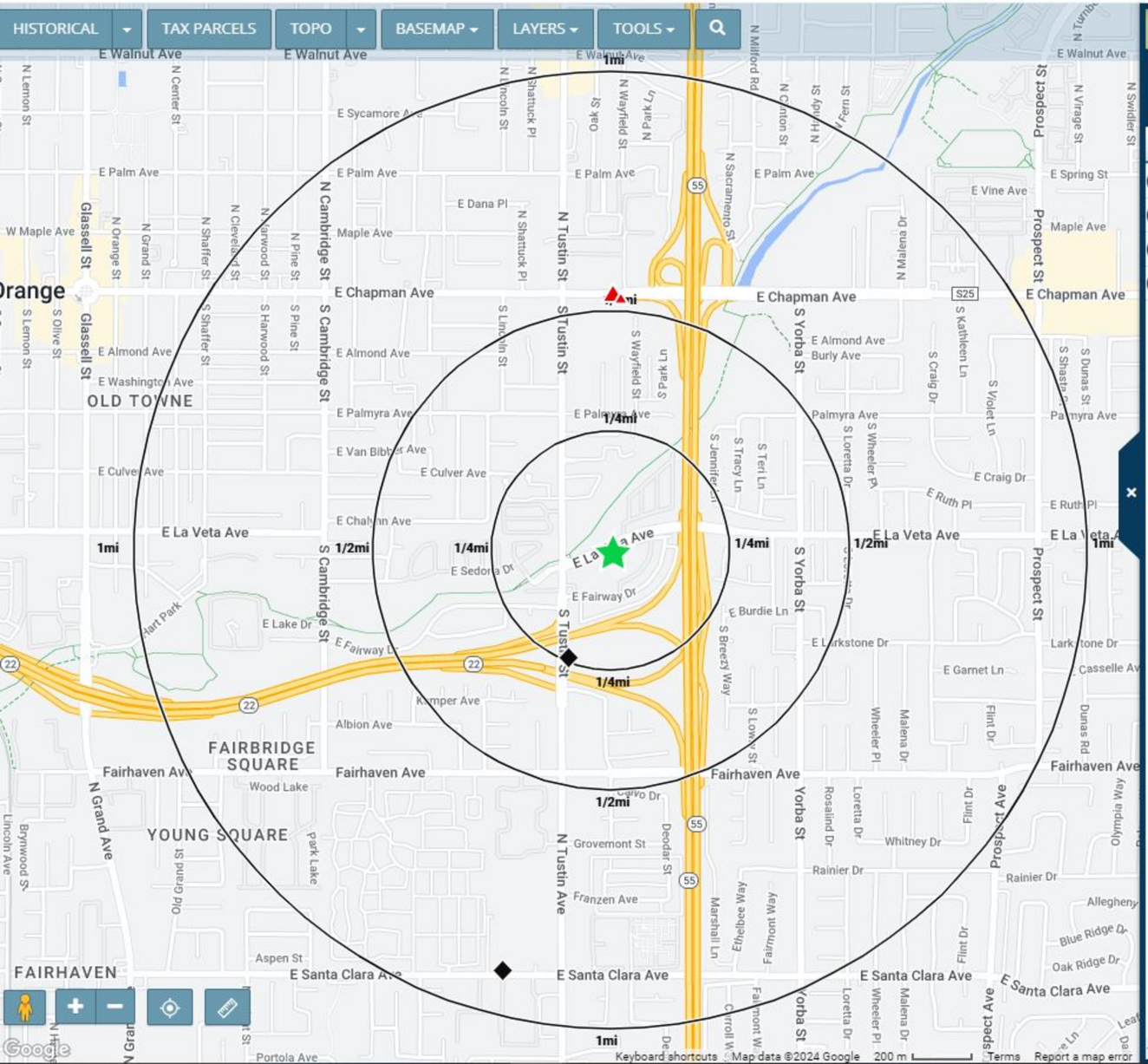
Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment 10. Explosive and Flammable Hazards ASD Calculations



FINDINGS | PHYSICAL SETTINGS

MAP FINDINGS

EXPORT

COLUMNS

4 of 2419 Records , Filtered by: Database

ID	SITE NAME	ADDRESS	DATABASES	ELEV	DIST(mi)
61		691 S TUSTIN ST	AST	Lower	0.239
608		1800 E CHAPMAN AVE	AST	Higher	0.528
610	SELMAN CHEVROLET	1800 E CHAPMAN AVE	AST	Higher	0.528
2042	675 SANTA ANA AREA	2031 EAST SANTA CLARA AVENUE	AST	Lower	0.904

Site Name	Site Address	Chemicals Onsite	Max Daily Amount/Unit (CalEPA)	Hazardous According to CFR	ASD Calculated Distance (feet)	Measured Distance from Project Site
Selman Chevrolet	1800 E CHAPMAN AVE ORANGE CA 92867	Waste Waterborne Paint	60-119 Gallons	No		
		Waste Oxygenated Solvents	12-59 Gallons	No		
		Waste Ethylene Glycol	120-599 Gallons	No		
		Waste Diethylene Glycol	60-119 Gallons	No		
		Used Paraffinic Petroleum Distillates	600-1199 Gallons	Yes	298.29	2,787.84
		Solids Containing Paraffinic Petroleum Distillates	1000-4999 Pounds	Yes	540.7	2,787.84
		Parts Washer Waste	60-119 Gallons	No		
		Paraffinic Petroleum Distillates	1200-2999 Gallons	Yes	437.03	2,787.84
		Oxygen	0-2599 Cubic Feet	No		
		Lacquer Thinner or Mineral Spirits	60-119 Gallons	No		
		Cleaners/Soaps	120-599 Gallons	No		
		Argon, Mixed with Carbon Dioxide	0-2599 Cubic Feet	No		
		Acetylene	0-2599 Cubic Feet	No		
Caltrans-Orange	691 S TUSTIN ST ORANGE CA 92866	Water Base Paint	1200-2999 Gallons	No		
		Waste Petroleum Distillate	600-1199 Gallons	Yes	298.29	1,261.92
		Waste Ethylene Glycol	60-119 Gallons	No		
		Unleaded Gasoline	6000-8999 Gallons	Yes	690.74	1,261.92
		Strontium Nitrate	25000-49999 Pounds	No		
		Silica Quartz	5000-9999 Pounds	No		
		Propane	120-599 Gallons	Yes	223.4	1,261.92
		Petroleum Distillate	60-119 Gallons	Yes	113.94	1,261.92
		Petroleum Distillate	60-119 Gallons	Yes	113.94	1,261.92
		Oxygen	0-2599 Cubic Feet	No		
		Motor Oil	120-599 Gallons	Yes	223.4	1,261.92
		Modified Asphalt	10000-24999 Pounds	No		
		Limestone	5000-9999 Pounds	No		
		Ethylene Glycol	120-599 Gallons	No		
		Diphenylmethane Diisocyante	12-59 Gallons	No		
		Diesel Fuel No. 2	120-599 Gallons	Yes	223.4	1,261.92
		Diesel Fuel	6000-8999 Gallons	Yes	690.74	1,261.92
		Cement	5000-9999 Pounds	No		
		Acetylene	0-2599 Cubic Feet	No		
California Highway Patrol 675 Santa Ana Area	2031 EAST SANTA CLARA AVENUE SANTA ANA CA 92705	Used Oil Filters	60-119 Gallons	Yes	113.94	4,773.12
		Motor Oil	60-119 Gallons	Yes	113.94	4,773.12
		Motor Oil	120-599 Gallons	Yes	223.4	4,773.12
		Liquefied Petroleum Gas	600-1199 Gallons	Yes	298.29	4,773.12
		Gasoline	9000-11999 Gallons	Yes	778.7	4,773.12
		FUSEE TRAFFIC	1000-4999 Pounds	No		
		Ammunition	500-999 Pounds	No		

Selman Chevrolet

Chemicals: Used Paraffinic Petroleum Distillates (600-1199 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	1199
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	298.29
ASD for Thermal Radiation for Buildings (ASDBPU)	54.68
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Chemicals: Solids Containing Paraffinic Petroleum Distillates (1000-4999 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	4999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	540.70
ASD for Thermal Radiation for Buildings (ASDBPU)	105.80
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Chemicals: Paraffinic Petroleum Distillates (2999 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	2999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	437.03
ASD for Thermal Radiation for Buildings (ASDBPU)	83.54
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Caltrans-Orange

Chemicals: Waste Petroleum Distillate (600-1199 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	1199
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	298.29
ASD for Thermal Radiation for Buildings (ASDBPU)	54.68
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Chemicals: Unleaded Gasoline (6000-8999 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	8999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	690.74
ASD for Thermal Radiation for Buildings (ASDBPU)	138.84
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Chemicals: Propane (120-599 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	599
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	223.40
ASD for Thermal Radiation for Buildings (ASDBPU)	39.67
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Chemicals: Propane Distillate (60-119 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	119
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	113.94
ASD for Thermal Radiation for Buildings (ASDBPU)	18.79
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Chemicals: Motor Oil (120-599 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	599
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	223.40
ASD for Thermal Radiation for Buildings (ASDBPU)	39.67
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Chemicals: Diesel Fuel No.2 (120-599 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	599
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	223.40
ASD for Thermal Radiation for Buildings (ASDBPU)	39.67
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Chemicals: Diesel Fuel (6000-8999 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	8999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	690.74
ASD for Thermal Radiation for Buildings (ASDBPU)	138.84
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

California Highway Patrol 675 Santa Ana Area

Chemical: Used Oil Filters (60-119 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	119
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	113.94
ASD for Thermal Radiation for Buildings (ASDBPU)	18.79
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Chemical: Motor Oil (60-119 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	119
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	113.94
ASD for Thermal Radiation for Buildings (ASDBPU)	18.79
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Chemicals: Motor Oil (120-599 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	599
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	223.40
ASD for Thermal Radiation for Buildings (ASDBPU)	39.67
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Liquefied Petroleum Gas (600-1199 gallons)

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	1199
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	298.29
ASD for Thermal Radiation for Buildings (ASDBPU)	54.68
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Gasoline (9000-11999 gallons)

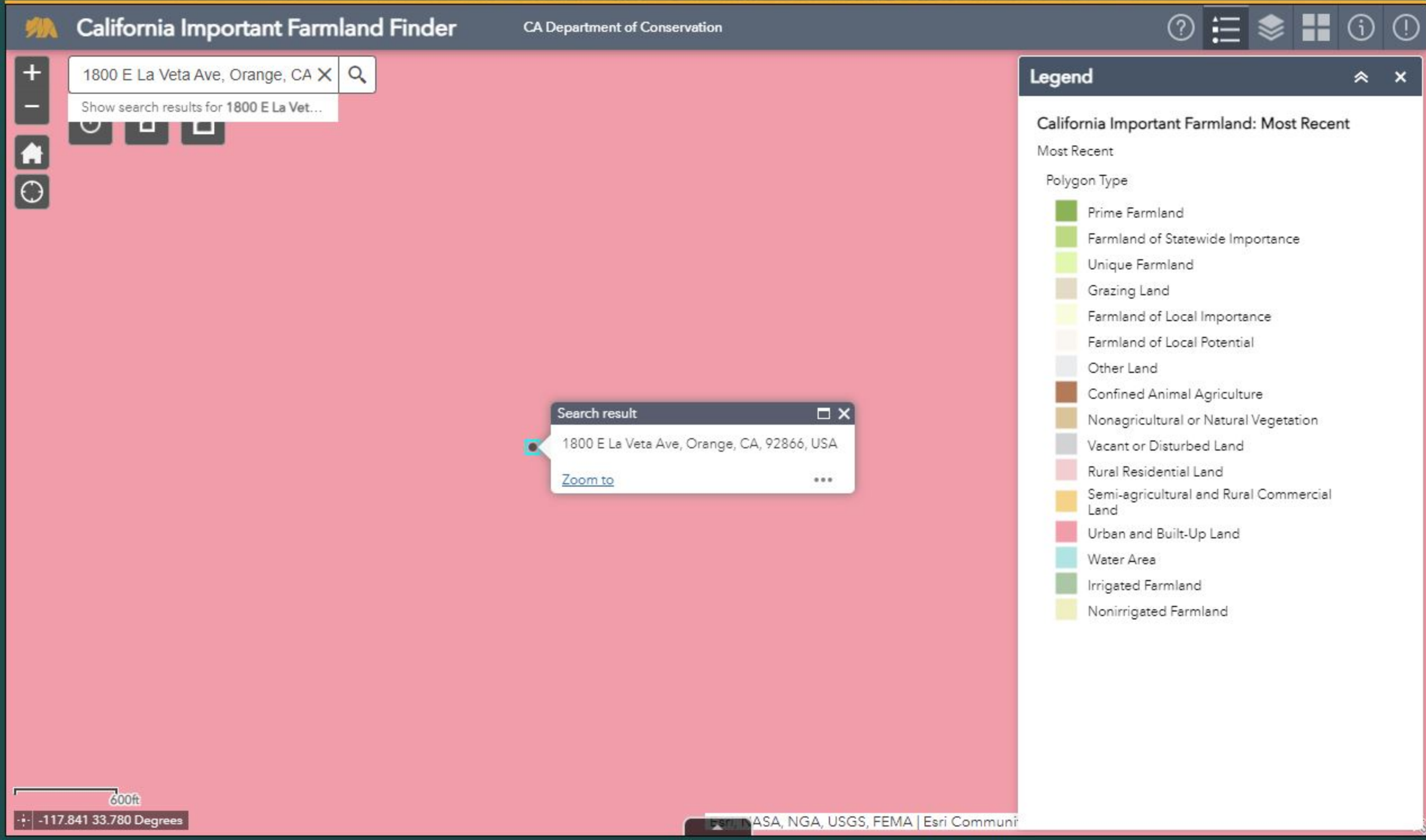
Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	11999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	778.70
ASD for Thermal Radiation for Buildings (ASDBPU)	158.59
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

Attachment 11. California Important Farmland Finder


California Important Farmland Finder
CA Department of Conservation
1800 E La Veta Ave, Orange, CA
Show search results for 1800 E La Vet...
Search result
1800 E La Veta Ave, Orange, CA, 92866, USA
Zoom to
Legend
California Important Farmland: Most Recent
Most Recent
Polygon Type
Prime Farmland
Farmland of Statewide Importance
Unique Farmland
Grazing Land
Farmland of Local Importance
Farmland of Local Potential
Other Land
Confined Animal Agriculture
Nonagricultural or Natural Vegetation
Vacant or Disturbed Land
Rural Residential Land
Semi-agricultural and Rural Commercial Land
Urban and Built-Up Land
Water Area
Irrigated Farmland
Nonirrigated Farmland
600ft
-117.841 33.780 Degrees
Esri, NASA, NGA, USGS, FEMA | Esri Communi

Attachment 12. Orange County SHPO Consultation Letter

DYLAN WRIGHT
DIRECTOR
OC COMMUNITY RESOURCES

CYMANTHA ATKINSON
ASSISTANT DIRECTOR
OC COMMUNITY RESOURCES

JOANNE VEEDOR
DIRECTOR
ADMINISTRATIVE SERVICES

MONICA SCHMIDT
INTERIM DIRECTOR
OC ANIMAL CARE

JULIA BIDWELL
DIRECTOR
OC HOUSING & COMMUNITY DEVELOPMENT

RENEE RAMIREZ
DIRECTOR
OC COMMUNITY SERVICES

PAMELA PASSOW
DIRECTOR
OC PARKS

JULIE QUILLMAN
COUNTY LIBRARIAN
OC PUBLIC LIBRARIES

OC Housing & Community Development

1501 E. ST. ANDREW PLACE, 1ST FLOOR
SANTA ANA, CA 92705
PHONE: 714.480.6534
FAX: 714.480.2978

OC Community Resources

February 13, 2024

Via Email: calshpo.hud@parks.ca.gov and susan.negrete@parks.ca.gov

California Department of Parks and Recreation
Office of Historic Preservation
1725 23rd St., Suite 100
Sacramento, CA 95816

Request for SHPO Concurrence: The Orion Project, 1800 E. La Veta Avenue, City of Orange, Orange County, California

To Whom it May Concern,

In accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 as amended (16 U.S.C 470f), and as required by the U.S. Department of Housing and Urban Development (HUD), we are requesting your review and comments on the determination of no effect that Project implementation would have on historic properties within the Project Area of Potential Effects (APE) for the Orion Project (Project).

The Orion Project
1800 E. La Veta Avenue
City of Orange, Orange County, California

Project Objective

The proposed Project (Project) includes the redevelopment of the existing campus for the Rehabilitation Institute of Southern California located at 1800 E. La Veta, in the City of Orange, Orange County, California. The redevelopment will include 166 affordable senior apartment units on 3.85-acres. The community consists of two 4-story elevator served buildings and one 2-4-story elevator served building with surface parking (Exhibit 4.02).

Area of Potential effects (APE)

The Area of potential effects (APE) for the Project includes the APE for direct effects (direct APE) which encompasses 3.85-acres and is located at 1800 East La Veta Avenue, in the City of Orange and is bound by East La Veta Avenue to the north, South Tustin Street to the west, and East Fairway Drive to the south and east. The direct APE encompasses Accessors Parcel Number (APN) 390-322-15. The direct APE falls within Township 4 South and Range 9 West of the *Orange, California* U.S Geological Survey (USGS) 7.5-minute Series Quadrangle Map. The direct APE includes areas of potential ground disturbances and where the project will be altered. Ground disturbance would encompass the entire 3.85-acre direct APE,

represented as the maximum depth of excavation, will be approximately 18 feet below the existing ground surface (Exhibit 4.25).

The APE also includes the APE for indirect effects (indirect APE) which is defined by the area in which there is potential for the proposed Project to have an adverse effect on historic properties. The indirect APE encompasses 15.7-acres which includes the addition of one parcel in all directions of the undertaking.

Historic Property Identification Effort

Orange County Housing & Community Development staff reviewed the cultural resource documents prepared by Architectural Resources Group (2020), ASM Affiliates (Andrews 2021), and Kleinfelder (Neals and Castells 2023).

Architectural Resources Group staff consulted archives and repositories as part of their research methodologies for this assessment including Orange County Public Library; Orange County Assessor; Orange County Archives; newspapers.com and California Digital Newspaper Collection databases; historic aerials accessed online through historicaerials.com and UCSB Frame Finder; and Architectural Resources Group in-house library collection.

ASM Affiliates did not evaluate built environmental resources during the cultural resources study in 2021.

To comply with Section 800.4(b) for the Project, the tasks listed below were also completed:

- On October 16, 2020, Architectural Resources Group staff conducted a site visit of the direct APE and identified two historic-era properties.
- On November 5, 2020, Architectural Resources Group conducted built environment evaluations recommending 1800 E. La Veta Avenue, 585 S. Tustin Street, ineligible for listing on the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR).
- On November 1, 2021, ASM Affiliates conducted background research indicating past disturbances within the direct APE.
- On November 3, 2021, ASM Affiliates conducted a records search at the SCCIC. The results indicated that no previously recorded cultural resources are within the direct APE.
- On November 31, 2021, ASM Affiliates conducted a negative archaeological resources pedestrian survey of the direct APE.
- On March 9, 2023, Kleinfelder conducted a review of the APE for indirect effects. The indirect APE includes the addition of one parcel in all directions of the undertaking. During the site visit, two historic-era properties were identified within the indirect APE.
- In April 2023, Kleinfelder conducted built environment evaluations recommending the Castilian Park Apartments (1622 and 1625 East Fairway Drive) and the Fairway Park Apartments (1844 E. Fairway Drive) ineligible for listing on the NRHP and the CRHR.

Native American Correspondence and Participation

ASM Affiliates contacted the Native American Heritage Commission (NAHC) to request a search of the Sacred Lands Files on October 31, 2021. The NAHC responded on November 17, 2023, with positive results and recommended that the Juaneño Band of Mission Indians Acjachemen Nation – Belardes be contacted for more information. Additionally, the NAHC provided a contact list of 17 Native American representatives who may have more information

about the cultural resources within the APE. Outreach letters were sent to the contacts identified by the NAHC, and one response was received. The Gabrieleño Band of Mission Indians - Kizh Nation responded on November 30, 2021, stating that the area is very important to their community and requested the lead agency's contact information (Andrews 2021). To date, no additional Native American correspondence or outreach has been conducted by Orange County.

South Central Coastal Information Center Records Search Results

ASM Affiliates conducted a records search at the California Historic Resources Information System (CHRIS) SCCIC on November 3, 2021, for the Project. The records search indicated that 22 previous cultural resources studies were conducted within one mile of the direct APE, none of which intersect the direct APE. Additionally, the records search identified 16 previously recorded cultural resources within one mile of the direct APE, none of which intersect the direct APE. The large majority (14) of these resources are historic era-built environment resources associated with the historical development of Orange County over the 20th Century. The remaining (2) previously recorded resources are prehistoric isolates (Andrews 2021).

Archival Research

In addition to the SCCIC records search, ASM Affiliates conducted an online review of historic aerial imagery (historic aerials) and historic topographic maps of the direct APE (NETR 2021). Historic aerial photographs of the APE are available from 1946 and 2018. Historic topographic maps of the APE are available from 1896 and 2018. The earliest topographic map from 1932 reveals a single structure along the southwestern portion of the parcel near S. Tustin Street and E. Fairway Drive. The earliest aerial image from 1946 shows the entire parcel utilized for agriculture. Overall, it appears that the entire APE has been subject to past disturbances associated with the development of several structures and associated infrastructure over the past century (NETR 2021).

Description of Findings

Architectural Resources Group conducted an historic resources assessment of the direct APE in 2020. The assessment included a search of California's Built Environment Resource Directory and Historic Resources Inventory and a built environment site visit. The study identified and evaluated two historic-era properties built between 1960 and 1987 within the direct APE. These properties include a single-family residence (585 S. Tustin Street) and a rehabilitation center (1800 E. La Veta Avenue). Both resources were evaluated and recommended ineligible for inclusion in the NRHP and the CRHR (Architectural Resources Group 2020).

ASM Affiliates conducted a cultural resources study of the direct APE in 2021. The study included a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search, a records search at the South-Central Coastal Information Center (SCCIC), a review of historic aerial and topographic imagery, and a pedestrian survey. These cultural resources study did not identify any archaeological resources within the direct APE. No built environmental resources were evaluated (Andrews 2021).

In 2023, Kleinfelder conducted a review of the proposed Project for indirect effects, extending the APE to include an indirect APE that consisted of one parcel in all directions of the undertaking. Two additional historic-era properties were identified. These include the Castilian Park Apartments (1622 and 1625 East Fairway Drive) and the Fairway Park Apartments (1844

E. Fairway Drive). Both resources were evaluated and recommended ineligible for inclusion in the NRHP and the CRHR (Neals and Castells 2023).

Effects Determination

Orange County Housing & Community Development reviewed the documentation for the Project and the potential for Project implementation to affect historic properties within the APE and determined that no historic properties will be affected in the APE for the subject undertaking.

Therefore, Orange County Housing & Community Development has reached a determination of "No Historic Properties Affected" by the project. Pursuant to 36 CFR Part 800, regulations implementing Section 106, we are requesting your concurrence on our determination of "No Historic Properties Affected."

We kindly request review and comments on our determination of no historic properties affected. Please provide us with your response on or before 30 days of receipt of this letter. To assist in your review, included in this packet is the referenced cultural resources studies (with confidential SCCIC records search results and DPR 523 Forms) prepared by Architectural Resources Group (2020), Sherri Andrews of ASM Affiliates (2021), and Jessica Neals and Justin Castells of Kleinfelder (2023). Also included in this packet are the undertaking descriptions, photographs, and maps for the proposed Project. Should you need further information, please contact me via email at Suzanne.harder@occr.ocgov.com.

Sincerely,

Sue Harder

_____
Sue Harder, Community Development Compliance and Environmental Coordinator
Orange County Housing & Community Development

Description of Undertaking

Address: 1800 E. La Veta Avenue
City of Orange, California 92866
Census Tract: 4004
APNs: 390-322-15

Agency Official Determination:

Based on our review, it is our determination that no historic properties or archaeological resources will be affected by this Project. We base these findings on:

- On October 16, 2020, Architectural Resources Group staff conducted a site visit of the direct APE and identified two historic-era properties.
- On November 5, 2020, Architectural Resources Group conducted built environment evaluations recommending 1800 E. La Veta Avenue, 585 S. Tustin Street, ineligible for listing on the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR).
- On November 1, 2021, ASM Affiliates conducted background research indicating past disturbances within the direct APE.
- On November 3, 2021, ASM Affiliates conducted a records search at the SCCIC. The results indicated that no previously recorded cultural resources are within the direct APE.
- On November 31, 2021, ASM Affiliates conducted a negative archaeological resources pedestrian survey of the direct APE.
- On March 9, 2023, Kleinfelder conducted a review of the APE for indirect effects. The indirect APE includes the addition of one parcel in all directions of the undertaking. During the site visit, two historic-era properties were identified within the indirect APE.
- In April 2023, Kleinfelder conducted built environment evaluations recommending the Castilian Park Apartments (1622 and 1625 East Fairway Drive) and the Fairway Park Apartments (1844 E. Fairway Drive) ineligible for listing on the NRHP and the CRHR.

Project Description:
The proposed Project includes the redevelopment of 1800 E. La Veta, the existing campus for the Rehabilitation Institute of Southern California. The redevelopment will include 166 affordable senior apartment units on 3.85-acres.

Site Information:

- **Zoning Designation:** Residential Multi-family (R-3)
- **General Plan Land Use Designation:** Residential Multi-family (R-3)
- **Existing Use:** Vacant
- **Prior Use(s)/Development(s):** Residential and commercial

Existing Conditions and Trends: The property is currently developed and includes a main building (1800 E. La Veta Avenue) formerly used as a rehabilitation center. The additional structure previously recorded on the property (585 S. Tustin Street) was recently demolished due to a fire. The rest of the property is occupied by landscape, hardscape, and surface parking that serves the rehabilitation center. The property is bounded by E. La Veta Avenue to the north, E. Fairway Drive to the south, and S. Tustin Street to the west, and multifamily housing to the east. It is bordered on the south by commercial and residential development and the north, east, and west by residential development.

References

Andrews, Sherri. 2021. Cultural Resources Assessment Findings Memo for the 1800 East La Veta Avenue Project, Orange, Orange County, California. On file with ASM Affiliates.

Architectural Resources Group. 2020. Historic Resources Assessment for the 1800 E. La Veta Avenue/585 S. Tustin Street, City of Orange, California. On file with Architectural Resources Group.

Neals, Jessica and Justin Castells. 2023. Cultural Resources Technical Report for the East La Veta Avenue Senior Apartment Community Project, Orange County, California. On file with Kleinfelder.

NETR (Nationwide Environmental Title Research LLC). 2021. Address search for 1800 La Veta Avenue City of Orange, California. Accessed 2021. http://www.historicaerials.com/

Suzanne Harder

Suzanne Harder, County of Orange	2/13/24 Date

Attachment 13. SHPO Response

DYLAN WRIGHT
DIRECTOR
OC COMMUNITY RESOURCES

CYMANTHA ATKINSON
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DIRECTOR
OC PARKS

JULIE QUILLMAN
COUNTY LIBRARIAN
OC PUBLIC LIBRARIES

OC Community Resources

Note to File-The Orion New Affordable Housing Complex

A request for Concurrence from CalSHPO was emailed on 2/14/24, as of 3/15/24 no response has been received.

Since CalSHPO did not respond within the 30 day time period, the County will proceed with completion of the Environmental Assessment.

Craig Foo — Signature

3/19/24 — Date

Enclosures: (optional)

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Attachment 14. Noise Memorandum

DUDEK
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MEMORANDUM

To:	Kristin Arakawa, Dudek
From:	Mike Greene, Dudek
Subject:	The Orion Apartments HUD EA Noise Assessment
Date:	02/22/2024
cc:	Jonathan Rigg, Dudek
Attachment(s):	Figure 1, Project Location Figure 2, Noise Model Receiver Locations Attachment A; Traffic Noise Model Input/Output Data

This technical noise memo summarizes the results of the noise analysis conducted for onsite uses of The Orion Apartments Project; Orange County Public Works On-Call Master Services Agreement Contract MA-080-21010547 Project in the City of Orange, California.

1 Background

1.1 Project Description

The proposed project would involve the construction of a new apartment community consisting of 166 affordable senior apartment units on the 3.85 gross acre (3.85 net acres) site located at 1800 E. La Veta Avenue in the city of Orange, Ca. The community consists of two 4-story elevator served buildings and one 2-4-story elevator served building with surface parking. The proposed total gross building area is approximately 145,716 SF, including apartments and resident-serving amenity uses, and common area.

The community will be restricted to seniors age 62+ with unit sizes range between 537 square feet (sf) to 700 net sf and include 111 one-bedroom units and 55 two-bedroom units (166 units total). The site is bounded by E. La Veta Avenue to the north, E. Fairway Drive to the south, S. Tustin Street to the west, and multi-family housing to the east.

1.2 Noise Fundamentals and Terminology

Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is measured on a logarithmic scale in decibels (dB) that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed in units of cycles per second or hertz (Hz). The normal frequency range of hearing for most people extends from about 20 to 20,000 Hz. The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter. As noise levels get

louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting called "A" weighting is typically used for quieter noise levels, which de-emphasizes the low-frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the "noise level" and is referenced in units of dBA.

Because sound is measured on a logarithmic scale, a doubling of sound energy results in a 3 dBA increase in the noise level. Changes in a community noise level of less than 3 dB are not typically noticed by the human ear (Caltrans 2013). Changes from 3 to 5 dB may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dB increase is readily noticeable. The human ear perceives a 10 dB increase in sound level as a doubling of the sound level (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear).

An individual's noise exposure occurs over a period of time; however, noise level is a measure of noise at a given instant in time. The equivalent continuous sound level (L_{eq}), also referred to as the average sound level, is a single number representing the fluctuating sound level in A-weighted decibels (dBA) over a specified period of time. It is a sound-energy average of the fluctuating level and is equal to a constant unchanging sound of that dB level. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which constitute a relatively stable background or ambient noise environment.

Noise levels are generally higher during the daytime and early evening when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during nighttime hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. In order to evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed "community noise equivalent level" (CNEL) was developed, The CNEL scale represents a time-weighted 24-hour average noise level based on the A-weighted sound level. CNEL accounts for the increased noise sensitivity during the evening hours (7 p.m. to 10 p.m.) and nighttime hours (10 p.m. to 7 a.m.) by adding 5 dB to the average sound levels occurring during the evening hours and 10 dB to the sound levels occurring during nighttime hours. Additional noise definitions are provided below.

Ambient Noise Level. The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.

A-Weighted Sound Level (dBA). The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter deemphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with community equivalent sound level.

Community Noise Equivalent Level (CNEL). CNEL is the A-weighted equivalent continuous sound exposure level for a 24-hour period with a 10 dB adjustment added to sound levels occurring during the nighttime hours (10 p.m.–7 a.m.) and 5 dB added to the sound during the evening hours (7 p.m.–10 p.m.).

Day Night Average Sound Level (DNL or L_{dn}). Similar to the CNEL noise metric, except that no penalty is added during the evening hours (7 p.m.–10 p.m.). Typically, the CNEL and L_{dn} noise metrics vary by approximately 1 decibel or less and are often considered to be functionally equivalent.

Decibel (dB). The decibel is a unit for measuring sound pressure level and is equal to 10 times the logarithm to the base 10 of the ratio of the measured sound pressure squared to a reference pressure, which is 20 micropascals.

2 Noise Analysis Methodology

2.1 Applicable Noise Standards

Because the proposed project may receive funding from the U.S. Department of Housing and Urban Development (HUD), the noise standards specified by HUD were used for this analysis. HUD's noise standards may be found in 24 CFR Part 51, Subpart B (CFR 2013). Exterior uses with a day night average sound level (DNL) of 65 dBA or less are considered normally acceptable. Sites at which the environmental or community noise exposure exceeds 65 decibels DNL are considered noise-impacted areas. For new construction proposed in high noise areas, grantees shall incorporate noise attenuation features to the extent required by HUD environmental criteria and standards contained in Subpart B (Noise Abatement and Control) of 24 CFR Part 51.

The "Normally Unacceptable" noise zone includes community noise levels from above 65 decibels to 75 decibels. Approvals in this noise zone require a minimum of 5 dB additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 dBA but does not exceed 70 dBA, or a minimum of 10 decibels of additional sound attenuation if the day-night average sound level is greater than 70 dBA but does not exceed 75 dBA.

The interior noise standard is 45 dBA DNL.

2.2 Preliminary Noise Modeling

The primary noise source in the project vicinity is motor vehicle traffic. The eastern façades of the proposed residential units would face the southbound lanes of the SR-55 freeway, while the southern façades face the SR-22 freeway. Both the eastern and the southern facades are separated from these two freeways by several rows of residential homes and an existing noise barrier (i.e., a soundwall) approximately 14 feet in height constructed at the Caltrans right-of-way (ROW). In addition, the northern façades of the proposed residential units face La Veta Avenue and the western facades face South Tustin Street. The other nearby roads are minor "feeder" streets which would have a negligible contribution to the on-site noise environment. The nearest active rail line is located approximately 1.25 miles away and the nearest airport, Santa Ana/John Wayne Airport, is located approximately 6.8 miles away. Based upon the Airport Environs Land Use Plan for John Wayne Airport (AELUP 2008), the airport's 60 dB CNEL noise contour is located approximately 4.7 miles from the project site. Thus, noise from the airport would have a negligible contribution to the on-site noise environment.

An initial noise analysis of traffic noise from the SR-55, the SR-22, La Veta Avenue and South Tustin Street carried out using HUD's DNL Calculator[1] indicated that worst-case exterior building façade noise levels would be approximately 73 dBA DNL. However, because the DNL Calculator does not account for site conditions such as the intervening building rows and the existing freeway soundwall, in addition to the proposed upper-floor residential units, this modeled noise level was determined to likely be an overestimate and a more detailed traffic noise model was used.

2.3 Detailed Noise Modeling

The proposed project site has several receiver locations of interest including multiple building exposures (i.e., rooms with exterior windows and doors facing north, south, east and west each four (4) stories high, with varying traffic noise exposures. Common use outdoor amenities areas are proposed as part of this projectat varying locations throughout the project site, each with differing exposures to the nearby major roadways. Because of these factors, it was determined that the Federal Highway Administration's (FHWA) Traffic Noise Model (TNM) version 2.5 (FHWA 2004) would be ideal for a more detailed analysis. The TNM traffic noise prediction model calculates the noise levels based on specific information including traffic volumes, vehicle fleet mix, speed limits, roadway geometrics, receiver elevations, intervening structures and lateral distances between the noise receivers and the roadways.

Project site, surrounding structures and roadway geometry were input using aerial photography information upon which the project's site plan was overlain; this was subsequently digitized into the TNM model.

Modeled receiver locations (shown in Figure 2) consisted of the following:

- Proposed building façade exteriors with windows and doors perpendicular to and facing SR-55, SR-22, La Veta Avenue and Tustin Street

- Outdoor amenity areas (specifically the central courtyard; the community garden near the southwest corner of the project site; the entertainment courtyard along the east side of Building 3; and the onsite dog park.

In order to accurately estimate the project site's noise levels in terms of the 24-hour weighted DNL noise metric, the TNM model was run for three 1-hour traffic volume cases: AM/PM peak-hour (assumed to be approximately 10% of the roadways' Average Daily Traffic (ADT); off-peak daytime (assumed to be approximately 6% of ADT), and nighttime volumes (assumed to be approximately 15 % of ADT over the 9-hour period from 10 PM to 7 AM, per HUD noise modeling guidance) The 15% of ADT was then divided by 9, to arrive at the hourly average level suitable for input into TNM. The resultant traffic noise levels for each of these cases was then averaged in the energy (i.e., the logarithmic) domain after applying the 10-decibel noise "penalty" to the nighttime noise levels.

ADT volumes and truck mix percentages used for the analysis for the freeways were from the Caltrans Traffic Operations Census Website (Caltrans 2024). The most recent traffic volume forecast available (Year 2021) was used as the basis to estimate future traffic volumes (10 years out from the Year 2025, the assumed year of occupancy). This was accomplished using an assumed increase rate of 1% per year. Thus,

[1] https://www.hudexchange.info/programs/environmental-review/dnl-calculator/

for example, the Year 2021 forecast average daily traffic volume of 215,000 for the relevant segment of SR-55 was calculated to be 247137 by Year 2035. The modeled ADTs are shown in Table 1 below. Modeled traffic speeds were used based upon the posted roadway speed limits using Google Earth Street View.

Table 1 – Modeled Traffic Volumes

Modeled Roadway	Average Daily Traffic (ADT) Volume (Year 2035)
SR-55	247,137
SR-22	160,926
South Tustin Street	29,297
La Veta Avenue	10,141

Source: Caltrans (SR-55 and SR-22) and OCTA volumes, adjusted to Year 2035.

3 Traffic Noise Analysis Results

The results of the traffic noise analysis for the modeled on-site receivers (shown in Figure 2) are summarized in Table 2. The modeled input and output data are provided in Attachment A. As shown in Table 2, the highest noise levels would occur at receivers M6 and M7, which is representative of the habitable rooms in Building 3 facing west, and closest to the SR-22 freeway and South Tustin Street. At receivers M6 and M7, the traffic noise levels at the building façade are predicted to range from 70 to 71 dBA DNL. Thus, the exposure from traffic noise would exceed the HUD exterior noise standard of 65 dBA DNL by up to 6 dB at the façade of units nearest these roadways, putting these receivers in the "normally unacceptable" noise range. The noise levels at the other modeled building facade receivers (except for M10) would also exceed the HUD exterior noise standard of 65 dBA DNL to varying degrees. At the modeled outdoor use areas (M11 through M14), the modeled traffic noise levels would not exceed the HUD exterior noise standard of 65 dBA DNL.

Table 2 – Traffic Noise Level Results Summary (DNL (dBA))

Receiver #	1st-Floor	2nd-Floor	3rd-Floor	4th-Floor
M1 - Building 1, northeast corner	65	**67**	**67**	**68**
M2 - Building 1, southeast corner	60	64	**66**	**67**
M3 - Building 2, eastern façade	60	65	**67**	**68**
M4 - Building 2, southeast corner	61	**66**	**67**	**68**
M5 - Building 3, southeast corner	63	65	**66**	**67**
M6 - Building 3, southwest corner	**70**	**71**	**70**	**70**

M7 - Building 3, northwest corner	**71**	**70**	**70**	**70**
M8 - Building 3, northern corner	**66**	**67**	**67**	**66**
M9 - Building 2, northeast corner	60	64	65	**67**
M10 - Building 1, northern façade	64	65	64	65
M11 - Central courtyard	60	n/a	n/a	n/a
M12 - Community garden	61	n/a	n/a	n/a
M13 - Entertainment courtyard	59	n/a	n/a	n/a
M14 - Dog park	65	n/a	n/a	n/a

Source: Attachment A.

Note: **Bolded** numbers indicate that the noise levels exceed the HUD noise standard of 65 dBA DNL.

As detailed in Section 2.1, 24 CFR Part 51, Subpart B states that sites at which environmental or community noise exposure exceeds the day night average sound level (DNL) of 65 dBA are considered to be noise-impacted. For new construction proposed in high noise areas, grantees shall incorporate noise attenuation features to the extent required. Approvals in the "normally unacceptable" noise zone require a minimum of 5 dB additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 dBA but does not exceed 70 dBA, or a minimum of 10 decibels of additional sound attenuation if the day-night average sound level is greater than 70 dBA but does not exceed 75 dBA.

Typical new construction of multi-family homes with windows closed provides a minimum of 25 dB exterior to interior noise reduction. All residential units will be equipped with a forced air heating ventilation air conditioning (HVAC) unit that allows for a "windows closed" condition (i.e., windows do not need to be left open for ventilation). As such, the interiors of the proposed habitable rooms with doors or windows facing west, toward South Tustin Street and SR-22 are anticipated to have noise levels of approximately 46 dBA DNL (i.e. 71 dBA exterior – 25 dBA attenuation = 46 dBA interior). The interiors of the other modeled receivers are anticipated to have noise levels of 43 dBA DNL (i.e. 68 dBA exterior – 25 dBA attenuation = 43 dBA interior) or less. Nonetheless, in order to ensure compliance with 24 CFR Part 51, Subpart B and that the HUD noise standard of 45 dBA DNL is not exceeded, the detailed architectural design plans (when these are prepared) shall provide the following specification for upgraded windows:

- All windows and exterior doors in the east-facing residential units on floors 2-4 of Building 1 shall have a Sound Transmission Class (STC) rating of 30 or greater.
- All windows and exterior doors in the south- and east-facing residential units on floors 2-4 of Building 2 shall have a Sound Transmission Class (STC) rating of 30 or greater.
- All windows and exterior doors in the west-facing residential units on floors 1-4 of Building 3 shall have a Sound Transmission Class (STC) rating of 35 or greater.
- All windows and exterior doors in the north- and south-facing residential units on floors 1-4 of Building 3 shall have a Sound Transmission Class (STC) rating of 30 or greater.

Please see Table 3. With implementation of this requirement the proposed project would not exceed the HUD interior noise standard of 45 dBA DNL and would be within the "normally acceptable" noise range for

interior noise. Additionally, as shown in Table 2, the outdoor amenity areas (as represented by receivers M11 – M14) would not exceed the permitted exterior noise standard of 65 dBA DNL, and thus would be in the "normally acceptable" category as proposed.

Table 3. Interior Noise Levels (DNL (dBA))

Receivers / Location	Maximum Noise Level at Façade[1]	Required Interior Noise Reduction[2]	Minimum Anticipated Interior Noise Reduction[3]	Upgraded Windows?[4]	Interior Noise Level[5]	Exceedance of Interior Noise Standard?
M1 (Building 1), floors 2 - 4	68	23	29	Yes	39	No
M2 (Building 1), floors 3 - 4	67	22	29	Yes	38	No
M3 and M4 (Building 2), floors 3 - 4	68	23	29	Yes	39	No
M5 (Building 3), floors 2 - 4	67	22	29	Yes	38	No
M6 and M7 (Building 3), floors 1 - 4	71	26	34	Yes	37	No
M8 and M9 (Building 3), floors 2 - 4	67	22	29	Yes	38	No

1 - Estimated exterior noise level at the building façade based upon Table 2.
2 - Noise reduction required to satisfy the interior noise standards.
3 - Minimum interior noise reduction with windows closed and upgraded windows at indicated locations, standard windows elsewhere.
4 - Does the required interior noise reduction trigger upgraded windows based on a standard reduction of 25 dBA?
5 - Estimated noise level based upon minimum anticipated noise reduction.

References

AELUP (Airport Environmental Land Use Plan). 2008. Airport Environs Land Use Plan for John Wayne Airport. Amended April 2008

Caltrans (California Department of Transportation). 2013. Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. September 2013

Caltrans. 2024. Caltrans Traffic Census Program webpage. Accessed 2/16/2024. https://dot.ca.gov/programs/traffic-operations/census

CFR (United States Code of Federal Regulations). 2013. Title 24, Volume 1, Title 51 Subpart B. Accessed 4/22/21: https://www.govinfo.gov/content/pkg/CFR-2013-title24-vol1/pdf/CFR-2013-title24-vol1-part51-subpartB.pdf

Federal Highway Administration (FHWA). 2004. FHWA Traffic Noise Model, Version 2.5. Office of Environment and Planning. Washington, DC. February 2004.

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Attachment A

Noise Model Input/Output Data

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the **Day/Night Noise Level Calculator Electronic Assessment Tool Overview (/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/)**.

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	The Orion HUD Project - Rcvr at SE Corner
Record Date	02/14/2024
User's Name	Mike Greene

Road # 1 Name:	**SR22 Freeway**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	450	450	450
Distance to Stop Sign			
Average Speed	65	65	60
Average Daily Trips (ADT)	157172	3088	2275
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	67	60	64

Vehicle DNL			
Calculate Road #1 DNL	69	Reset	

Road # 2 Name:	**SR55 Freeway**

Road #2

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	870	870	870
Distance to Stop Sign			
Average Speed	65	65	60
Average Daily Trips (ADT)	234881	8736	5991
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	64	60	64
Calculate Road #2 DNL	68	Reset	

Road # 3 Name:	**South Tustin Ave**

Road #3

Vehicle Type	Cars ☑	Medium Trucks ☑	Heavy Trucks ☑
Effective Distance	560	560	560
Distance to Stop Sign			
Average Speed	40	40	35
Average Daily Trips (ADT)	28990	598	299
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	54	47	52
Calculate Road #3 DNL	57	Reset	

Road # 4 Name: **La Veta Ave**

Road #4

Vehicle Type	Cars ☑	Medium Trucks ☑	Heavy Trucks ☑
Effective Distance	370	370	370
Distance to Stop Sign			
Average Speed	40	40	35

Average Speed			
Average Daily Trips (ADT)	10035	207	103
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	52	45	50
Calculate Road #4 DNL	55	Reset	

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	○Yes ○No
Combined DNL for all Road and Rail sources	**72**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate | Reset

Calculate Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
  - Incorporate natural or man-made barriers. See ***The Noise Guidebook (/resource/313/hud-noise-guidebook/)***
  - Construct noise barrier. See the **Barrier Performance Module (/programs/environmental-review/bpm-calculator/)**

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the **Day/Night Noise Level Calculator Electronic Assessment Tool Overview (/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/)**.

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	The Orion HUD Project - Rcvr at SW Corner
Record Date	02/14/2024
User's Name	Mike Greene

Road # 1 Name:	**SR22 Freeway**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	500	500	500
Distance to Stop Sign			
Average Speed	65	65	60
Average Daily Trips (ADT)	157172	3088	2275
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	66	59	63

Vehicle DNL			
Calculate Road #1 DNL	68	Reset	

Road # 2 Name:	**SR55 Freeway**

Road #2

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	1370	1370	1370
Distance to Stop Sign			
Average Speed	65	65	60
Average Daily Trips (ADT)	234881	8736	5991
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	61	57	61
Calculate Road #2 DNL	65	Reset	

Road # 3 Name:	**South Tustin Ave**

Road #3

Vehicle Type	Cars ☑	Medium Trucks ☑	Heavy Trucks ☑
Effective Distance	65	65	65
Distance to Stop Sign			
Average Speed	40	40	35
Average Daily Trips (ADT)	28990	598	299
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	68	61	66
Calculate Road #3 DNL	71	Reset	

Road # 4 Name: **La Veta Ave**

Road #4

Vehicle Type	Cars ☑	Medium Trucks ☑	Heavy Trucks ☑
Effective Distance	280	280	280
Distance to Stop Sign			
Average Speed	40	40	35

Average Daily Trips (ADT)	10035	207	103
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	54	47	52
Calculate Road #4 DNL	56	Reset	

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	○Yes ○No
Combined DNL for all Road and Rail sources	**73**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate | Reset

Calculate Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
  - Incorporate natural or man-made barriers. See ***The Noise Guidebook (/resource/313/hud-noise-guidebook/)***
  - Construct noise barrier. See the **Barrier Performance Module (/programs/environmental-review/bpm-calculator/)**

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

Dudek					**20 February 2024**							
M Greene					**TNM 2.5**							
INPUT: ROADWAYS								**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**13230**							**a State highway agency substantiates the use**				
RUN:	**Orion HUD Project - Fut with Project Pk-Hr**							**of a different type with the approval of FHWA**				
Roadway		**Points**										
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**				**Flow Control**			**Segment**	
				X	**Y**	**Z**		**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft			mph	%		
La Veta Ave	55.0	point1	1	2,346.0	2,236.2	255.00					Average	
		point3	3	2,111.6	2,250.2	254.00					Average	
		point4	4	1,980.3	2,248.1	250.00					Average	
		point5	5	1,837.0	2,234.5	245.00					Average	
		point6	6	1,703.0	2,209.9	240.00					Average	
		point7	7	1,526.6	2,166.1	230.00					Average	
		point8	8	1,350.3	2,098.9	222.00					Average	
		point9	9	1,211.2	2,036.3	222.00					Average	
		point10	10	990.8	1,929.5	222.00					Average	
		point11	11	829.8	1,856.0	221.00					Average	
		point12	12	705.9	1,810.0	220.00						
SR55NB	80.0	point51	51	2,144.8	748.2	216.00					Average	
		point20	20	2,141.8	1,364.8	222.00					Average	
		point21	21	2,127.9	2,095.2	227.00					Average	
		point57	57	2,129.6	2,234.9	229.00						
SR22 WB - 1	35.0	point52	52	1,992.9	2,195.8	226.00					Average	
		point24	24	1,985.9	1,970.1	225.00					Average	
		point25	25	1,938.6	1,771.5	220.00					Average	
		point26	26	1,878.3	1,634.2	217.00					Average	
		point27	27	1,786.4	1,502.9	212.00					Average	
		point28	28	1,680.2	1,389.8	205.00					Average	
		point29	29	1,528.1	1,287.7	200.00					Average	
		point30	30	1,333.9	1,214.2	195.00					Average	
		point31	31	767.4	1,043.4	191.00					Average	
		point32	32	731.6	1,030.8	190.00						

S Tustin Avenue	85.0	point53	53	674.9	960.9	213.00				Average	
		point14	14	672.8	1,004.7	215.00				Average	
		point15	15	674.2	1,297.0	218.00				Average	
		point16	16	678.4	1,610.8	220.00				Average	
		point17	17	688.9	1,815.5	224.00				Average	
		point18	18	671.4	2,672.9	220.00					
SR22 EB - 2	35.0	point54	54	414.8	907.2	0.00				Average	
		point2	2	632.1	971.1	0.00					
SR22 EB - 1	35.0	point55	55	731.6	1,005.8	189.00				Average	
		point34	34	776.2	1,020.3	190.00				Average	
		point35	35	1,225.4	1,136.2	190.00				Average	
		point36	36	1,335.6	1,149.3	190.00				Average	
		point37	37	1,457.2	1,156.3	190.00				Average	
		point38	38	1,604.2	1,135.3	190.00				Average	
		point39	39	1,805.4	1,056.6	190.00				Average	
		point40	40	1,946.3	956.8	190.00				Average	
		point41	41	2,019.8	858.0	190.00					
SR22 WB - 2	35.0	point56	56	630.0	997.5	192.00				Average	
		point43	43	406.5	933.0	192.00					
SR55-2NB	80.0	point59	59	2,130.8	2,298.5	230.00				Average	
		point58	58	2,133.3	2,573.6	234.00				Average	
		point22	22	2,135.2	2,806.9	236.00					
SR55SB	80.0	point62	62	2,058.4	748.2	216.00				Average	
		point63	63	2,052.8	1,364.8	222.00				Average	
		point64	64	2,038.9	2,095.2	227.00				Average	
		point65	65	2,043.1	2,234.9	229.00					
SR55-2SB	80.0	point66	66	2,039.3	2,295.3	230.00				Average	
		point67	67	2,041.8	2,570.4	234.00				Average	
		point68	68	2,043.7	2,803.7	236.00					

Dudek **20 February 2024**
M Greene **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut with Project Pk-Hr

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
La Veta Ave	point1	1	984	40	20	40	10	35	0	0	0	0
	point3	3	984	40	20	40	10	35	0	0	0	0
	point4	4	984	40	20	40	10	35	0	0	0	0
	point5	5	984	40	20	40	10	35	0	0	0	0
	point6	6	984	40	20	40	10	35	0	0	0	0
	point7	7	984	40	20	40	10	35	0	0	0	0
	point8	8	984	40	20	40	10	35	0	0	0	0
	point9	9	984	40	20	40	10	35	0	0	0	0
	point10	10	984	40	20	40	10	35	0	0	0	0
	point11	11	984	40	20	40	10	35	0	0	0	0
	point12	12										
SR55NB	point51	51	11628	65	432	65	297	60	0	0	0	0
	point20	20	11628	65	432	65	297	60	0	0	0	0
	point21	21	11628	65	432	65	297	60	0	0	0	0
	point57	57										
SR22 WB - 1	point52	52	7781	65	153	65	113	60	0	0	0	0
	point24	24	7781	65	153	65	113	60	0	0	0	0
	point25	25	7781	65	153	65	113	60	0	0	0	0
	point26	26	7781	65	153	65	113	60	0	0	0	0
	point27	27	7781	65	153	65	113	60	0	0	0	0
	point28	28	7781	65	153	65	113	60	0	0	0	0
	point29	29	7781	65	153	65	113	60	0	0	0	0
	point30	30	7781	65	153	65	113	60	0	0	0	0

	point31	31	7781	65	153	65	113	60	0	0	0	0
	point32	32										
S Tustin Avenue	point53	53	2842	40	59	40	29	35	0	0	0	0
	point14	14	2842	40	59	40	29	35	0	0	0	0
	point15	15	2842	40	59	40	29	35	0	0	0	0
	point16	16	2842	40	59	40	29	35	0	0	0	0
	point17	17	2842	40	59	40	29	35	0	0	0	0
	point18	18										
SR22 EB - 2	point54	54	7781	65	153	65	113	60	0	0	0	0
	point2	2										
SR22 EB - 1	point55	55	7781	65	153	65	113	60	0	0	0	0
	point34	34	7781	65	153	65	113	60	0	0	0	0
	point35	35	7781	65	153	65	113	60	0	0	0	0
	point36	36	7781	65	153	65	113	60	0	0	0	0
	point37	37	7781	65	153	65	113	60	0	0	0	0
	point38	38	7781	65	153	65	113	60	0	0	0	0
	point39	39	7781	65	153	65	113	60	0	0	0	0
	point40	40	7781	65	153	65	113	60	0	0	0	0
	point41	41										
SR22 WB - 2	point56	56	7781	65	153	65	113	60	0	0	0	0
	point43	43										
SR55-2NB	point59	59	11628	65	432	65	297	60	0	0	0	0
	point58	58	11628	65	432	65	297	60	0	0	0	0
	point22	22										
SR55SB	point62	62	11628	65	432	65	297	60	0	0	0	0
	point63	0	11628	65	432	65	297	60	0	0	0	0
	point64	64	11628	65	432	65	297	60	0	0	0	0
	point65	65										
SR55-2SB	point66	66	11628	65	432	65	297	60	0	0	0	0
	point67	67	11628	65	432	65	297	60	0	0	0	0
	point68	68										

Dudek
M Greene

20 February 2024
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut with Project Pk-Hr

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1-1	1	1	1,267.7	1,981.3	220.00	5.00	0.00	66	10.0	8.0	
M2-1	2	1	1,273.4	1,850.1	220.00	5.00	0.00	66	10.0	8.0	
M3-1	3	1	1,230.3	1,669.0	220.00	5.00	0.00	66	10.0	8.0	
M4-1	4	1	1,212.9	1,614.5	220.00	5.00	0.00	66	10.0	8.0	
M5-1	5	1	853.7	1,515.0	220.00	5.00	0.00	66	10.0	8.0	
M6-1	6	1	742.4	1,514.7	220.00	5.00	0.00	66	10.0	8.0	
M7-1	7	1	732.9	1,658.0	220.00	5.00	0.00	66	10.0	8.0	
M8-1	8	1	767.4	1,671.8	220.00	5.00	0.00	66	10.0	8.0	
M9-1	9	1	1,168.3	1,725.5	220.00	5.00	0.00	66	10.0	8.0	
M10-1	10	1	1,157.2	1,921.1	220.00	5.00	0.00	66	10.0	8.0	
M1-2	12	1	1,267.7	1,981.3	220.00	15.00	0.00	66	10.0	8.0	
M2-2	13	1	1,273.4	1,850.1	220.00	15.00	0.00	66	10.0	8.0	
M3-2	14	1	1,230.3	1,669.0	220.00	15.00	0.00	66	10.0	8.0	
M4-2	15	1	1,212.9	1,614.5	220.00	15.00	0.00	66	10.0	8.0	
M5-2	16	1	853.7	1,515.0	220.00	15.00	0.00	66	10.0	8.0	
M6-2	17	1	742.4	1,514.7	220.00	15.00	0.00	66	10.0	8.0	
M7-2	18	1	732.9	1,658.0	220.00	15.00	0.00	66	10.0	8.0	
M8-2	19	1	767.4	1,671.8	220.00	15.00	0.00	66	10.0	8.0	
M9-2	20	1	1,168.3	1,725.5	220.00	15.00	0.00	66	10.0	8.0	
M10-2	21	1	1,157.2	1,921.1	220.00	15.00	0.00	66	10.0	8.0	
M1-3	22	1	1,267.7	1,981.3	220.00	25.00	0.00	66	10.0	8.0	
M2-3	24	1	1,273.4	1,850.1	220.00	25.00	0.00	66	10.0	8.0	

M3-3	25	1	1,230.3	1,669.0	220.00	25.00	0.00	66	10.0	8.0	
M4-3	26	1	1,212.9	1,614.5	220.00	25.00	0.00	66	10.0	8.0	
M5-3	27	1	853.7	1,515.0	220.00	25.00	0.00	66	10.0	8.0	
M6-3	28	1	742.4	1,514.7	220.00	25.00	0.00	66	10.0	8.0	
M7-3	29	1	732.9	1,658.0	220.00	25.00	0.00	66	10.0	8.0	
M8-3	30	1	767.4	1,671.8	220.00	25.00	0.00	66	10.0	8.0	
M9-3	31	1	1,168.3	1,725.5	220.00	25.00	0.00	66	10.0	8.0	
M10-3	32	1	1,157.2	1,921.1	220.00	25.00	0.00	66	10.0	8.0	
M1-4	33	1	1,267.7	1,981.3	220.00	35.00	0.00	66	10.0	8.0	
M2-4	34	1	1,273.4	1,850.1	220.00	35.00	0.00	66	10.0	8.0	
M3-4	35	1	1,230.3	1,669.0	220.00	35.00	0.00	66	10.0	8.0	
M4-4	36	1	1,212.9	1,614.5	220.00	35.00	0.00	66	10.0	8.0	
M5-4	38	1	853.7	1,515.0	220.00	35.00	0.00	66	10.0	8.0	
M6-4	39	1	742.4	1,514.7	220.00	35.00	0.00	66	10.0	8.0	
M7-4	41	1	732.9	1,658.0	220.00	35.00	0.00	66	10.0	8.0	
M8-4	42	1	767.4	1,671.8	220.00	35.00	0.00	66	10.0	8.0	
M9-4	43	1	1,168.3	1,725.5	220.00	35.00	0.00	66	10.0	8.0	
M10-4	44	1	1,157.2	1,921.1	220.00	35.00	0.00	66	10.0	8.0	
M11	46	1	1,154.7	1,818.0	220.00	5.00	0.00	66	10.0	8.0	
M12	47	1	1,212.5	1,592.0	220.00	5.00	0.00	66	10.0	8.0	
M13	48	1	811.2	1,603.0	220.00	5.00	0.00	66	10.0	8.0	
M14	49	1	876.3	1,743.0	220.00	5.00	0.00	66	10.0	8.0	Y

Dudek
M Greene

20 February 2024
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut with Project Pk-Hr

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Terrain Line - top of slope wall	W	0.00	99.99	0.00				0.00	point1	1	730.5	1,101.0	211.00	14.00	0.00	0	0		
									point3	3	1,080.4	1,209.3	212.00	14.00	0.00	0	0		
									point4	4	1,386.0	1,311.4	212.00	14.00	0.00	0	0		
									point5	5	1,533.2	1,361.4	213.00	14.00	0.00	0	0		
									point6	6	1,648.9	1,424.2	215.00	14.00	0.00	0	0		
									point7	7	1,787.8	1,552.0	218.00	14.00	0.00	0	0		
									point8	8	1,877.5	1,695.5	220.00	14.00	0.00	0	0		
									point9	9	1,925.6	1,804.8	220.00	14.00					
Barrier1-2-2-2	W	0.00	99.99	0.00				0.00	point47	47	1,104.9	1,644.5	220.00	45.00	0.00	0	0		
									point27	27	1,135.1	1,644.5	220.00	45.00	0.00	0	0		
									point28	28	1,135.5	1,618.6	220.00	45.00	0.00	0	0		
									point29	29	1,214.7	1,618.2	220.00	45.00	0.00	0	0		
									point30	30	1,215.1	1,632.7	220.00	45.00	0.00	0	0		
									point31	31	1,228.7	1,632.2	220.00	45.00	0.00	0	0		
									point32	32	1,226.5	1,679.9	220.00	45.00					
Barrier1-2-2	W	0.00	99.99	0.00				0.00	point48	48	737.9	1,669.7	220.00	45.00	0.00	0	0		
									point20	20	797.4	1,669.1	220.00	45.00	0.00	0	0		
									point21	21	795.8	1,570.5	220.00	45.00	0.00	0	0		
									point22	22	854.7	1,570.5	220.00	45.00	0.00	0	0		
									point23	23	854.7	1,515.9	220.00	45.00	0.00	0	0		
									point24	24	743.9	1,516.4	220.00	45.00	0.00	0	0		
									point25	25	735.7	1,666.9	220.00	45.00					
Barrier1-2-2-2-2-2	W	0.00	99.99	0.00				0.00	point50	50	1,266.2	1,979.3	220.00	45.00	0.00	0	0		
									point34	34	1,269.7	1,848.0	220.00	45.00	0.00	0	0		
									point35	35	1,102.6	1,855.0	220.00	45.00	0.00	0	0		
									point36	36	1,099.1	1,914.5	220.00	45.00					
Barrier12	W	0.00	99.99	0.00				0.00	point52	52	1,925.6	1,804.8	220.00	14.00	0.00	0	0		
									point53	53	1,965.4	1,970.1	225.00	14.00	0.00	0	0		
									point54	54	1,971.1	2,211.0	226.00	14.00					
Barrier13	W	0.00	99.99	0.00				0.00	point55	55	1,998.1	2,726.9	254.00	10.00	0.00	0	0		
									point56	56	1,998.2	2,295.6	250.00	10.00	0.00	0	0		
									point57	57	1,854.9	2,282.0	245.00	10.00	0.00	0	0		
									point58	58	1,720.9	2,257.4	240.00	10.00	0.00	0	0		
									point59	59	1,544.5	2,213.6	230.00	10.00	0.00	0	0		
									point60	60	1,368.2	2,146.4	222.00	10.00					

Barrier14	W	0.00	99.99	0.00				0.00	point61	61	1,373.3	2,052.9	222.00	0.00	0.00	0	0		
									point62	62	1,234.2	1,990.3	222.00	0.00	0.00	0	0		
									point63	63	1,013.8	1,883.5	222.00	0.00	0.00	0	0		
									point64	64	852.8	1,810.0	221.00	0.00	0.00	0	0		
									point65	65	728.9	1,764.0	220.00	0.00	0.00	0	0		
									point66	66	728.7	1,587.9	220.00	0.00					
Barrier15	W	0.00	99.99	0.00				0.00	point67	67	602.2	1,085.9	211.00	14.00	0.00	0	0		
									point68	68	383.8	997.8	211.00	14.00					

Dudek 20 February 2024
M Greene TNM 2.5

INPUT: BUILDING ROWS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut with P

Building Row Name	Average Height ft	Building Percent %	Points No.	Coordinates (ground) X ft	Y ft	Z ft
Building2	12.00	80	1	1,341.8	1,549.7	220.00
			2	1,368.3	1,561.9	220.00
			3	1,500.6	1,622.6	220.00
			4	1,635.1	1,763.6	220.00
			5	1,705.6	1,901.4	220.00
			6	1,729.9	2,066.7	220.00
Building4	12.00	80	9	731.5	1,300.3	220.00
			10	876.0	1,297.6	220.00
			11	898.2	1,379.5	220.00
			12	1,185.7	1,393.4	220.00
			13	1,462.0	1,443.4	220.00
			14	1,667.6	1,567.0	220.00
			15	1,781.4	1,723.9	220.00
			16	1,860.6	1,890.6	220.00
			17	1,877.2	2,090.5	220.00
Building5	12.00	80	18	598.4	1,718.1	220.00
			19	598.4	1,093.6	220.00

Dudek
M Greene

20 February 2024
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut with Project Pk-Hr
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1-1	1	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
M2-1	2	1	0.0	60.1	66	60.1	10	----	60.1	0.0	8	-8.0
M3-1	3	1	0.0	59.9	66	59.9	10	----	59.9	0.0	8	-8.0
M4-1	4	1	0.0	60.6	66	60.6	10	----	60.6	0.0	8	-8.0
M5-1	5	1	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0
M6-1	6	1	0.0	69.6	66	69.6	10	Snd Lvl	69.6	0.0	8	-8.0
M7-1	7	1	0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
M8-1	8	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
M9-1	9	1	0.0	59.9	66	59.9	10	----	59.9	0.0	8	-8.0
M10-1	10	1	0.0	63.6	66	63.6	10	----	63.6	0.0	8	-8.0
M1-2	12	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
M2-2	13	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
M3-2	14	1	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
M4-2	15	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
M5-2	16	1	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0
M6-2	17	1	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0
M7-2	18	1	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
M8-2	19	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
M9-2	20	1	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0
M10-2	21	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
M1-3	22	1	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8	-8.0
M2-3	24	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
M3-3	25	1	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
M4-3	26	1	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8	-8.0

M5-3	27	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
M6-3	28	1	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
M7-3	29	1	0.0	69.9	66	69.9	10	Snd Lvl	69.9	0.0	8	-8.0
M8-3	30	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
M9-3	31	1	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0
M10-3	32	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
M1-4	33	1	0.0	68.1	66	68.1	10	Snd Lvl	68.1	0.0	8	-8.0
M2-4	34	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
M3-4	35	1	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0
M4-4	36	1	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0
M5-4	38	1	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
M6-4	39	1	0.0	70.0	66	70.0	10	Snd Lvl	70.0	0.0	8	-8.0
M7-4	41	1	0.0	69.7	66	69.7	10	Snd Lvl	69.7	0.0	8	-8.0
M8-4	42	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
M9-4	43	1	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
M10-4	44	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
M11	46	1	0.0	59.9	66	59.9	10	----	59.9	0.0	8	-8.0
M12	47	1	0.0	61.0	66	61.0	10	----	61.0	0.0	8	-8.0
M13	48	1	0.0	58.5	66	58.5	10	----	58.5	0.0	8	-8.0
M14	49	1	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	44	0.0	0.0	0.0
All Impacted	22	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek					**20 February 2024**							
M Greene					**TNM 2.5**							
INPUT: ROADWAYS								**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**13230**							**a State highway agency substantiates the use**				
RUN:	**Orion HUD Project - Fut with Proj Off-Pk**							**of a different type with the approval of FHWA**				
Roadway		**Points**										
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**				**Flow Control**			**Segment**	
				X	**Y**	**Z**		**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft			mph	%		
La Veta Ave	55.0	point1	1	2,346.0	2,236.2	255.00					Average	
		point3	3	2,111.6	2,250.2	254.00					Average	
		point4	4	1,980.3	2,248.1	250.00					Average	
		point5	5	1,837.0	2,234.5	245.00					Average	
		point6	6	1,703.0	2,209.9	240.00					Average	
		point7	7	1,526.6	2,166.1	230.00					Average	
		point8	8	1,350.3	2,098.9	222.00					Average	
		point9	9	1,211.2	2,036.3	222.00					Average	
		point10	10	990.8	1,929.5	222.00					Average	
		point11	11	829.8	1,856.0	221.00					Average	
		point12	12	705.9	1,810.0	220.00						
SR55NB	80.0	point51	51	2,144.8	748.2	216.00					Average	
		point20	20	2,141.8	1,364.8	222.00					Average	
		point21	21	2,127.9	2,095.2	227.00					Average	
		point57	57	2,129.6	2,234.9	229.00						
SR22 WB - 1	35.0	point52	52	1,992.9	2,195.8	226.00					Average	
		point24	24	1,985.9	1,970.1	225.00					Average	
		point25	25	1,938.6	1,771.5	220.00					Average	
		point26	26	1,878.3	1,634.2	217.00					Average	
		point27	27	1,786.4	1,502.9	212.00					Average	
		point28	28	1,680.2	1,389.8	205.00					Average	
		point29	29	1,528.1	1,287.7	200.00					Average	
		point30	30	1,333.9	1,214.2	195.00					Average	
		point31	31	767.4	1,043.4	191.00					Average	
		point32	32	731.6	1,030.8	190.00						

S Tustin Avenue	85.0	point53	53	674.9	960.9	213.00				Average	
		point14	14	672.8	1,004.7	215.00				Average	
		point15	15	674.2	1,297.0	218.00				Average	
		point16	16	678.4	1,610.8	220.00				Average	
		point17	17	688.9	1,815.5	224.00				Average	
		point18	18	671.4	2,672.9	220.00					
SR22 EB - 2	35.0	point54	54	414.8	907.2	0.00				Average	
		point2	2	632.1	971.1	0.00					
SR22 EB - 1	35.0	point55	55	731.6	1,005.8	189.00				Average	
		point34	34	776.2	1,020.3	190.00				Average	
		point35	35	1,225.4	1,136.2	190.00				Average	
		point36	36	1,335.6	1,149.3	190.00				Average	
		point37	37	1,457.2	1,156.3	190.00				Average	
		point38	38	1,604.2	1,135.3	190.00				Average	
		point39	39	1,805.4	1,056.6	190.00				Average	
		point40	40	1,946.3	956.8	190.00				Average	
		point41	41	2,019.8	858.0	190.00					
SR22 WB - 2	35.0	point56	56	630.0	997.5	192.00				Average	
		point43	43	406.5	933.0	192.00					
SR55-2NB	80.0	point59	59	2,130.8	2,298.5	230.00				Average	
		point58	58	2,133.3	2,573.6	234.00				Average	
		point22	22	2,135.2	2,806.9	236.00					
SR55SB	80.0	point62	62	2,058.4	748.2	216.00				Average	
		point63	63	2,052.8	1,364.8	222.00				Average	
		point64	64	2,038.9	2,095.2	227.00				Average	
		point65	65	2,043.1	2,234.9	229.00					
SR55-2SB	80.0	point66	66	2,039.3	2,295.3	230.00				Average	
		point67	67	2,041.8	2,570.4	234.00				Average	
		point68	68	2,043.7	2,803.7	236.00					

Dudek **20 February 2024**
M Greene **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut with Proj Off-Pk

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
La Veta Ave	point1	1	590	40	12	40	6	35	0	0	0	0
	point3	3	590	40	12	40	6	35	0	0	0	0
	point4	4	590	40	12	40	6	35	0	0	0	0
	point5	5	590	40	12	40	6	35	0	0	0	0
	point6	6	590	40	12	40	6	35	0	0	0	0
	point7	7	590	40	12	40	6	35	0	0	0	0
	point8	8	590	40	12	40	6	35	0	0	0	0
	point9	9	590	40	12	40	6	35	0	0	0	0
	point10	10	590	40	12	40	6	35	0	0	0	0
	point11	11	590	40	12	40	6	35	0	0	0	0
	point12	12										
SR55NB	point51	51	6977	65	259	65	178	60	0	0	0	0
	point20	20	6977	65	259	65	178	60	0	0	0	0
	point21	21	6977	65	259	65	178	60	0	0	0	0
	point57	57										
SR22 WB - 1	point52	52	4668	65	92	65	68	60	0	0	0	0
	point24	24	4668	65	92	65	68	60	0	0	0	0
	point25	25	4668	65	92	65	68	60	0	0	0	0
	point26	26	4668	65	92	65	68	60	0	0	0	0
	point27	27	4668	65	92	65	68	60	0	0	0	0
	point28	28	4668	65	92	65	68	60	0	0	0	0
	point29	29	4668	65	92	65	68	60	0	0	0	0
	point30	30	4668	65	92	65	68	60	0	0	0	0

	point31	31	4668	65	92	65	68	60	0	0	0	0
	point32	32										
S Tustin Avenue	point53	53	1705	40	35	40	18	35	0	0	0	0
	point14	14	1705	40	35	40	18	35	0	0	0	0
	point15	15	1705	40	35	40	18	35	0	0	0	0
	point16	16	1705	40	35	40	18	35	0	0	0	0
	point17	17	1705	40	35	40	18	35	0	0	0	0
	point18	18										
SR22 EB - 2	point54	54	4668	65	92	65	68	60	0	0	0	0
	point2	2										
SR22 EB - 1	point55	55	4668	65	92	65	68	60	0	0	0	0
	point34	34	4668	65	92	65	68	60	0	0	0	0
	point35	35	4668	65	92	65	68	60	0	0	0	0
	point36	36	4668	65	92	65	68	60	0	0	0	0
	point37	37	4668	65	92	65	68	60	0	0	0	0
	point38	38	4668	65	92	65	68	60	0	0	0	0
	point39	39	4668	65	92	65	68	60	0	0	0	0
	point40	40	4668	65	92	65	68	60	0	0	0	0
	point41	41										
SR22 WB - 2	point56	56	4668	65	92	65	68	60	0	0	0	0
	point43	43										
SR55-2NB	point59	59	6977	65	259	65	178	60	0	0	0	0
	point58	58	6977	65	259	65	178	60	0	0	0	0
	point22	22										
SR55SB	point62	62	6977	65	259	65	178	60	0	0	0	0
	point63	63	6977	65	259	65	178	60	0	0	0	0
	point64	64	6977	65	259	65	178	60	0	0	0	0
	point65	65										
SR55-2SB	point66	66	6977	65	259	65	178	60	0	0	0	0
	point67	67	6977	65	259	65	178	60	0	0	0	0
	point68	68										

Dudek
M Greene

20 February 2024
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut with Proj Off-Pk

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1-1	1	1	1,267.7	1,981.3	220.00	5.00	0.00	66	10.0	8.0	Y
M2-1	2	1	1,273.4	1,850.1	220.00	5.00	0.00	66	10.0	8.0	Y
M3-1	3	1	1,230.3	1,669.0	220.00	5.00	0.00	66	10.0	8.0	Y
M4-1	4	1	1,212.9	1,614.5	220.00	5.00	0.00	66	10.0	8.0	Y
M5-1	5	1	853.7	1,515.0	220.00	5.00	0.00	66	10.0	8.0	Y
M6-1	6	1	742.4	1,514.7	220.00	5.00	0.00	66	10.0	8.0	Y
M7-1	7	1	732.9	1,658.0	220.00	5.00	0.00	66	10.0	8.0	Y
M8-1	8	1	767.4	1,671.8	220.00	5.00	0.00	66	10.0	8.0	Y
M9-1	9	1	1,168.3	1,725.5	220.00	5.00	0.00	66	10.0	8.0	Y
M10-1	10	1	1,157.2	1,921.1	220.00	5.00	0.00	66	10.0	8.0	Y
M1-2	12	1	1,267.7	1,981.3	220.00	15.00	0.00	66	10.0	8.0	Y
M2-2	13	1	1,273.4	1,850.1	220.00	15.00	0.00	66	10.0	8.0	Y
M3-2	14	1	1,230.3	1,669.0	220.00	15.00	0.00	66	10.0	8.0	Y
M4-2	15	1	1,212.9	1,614.5	220.00	15.00	0.00	66	10.0	8.0	Y
M5-2	16	1	853.7	1,515.0	220.00	15.00	0.00	66	10.0	8.0	Y
M6-2	17	1	742.4	1,514.7	220.00	15.00	0.00	66	10.0	8.0	Y
M7-2	18	1	732.9	1,658.0	220.00	15.00	0.00	66	10.0	8.0	Y
M8-2	19	1	767.4	1,671.8	220.00	15.00	0.00	66	10.0	8.0	Y
M9-2	20	1	1,168.3	1,725.5	220.00	15.00	0.00	66	10.0	8.0	Y
M10-2	21	1	1,157.2	1,921.1	220.00	15.00	0.00	66	10.0	8.0	Y
M1-3	22	1	1,267.7	1,981.3	220.00	25.00	0.00	66	10.0	8.0	Y
M2-3	24	1	1,273.4	1,850.1	220.00	25.00	0.00	66	10.0	8.0	Y

M3-3	25	1	1,230.3	1,669.0	220.00	25.00	0.00	66	10.0	8.0	Y
M4-3	26	1	1,212.9	1,614.5	220.00	25.00	0.00	66	10.0	8.0	Y
M5-3	27	1	853.7	1,515.0	220.00	25.00	0.00	66	10.0	8.0	Y
M6-3	28	1	742.4	1,514.7	220.00	25.00	0.00	66	10.0	8.0	Y
M7-3	29	1	732.9	1,658.0	220.00	25.00	0.00	66	10.0	8.0	Y
M8-3	30	1	767.4	1,671.8	220.00	25.00	0.00	66	10.0	8.0	Y
M9-3	31	1	1,168.3	1,725.5	220.00	25.00	0.00	66	10.0	8.0	Y
M10-3	32	1	1,157.2	1,921.1	220.00	25.00	0.00	66	10.0	8.0	Y
M1-4	33	1	1,267.7	1,981.3	220.00	35.00	0.00	66	10.0	8.0	Y
M2-4	34	1	1,273.4	1,850.1	220.00	35.00	0.00	66	10.0	8.0	Y
M3-4	35	1	1,230.3	1,669.0	220.00	35.00	0.00	66	10.0	8.0	Y
M4-4	36	1	1,212.9	1,614.5	220.00	35.00	0.00	66	10.0	8.0	Y
M5-4	38	1	853.7	1,515.0	220.00	35.00	0.00	66	10.0	8.0	Y
M6-4	39	1	742.4	1,514.7	220.00	35.00	0.00	66	10.0	8.0	Y
M7-4	41	1	732.9	1,658.0	220.00	35.00	0.00	66	10.0	8.0	Y
M8-4	42	1	767.4	1,671.8	220.00	35.00	0.00	66	10.0	8.0	Y
M9-4	43	1	1,168.3	1,725.5	220.00	35.00	0.00	66	10.0	8.0	Y
M10-4	44	1	1,157.2	1,921.1	220.00	35.00	0.00	66	10.0	8.0	Y
M11	46	1	1,154.7	1,818.0	220.00	5.00	0.00	66	10.0	8.0	
M12	47	1	1,212.5	1,592.0	220.00	5.00	0.00	66	10.0	8.0	
M13	48	1	811.2	1,603.0	220.00	5.00	0.00	66	10.0	8.0	
M14	49	1	876.2	1,743.0	220.00	5.00	0.00	66	10.0	8.0	Y

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INPUT: BARRIERS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut with Proj Off-Pk

Barrier Name	Type	Height Min	Height Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	Top Width	Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Increment	Perturbs #Up	Perturbs #Dn	On Struct?	Important Reflections?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Terrain Line - top of slope wall	W	0.00	99.99	0.00				0.00	point1	1	730.5	1,101.0	211.00	14.00	0.00	0	0		
									point3	3	1,080.4	1,209.3	212.00	14.00	0.00	0	0		
									point4	4	1,386.0	1,311.4	212.00	14.00	0.00	0	0		
									point5	5	1,533.2	1,361.4	213.00	14.00	0.00	0	0		
									point6	6	1,648.9	1,424.2	215.00	14.00	0.00	0	0		
									point7	7	1,787.8	1,552.0	218.00	14.00	0.00	0	0		
									point8	8	1,877.5	1,695.5	220.00	14.00	0.00	0	0		
									point9	9	1,925.6	1,804.8	220.00	14.00					
Barrier1-2-2-2	W	0.00	99.99	0.00				0.00	point47	47	1,104.9	1,644.5	220.00	45.00	0.00	0	0		
									point27	27	1,135.1	1,644.5	220.00	45.00	0.00	0	0		
									point28	28	1,135.5	1,618.6	220.00	45.00	0.00	0	0		
									point29	29	1,214.7	1,618.2	220.00	45.00	0.00	0	0		
									point30	30	1,215.1	1,632.7	220.00	45.00	0.00	0	0		
									point31	31	1,228.7	1,632.2	220.00	45.00	0.00	0	0		
									point32	32	1,226.5	1,679.9	220.00	45.00					
Barrier1-2-2	W	0.00	99.99	0.00				0.00	point48	48	737.9	1,669.7	220.00	45.00	0.00	0	0		
									point20	20	797.4	1,669.1	220.00	45.00	0.00	0	0		
									point21	21	795.8	1,570.5	220.00	45.00	0.00	0	0		
									point22	22	854.7	1,570.5	220.00	45.00	0.00	0	0		
									point23	23	854.7	1,515.9	220.00	45.00	0.00	0	0		
									point24	24	743.9	1,516.4	220.00	45.00	0.00	0	0		
									point25	25	735.7	1,666.9	220.00	45.00					
Barrier1-2-2-2-2-2	W	0.00	99.99	0.00				0.00	point50	50	1,266.2	1,979.3	220.00	45.00	0.00	0	0		
									point34	34	1,269.7	1,848.0	220.00	45.00	0.00	0	0		
									point35	35	1,102.6	1,855.0	220.00	45.00	0.00	0	0		
									point36	36	1,099.1	1,914.5	220.00	45.00					
Barrier12	W	0.00	99.99	0.00				0.00	point52	52	1,925.6	1,804.8	220.00	14.00	0.00	0	0		
									point53	53	1,965.4	1,970.1	225.00	14.00	0.00	0	0		
									point54	54	1,971.1	2,211.0	226.00	14.00					
Barrier13	W	0.00	99.99	0.00				0.00	point55	55	1,998.1	2,726.9	254.00	10.00	0.00	0	0		
									point56	56	1,998.2	2,295.6	250.00	10.00	0.00	0	0		
									point57	57	1,854.9	2,282.0	245.00	10.00	0.00	0	0		
									point58	58	1,720.9	2,257.4	240.00	10.00	0.00	0	0		
									point59	59	1,544.5	2,213.6	230.00	10.00	0.00	0	0		
									point60	60	1,368.2	2,146.4	222.00	10.00					

Barrier14	W	0.00	99.99	0.00				0.00	point61	61	1,373.3	2,052.9	222.00	0.00	0.00	0	0		
									point62	62	1,234.2	1,990.3	222.00	0.00	0.00	0	0		
									point63	63	1,013.8	1,883.5	222.00	0.00	0.00	0	0		
									point64	64	852.8	1,810.0	221.00	0.00	0.00	0	0		
									point65	65	728.9	1,764.0	220.00	0.00	0.00	0	0		
									point66	66	728.7	1,587.9	220.00	0.00					
Barrier16	W	0.00	99.99	0.00				0.00	point67	67	602.2	1,085.9	211.00	14.00	0.00	0	0		
									point68	68	383.8	997.8	211.00	14.00					

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INPUT: BUILDING ROWS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut with P

Building Row Name	Average Height ft	Building Percent %	Points No.	Coordinates (ground) X ft	Y ft	Z ft
Building2	12.00	80	1	1,341.8	1,549.7	220.00
			2	1,368.3	1,561.9	220.00
			3	1,500.6	1,622.6	220.00
			4	1,635.1	1,763.6	220.00
			5	1,705.6	1,901.4	220.00
			6	1,729.9	2,066.7	220.00
Building4	12.00	80	9	731.5	1,300.3	220.00
			10	876.0	1,297.6	220.00
			11	898.2	1,379.5	220.00
			12	1,185.7	1,393.4	220.00
			13	1,462.0	1,443.4	220.00
			14	1,667.6	1,567.0	220.00
			15	1,781.4	1,723.9	220.00
			16	1,860.6	1,890.6	220.00
			17	1,877.2	2,090.5	220.00
Building5	12.00	80	18	598.4	1,718.1	220.00
			19	598.4	1,093.6	220.00

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Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut with Proj Off-Pk
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1-1	1	1	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
M2-1	2	1	0.0	57.9	66	57.9	10	----	57.9	0.0	8	-8.0
M3-1	3	1	0.0	57.7	66	57.7	10	----	57.7	0.0	8	-8.0
M4-1	4	1	0.0	58.4	66	58.4	10	----	58.4	0.0	8	-8.0
M5-1	5	1	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0
M6-1	6	1	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0
M7-1	7	1	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0
M8-1	8	1	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
M9-1	9	1	0.0	57.7	66	57.7	10	----	57.7	0.0	8	-8.0
M10-1	10	1	0.0	61.4	66	61.4	10	----	61.4	0.0	8	-8.0
M1-2	12	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
M2-2	13	1	0.0	61.2	66	61.2	10	----	61.2	0.0	8	-8.0
M3-2	14	1	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0
M4-2	15	1	0.0	63.2	66	63.2	10	----	63.2	0.0	8	-8.0
M5-2	16	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
M6-2	17	1	0.0	68.1	66	68.1	10	Snd Lvl	68.1	0.0	8	-8.0
M7-2	18	1	0.0	68.0	66	68.0	10	Snd Lvl	68.0	0.0	8	-8.0
M8-2	19	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
M9-2	20	1	0.0	61.1	66	61.1	10	----	61.1	0.0	8	-8.0
M10-2	21	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
M1-3	22	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
M2-3	24	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
M3-3	25	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
M4-3	26	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0

M5-3	27	1	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0
M6-3	28	1	0.0	68.0	66	68.0	10	Snd Lvl	68.0	0.0	8	-8.0
M7-3	29	1	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
M8-3	30	1	0.0	64.0	66	64.0	10	----	64.0	0.0	8	-8.0
M9-3	31	1	0.0	63.0	66	63.0	10	----	63.0	0.0	8	-8.0
M10-3	32	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
M1-4	33	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
M2-4	34	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
M3-4	35	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
M4-4	36	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
M5-4	38	1	0.0	64.6	66	64.6	10	----	64.6	0.0	8	-8.0
M6-4	39	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
M7-4	41	1	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0
M8-4	42	1	0.0	64.0	66	64.0	10	----	64.0	0.0	8	-8.0
M9-4	43	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
M10-4	44	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
M11	46	1	0.0	57.7	66	57.7	10	----	57.7	0.0	8	-8.0
M12	47	1	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0
M13	48	1	0.0	56.3	66	56.3	10	----	56.3	0.0	8	-8.0
M14	49	1	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0

Dwelling Units		**# DUs**	**Noise Reduction**		
			Min	**Avg**	**Max**
			dB	**dB**	**dB**
All Selected		44	0.0	0.0	0.0
All Impacted		9	0.0	0.0	0.0
All that meet NR Goal		0	0.0	0.0	0.0

Dudek					**20 February 2024**							
M Greene					**TNM 2.5**							
INPUT: ROADWAYS								**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**13230**							**a State highway agency substantiates the use**				
RUN:	**Orion HUD Project - Fut w Proj Nighttime**							**of a different type with the approval of FHWA**				
Roadway		**Points**										
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**				**Flow Control**			**Segment**	
				X	**Y**	**Z**		**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft			mph	%		
La Veta Ave	55.0	point1	1	2,346.0	2,236.2	255.00					Average	
		point3	3	2,111.6	2,250.2	254.00					Average	
		point4	4	1,980.3	2,248.1	250.00					Average	
		point5	5	1,837.0	2,234.5	245.00					Average	
		point6	6	1,703.0	2,209.9	240.00					Average	
		point7	7	1,526.6	2,166.1	230.00					Average	
		point8	8	1,350.3	2,098.9	222.00					Average	
		point9	9	1,211.2	2,036.3	222.00					Average	
		point10	10	990.8	1,929.5	222.00					Average	
		point11	11	829.8	1,856.0	221.00					Average	
		point12	12	705.9	1,810.0	220.00						
SR55NB	80.0	point51	51	2,144.8	748.2	216.00					Average	
		point20	20	2,141.8	1,364.8	222.00					Average	
		point21	21	2,127.9	2,095.2	227.00					Average	
		point57	57	2,129.6	2,234.9	229.00						
SR22 WB - 1	35.0	point52	52	1,992.9	2,195.8	226.00					Average	
		point24	24	1,985.9	1,970.1	225.00					Average	
		point25	25	1,938.6	1,771.5	220.00					Average	
		point26	26	1,878.3	1,634.2	217.00					Average	
		point27	27	1,786.4	1,502.9	212.00					Average	
		point28	28	1,680.2	1,389.8	205.00					Average	
		point29	29	1,528.1	1,287.7	200.00					Average	
		point30	30	1,333.9	1,214.2	195.00					Average	
		point31	31	767.4	1,043.4	191.00					Average	
		point32	32	731.6	1,030.8	190.00						

S Tustin Avenue	85.0	point53	53	674.9	960.9	213.00				Average	
		point14	14	672.8	1,004.7	215.00				Average	
		point15	15	674.2	1,297.0	218.00				Average	
		point16	16	678.4	1,610.8	220.00				Average	
		point17	17	688.9	1,815.5	224.00				Average	
		point18	18	671.4	2,672.9	220.00					
SR22 EB - 2	35.0	point54	54	414.8	907.2	0.00				Average	
		point2	2	632.1	971.1	0.00					
SR22 EB - 1	35.0	point55	55	731.6	1,005.8	189.00				Average	
		point34	34	776.2	1,020.3	190.00				Average	
		point35	35	1,225.4	1,136.2	190.00				Average	
		point36	36	1,335.6	1,149.3	190.00				Average	
		point37	37	1,457.2	1,156.3	190.00				Average	
		point38	38	1,604.2	1,135.3	190.00				Average	
		point39	39	1,805.4	1,056.6	190.00				Average	
		point40	40	1,946.3	956.8	190.00				Average	
		point41	41	2,019.8	858.0	190.00					
SR22 WB - 2	35.0	point56	56	630.0	997.5	192.00				Average	
		point43	43	406.5	933.0	192.00					
SR55-2NB	80.0	point59	59	2,130.8	2,298.5	230.00				Average	
		point58	58	2,133.3	2,573.6	234.00				Average	
		point22	22	2,135.2	2,806.9	236.00					
SR55SB	80.0	point62	62	2,058.4	748.2	216.00				Average	
		point63	63	2,052.8	1,364.8	222.00				Average	
		point64	64	2,038.9	2,095.2	227.00				Average	
		point65	65	2,043.1	2,234.9	229.00					
SR55-2SB	80.0	point66	66	2,039.3	2,295.3	230.00				Average	
		point67	67	2,041.8	2,570.4	234.00				Average	
		point68	68	2,043.7	2,803.7	236.00					

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INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut w Proj Nighttime

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
La Veta Ave	point1	1	164	40	3	40	2	35	0	0	0	0
	point3	3	164	40	3	40	2	35	0	0	0	0
	point4	4	164	40	3	40	2	35	0	0	0	0
	point5	5	164	40	3	40	2	35	0	0	0	0
	point6	6	164	40	3	40	2	35	0	0	0	0
	point7	7	164	40	3	40	2	35	0	0	0	0
	point8	8	164	40	3	40	2	35	0	0	0	0
	point9	9	164	40	3	40	2	35	0	0	0	0
	point10	10	164	40	3	40	2	35	0	0	0	0
	point11	11	164	40	3	40	2	35	0	0	0	0
	point12	12										
SR55NB	point51	51	1938	65	72	65	49	60	0	0	0	0
	point20	20	1938	65	72	65	49	60	0	0	0	0
	point21	21	1938	65	72	65	49	60	0	0	0	0
	point57	57										
SR22 WB - 1	point52	52	1297	65	25	65	19	60	0	0	0	0
	point24	24	1297	65	25	65	19	60	0	0	0	0
	point25	25	1297	65	25	65	19	60	0	0	0	0
	point26	26	1297	65	25	65	19	60	0	0	0	0
	point27	27	1297	65	25	65	19	60	0	0	0	0
	point28	28	1297	65	25	65	19	60	0	0	0	0
	point29	29	1297	65	25	65	19	60	0	0	0	0
	point30	30	1297	65	25	65	19	60	0	0	0	0

	point31	31	1297	65	25	65	19	60	0	0	0	0
	point32	32										
S Tustin Avenue	point53	53	474	40	10	40	5	35	0	0	0	0
	point14	14	474	40	10	40	5	35	0	0	0	0
	point15	15	474	40	10	40	5	35	0	0	0	0
	point16	16	474	40	10	40	5	35	0	0	0	0
	point17	17	474	40	10	40	5	35	0	0	0	0
	point18	18										
SR22 EB - 2	point54	54	1297	65	25	65	19	60	0	0	0	0
	point2	2										
SR22 EB - 1	point55	55	1297	65	25	65	19	60	0	0	0	0
	point34	34	1297	65	25	65	19	60	0	0	0	0
	point35	35	1297	65	25	65	19	60	0	0	0	0
	point36	36	1297	65	25	65	19	60	0	0	0	0
	point37	37	1297	65	25	65	19	60	0	0	0	0
	point38	38	1297	65	25	65	19	60	0	0	0	0
	point39	39	1297	65	25	65	19	60	0	0	0	0
	point40	40	1297	65	25	65	19	60	0	0	0	0
	point41	41										
SR22 WB - 2	point56	56	1297	65	25	65	19	60	0	0	0	0
	point43	43										
SR55-2NB	point59	59	1938	65	72	65	49	60	0	0	0	0
	point58	58	1938	65	72	65	49	60	0	0	0	0
	point22	22										
SR55SB	point62	62	1938	65	72	65	49	60	0	0	0	0
	point63	63	1938	65	72	65	49	60	0	0	0	0
	point64	64	1938	65	72	65	49	60	0	0	0	0
	point65	65										
SR55-2SB	point66	66	1938	65	72	65	49	60	0	0	0	0
	point67	67	1938	65	72	65	49	60	0	0	0	0
	point68	68										

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INPUT: RECEIVERS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut w Proj Nighttime

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1-1	1	1	1,267.7	1,981.3	220.00	5.00	0.00	66	10.0	8.0	Y
M2-1	2	1	1,273.4	1,850.1	220.00	5.00	0.00	66	10.0	8.0	Y
M3-1	3	1	1,230.3	1,669.0	220.00	5.00	0.00	66	10.0	8.0	Y
M4-1	4	1	1,212.9	1,614.5	220.00	5.00	0.00	66	10.0	8.0	Y
M5-1	5	1	853.7	1,515.0	220.00	5.00	0.00	66	10.0	8.0	Y
M6-1	6	1	742.4	1,514.7	220.00	5.00	0.00	66	10.0	8.0	Y
M7-1	7	1	732.9	1,658.0	220.00	5.00	0.00	66	10.0	8.0	Y
M8-1	8	1	767.4	1,671.8	220.00	5.00	0.00	66	10.0	8.0	Y
M9-1	9	1	1,168.3	1,725.5	220.00	5.00	0.00	66	10.0	8.0	Y
M10-1	10	1	1,157.2	1,921.1	220.00	5.00	0.00	66	10.0	8.0	Y
M1-2	12	1	1,267.7	1,981.3	220.00	15.00	0.00	66	10.0	8.0	Y
M2-2	13	1	1,273.4	1,850.1	220.00	15.00	0.00	66	10.0	8.0	Y
M3-2	14	1	1,230.3	1,669.0	220.00	15.00	0.00	66	10.0	8.0	Y
M4-2	15	1	1,212.9	1,614.5	220.00	15.00	0.00	66	10.0	8.0	Y
M5-2	16	1	853.7	1,515.0	220.00	15.00	0.00	66	10.0	8.0	Y
M6-2	17	1	742.4	1,514.7	220.00	15.00	0.00	66	10.0	8.0	Y
M7-2	18	1	732.9	1,658.0	220.00	15.00	0.00	66	10.0	8.0	Y
M8-2	19	1	767.4	1,671.8	220.00	15.00	0.00	66	10.0	8.0	Y
M9-2	20	1	1,168.3	1,725.5	220.00	15.00	0.00	66	10.0	8.0	Y
M10-2	21	1	1,157.2	1,921.1	220.00	15.00	0.00	66	10.0	8.0	Y
M1-3	22	1	1,267.7	1,981.3	220.00	25.00	0.00	66	10.0	8.0	Y
M2-3	24	1	1,273.4	1,850.1	220.00	25.00	0.00	66	10.0	8.0	Y

M3-3	25	1	1,230.3	1,669.0	220.00	25.00	0.00	66	10.0	8.0	Y
M4-3	26	1	1,212.9	1,614.5	220.00	25.00	0.00	66	10.0	8.0	Y
M5-3	27	1	853.7	1,515.0	220.00	25.00	0.00	66	10.0	8.0	Y
M6-3	28	1	742.4	1,514.7	220.00	25.00	0.00	66	10.0	8.0	Y
M7-3	29	1	732.9	1,658.0	220.00	25.00	0.00	66	10.0	8.0	Y
M8-3	30	1	767.4	1,671.8	220.00	25.00	0.00	66	10.0	8.0	Y
M9-3	31	1	1,168.3	1,725.5	220.00	25.00	0.00	66	10.0	8.0	Y
M10-3	32	1	1,157.2	1,921.1	220.00	25.00	0.00	66	10.0	8.0	Y
M1-4	33	1	1,267.7	1,981.3	220.00	35.00	0.00	66	10.0	8.0	Y
M2-4	34	1	1,273.4	1,850.1	220.00	35.00	0.00	66	10.0	8.0	Y
M3-4	35	1	1,230.3	1,669.0	220.00	35.00	0.00	66	10.0	8.0	Y
M4-4	36	1	1,212.9	1,614.5	220.00	35.00	0.00	66	10.0	8.0	Y
M5-4	38	1	853.7	1,515.0	220.00	35.00	0.00	66	10.0	8.0	Y
M6-4	39	1	742.4	1,514.7	220.00	35.00	0.00	66	10.0	8.0	Y
M7-4	41	1	732.9	1,658.0	220.00	35.00	0.00	66	10.0	8.0	Y
M8-4	42	1	767.4	1,671.8	220.00	35.00	0.00	66	10.0	8.0	Y
M9-4	43	1	1,168.3	1,725.5	220.00	35.00	0.00	66	10.0	8.0	Y
M10-4	44	1	1,157.2	1,921.1	220.00	35.00	0.00	66	10.0	8.0	Y
M11	46	1	1,154.7	1,818.0	220.00	5.00	0.00	66	10.0	8.0	
M12	47	1	1,212.5	1,592.0	220.00	5.00	0.00	66	10.0	8.0	
M13	48	1	811.2	1,603.0	220.00	5.00	0.00	66	10.0	8.0	
M14	49	1	876.2	1,743.0	220.00	5.00	0.00	66	10.0	8.0	Y

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INPUT: BARRIERS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut w Proj Nighttime

Barrier									Points										
Name	Type	Height Min	Height Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	Top Width	Run:Rise	Add'tnl $ per Unit Length	Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Increment	Perturbs #Up	Perturbs #Dn	On Struct?	Important Reflections?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Terrain Line - top of slope wall	W	0.00	99.99	0.00				0.00	point1	1	730.5	1,101.0	211.00	14.00	0.00	0	0		
									point3	3	1,080.4	1,209.3	212.00	14.00	0.00	0	0		
									point4	4	1,386.0	1,311.4	212.00	14.00	0.00	0	0		
									point5	5	1,533.2	1,361.4	213.00	14.00	0.00	0	0		
									point6	6	1,648.9	1,424.2	215.00	14.00	0.00	0	0		
									point7	7	1,787.8	1,552.0	218.00	14.00	0.00	0	0		
									point8	8	1,877.5	1,695.5	220.00	14.00	0.00	0	0		
									point9	9	1,925.6	1,804.8	220.00	14.00					
Barrier1-2-2-2	W	0.00	99.99	0.00				0.00	point47	47	1,104.9	1,644.5	220.00	45.00	0.00	0	0		
									point27	27	1,135.1	1,644.5	220.00	45.00	0.00	0	0		
									point28	28	1,135.5	1,618.6	220.00	45.00	0.00	0	0		
									point29	29	1,214.7	1,618.2	220.00	45.00	0.00	0	0		
									point30	30	1,215.1	1,632.7	220.00	45.00	0.00	0	0		
									point31	31	1,228.7	1,632.2	220.00	45.00	0.00	0	0		
									point32	32	1,226.5	1,679.9	220.00	45.00					
Barrier1-2-2	W	0.00	99.99	0.00				0.00	point48	48	737.9	1,669.7	220.00	45.00	0.00	0	0		
									point20	20	797.4	1,669.1	220.00	45.00	0.00	0	0		
									point21	21	795.8	1,570.5	220.00	45.00	0.00	0	0		
									point22	22	854.7	1,570.5	220.00	45.00	0.00	0	0		
									point23	23	854.7	1,515.9	220.00	45.00	0.00	0	0		
									point24	24	743.9	1,516.4	220.00	45.00	0.00	0	0		
									point25	25	735.7	1,666.9	220.00	45.00					
Barrier1-2-2-2-2-2	W	0.00	99.99	0.00				0.00	point50	50	1,266.2	1,979.3	220.00	45.00	0.00	0	0		
									point34	34	1,269.7	1,848.0	220.00	45.00	0.00	0	0		
									point35	35	1,102.6	1,855.0	220.00	45.00	0.00	0	0		
									point36	36	1,099.1	1,914.5	220.00	45.00					
Barrier12	W	0.00	99.99	0.00				0.00	point52	52	1,925.6	1,804.8	220.00	14.00	0.00	0	0		
									point53	53	1,965.4	1,970.1	225.00	14.00	0.00	0	0		
									point54	54	1,971.1	2,211.0	226.00	14.00					
Barrier13	W	0.00	99.99	0.00				0.00	point55	55	1,998.1	2,726.9	254.00	10.00	0.00	0	0		
									point56	56	1,998.2	2,295.6	250.00	10.00	0.00	0	0		
									point57	57	1,854.9	2,282.0	245.00	10.00	0.00	0	0		
									point58	58	1,720.9	2,257.4	240.00	10.00	0.00	0	0		
									point59	59	1,544.5	2,213.6	230.00	10.00	0.00	0	0		
									point60	60	1,368.2	2,146.4	222.00	10.00					

Barrier14	W	0.00	99.99	0.00				0.00	point61	61	1,373.3	2,052.9	222.00	0.00	0.00	0	0		
									point62	62	1,234.2	1,990.3	222.00	0.00	0.00	0	0		
									point63	63	1,013.8	1,883.5	222.00	0.00	0.00	0	0		
									point64	64	852.8	1,810.0	221.00	0.00	0.00	0	0		
									point65	65	728.9	1,764.0	220.00	0.00	0.00	0	0		
									point66	66	728.7	1,587.9	220.00	0.00					
Barrier15	W	0.00	99.99	0.00				0.00	point67	67	602.2	1,085.9	211.00	14.00	0.00	0	0		
									point68	68	383.8	997.8	211.00	14.00					

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INPUT: BUILDING ROWS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut w Proj

Building Row Name	Average Height ft	Building Percent %	Points No.	Coordinates (ground) X ft	Y ft	Z ft
Building2	12.00	80	1	1,341.8	1,549.7	220.00
			2	1,368.3	1,561.9	220.00
			3	1,500.6	1,622.6	220.00
			4	1,635.1	1,763.6	220.00
			5	1,705.6	1,901.4	220.00
			6	1,729.9	2,066.7	220.00
Building4	12.00	80	9	731.5	1,300.3	220.00
			10	876.0	1,297.6	220.00
			11	898.2	1,379.5	220.00
			12	1,185.7	1,393.4	220.00
			13	1,462.0	1,443.4	220.00
			14	1,667.6	1,567.0	220.00
			15	1,781.4	1,723.9	220.00
			16	1,860.6	1,890.6	220.00
			17	1,877.2	2,090.5	220.00
Building5	12.00	80	18	598.4	1,718.1	220.00
			19	598.4	1,093.6	220.00

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Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 13230
RUN: Orion HUD Project - Fut w Proj Nighttime
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

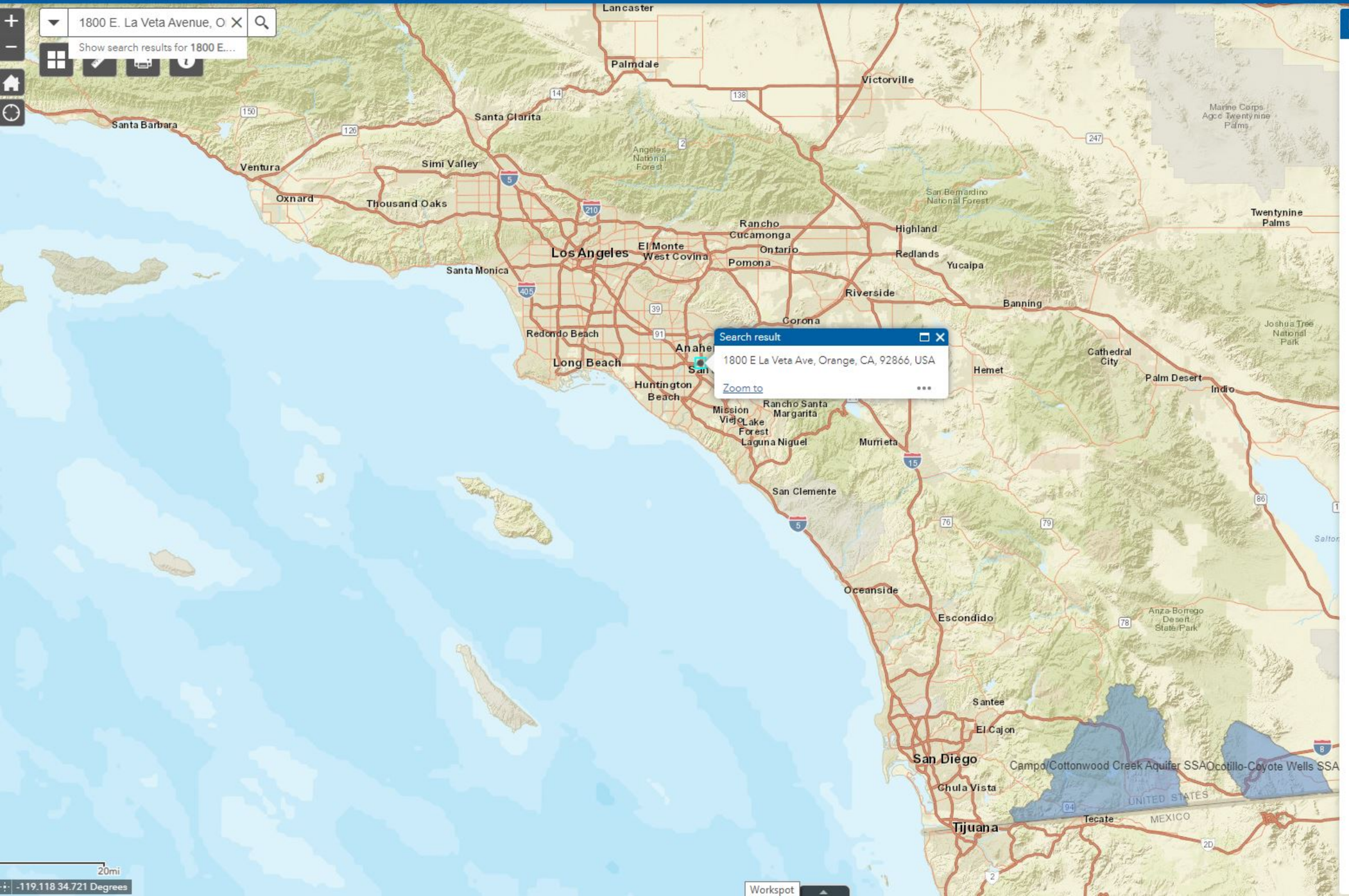
Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1-1	1	1	0.0	57.2	66	57.2	10	----	57.2	0.0	8	-8.0
M2-1	2	1	0.0	52.4	66	52.4	10	----	52.4	0.0	8	-8.0
M3-1	3	1	0.0	52.1	66	52.1	10	----	52.1	0.0	8	-8.0
M4-1	4	1	0.0	52.8	66	52.8	10	----	52.8	0.0	8	-8.0
M5-1	5	1	0.0	54.8	66	54.8	10	----	54.8	0.0	8	-8.0
M6-1	6	1	0.0	61.9	66	61.9	10	----	61.9	0.0	8	-8.0
M7-1	7	1	0.0	62.6	66	62.6	10	----	62.6	0.0	8	-8.0
M8-1	8	1	0.0	58.2	66	58.2	10	----	58.2	0.0	8	-8.0
M9-1	9	1	0.0	52.1	66	52.1	10	----	52.1	0.0	8	-8.0
M10-1	10	1	0.0	55.8	66	55.8	10	----	55.8	0.0	8	-8.0
M1-2	12	1	0.0	58.7	66	58.7	10	----	58.7	0.0	8	-8.0
M2-2	13	1	0.0	55.7	66	55.7	10	----	55.7	0.0	8	-8.0
M3-2	14	1	0.0	57.0	66	57.0	10	----	57.0	0.0	8	-8.0
M4-2	15	1	0.0	57.6	66	57.6	10	----	57.6	0.0	8	-8.0
M5-2	16	1	0.0	57.4	66	57.4	10	----	57.4	0.0	8	-8.0
M6-2	17	1	0.0	62.6	66	62.6	10	----	62.6	0.0	8	-8.0
M7-2	18	1	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0
M8-2	19	1	0.0	58.6	66	58.6	10	----	58.6	0.0	8	-8.0
M9-2	20	1	0.0	55.5	66	55.5	10	----	55.5	0.0	8	-8.0
M10-2	21	1	0.0	56.5	66	56.5	10	----	56.5	0.0	8	-8.0
M1-3	22	1	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0
M2-3	24	1	0.0	57.9	66	57.9	10	----	57.9	0.0	8	-8.0
M3-3	25	1	0.0	58.9	66	58.9	10	----	58.9	0.0	8	-8.0
M4-3	26	1	0.0	59.3	66	59.3	10	----	59.3	0.0	8	-8.0

M5-3	27	1	0.0	58.2	66	58.2	10	----	58.2	0.0	8	-8.0
M6-3	28	1	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0
M7-3	29	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
M8-3	30	1	0.0	58.5	66	58.5	10	----	58.5	0.0	8	-8.0
M9-3	31	1	0.0	57.4	66	57.4	10	----	57.4	0.0	8	-8.0
M10-3	32	1	0.0	56.4	66	56.4	10	----	56.4	0.0	8	-8.0
M1-4	33	1	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0
M2-4	34	1	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0
M3-4	35	1	0.0	60.1	66	60.1	10	----	60.1	0.0	8	-8.0
M4-4	36	1	0.0	60.4	66	60.4	10	----	60.4	0.0	8	-8.0
M5-4	38	1	0.0	59.0	66	59.0	10	----	59.0	0.0	8	-8.0
M6-4	39	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
M7-4	41	1	0.0	61.9	66	61.9	10	----	61.9	0.0	8	-8.0
M8-4	42	1	0.0	58.4	66	58.4	10	----	58.4	0.0	8	-8.0
M9-4	43	1	0.0	58.7	66	58.7	10	----	58.7	0.0	8	-8.0
M10-4	44	1	0.0	56.5	66	56.5	10	----	56.5	0.0	8	-8.0
M11	46	1	0.0	52.1	66	52.1	10	----	52.1	0.0	8	-8.0
M12	47	1	0.0	53.2	66	53.2	10	----	53.2	0.0	8	-8.0
M13	48	1	0.0	50.7	66	50.7	10	----	50.7	0.0	8	-8.0
M14	49	1	0.0	57.0	66	57.0	10	----	57.0	0.0	8	-8.0

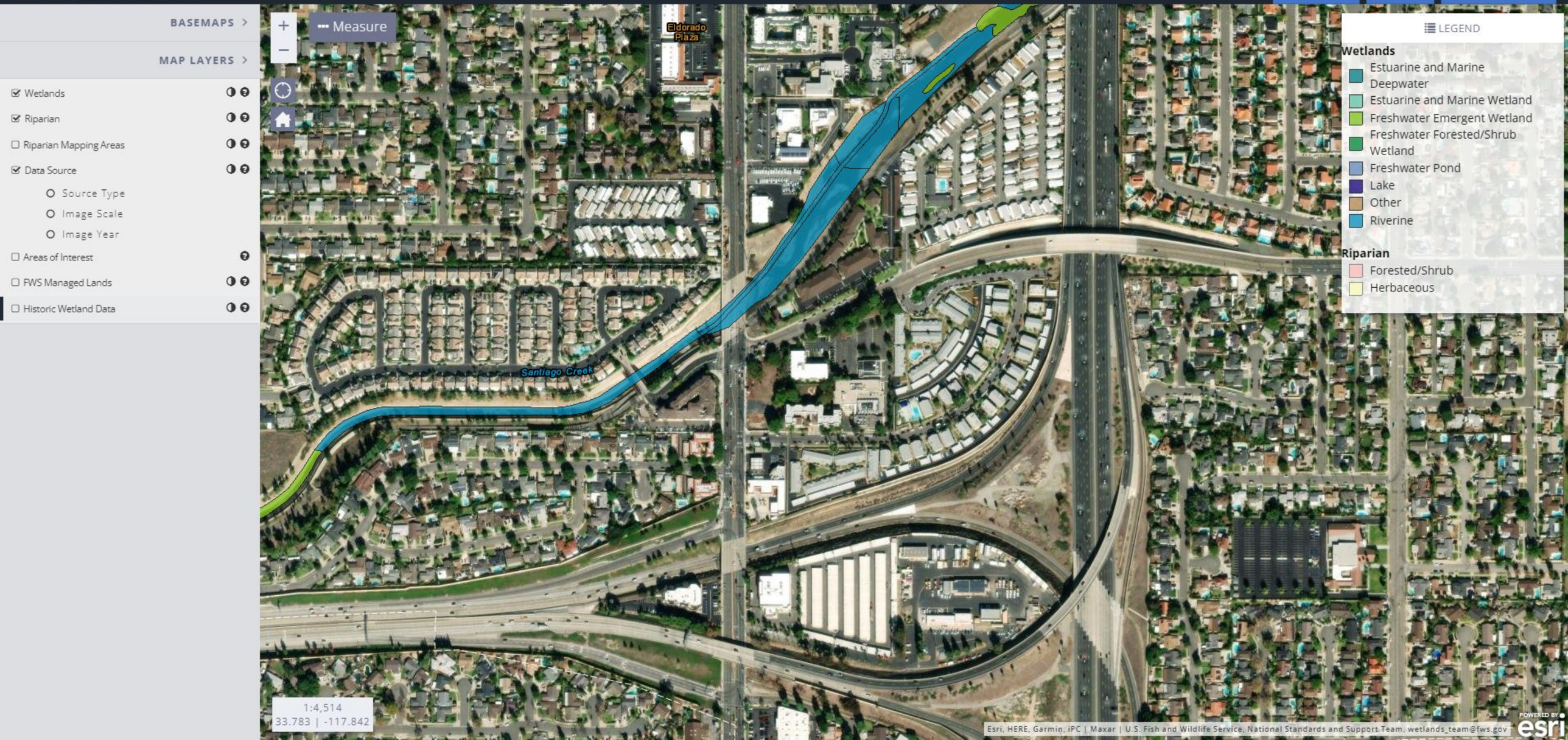
Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	44	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Attachment 15. Sole Source Aquifer Map

Sole Source Aquifers

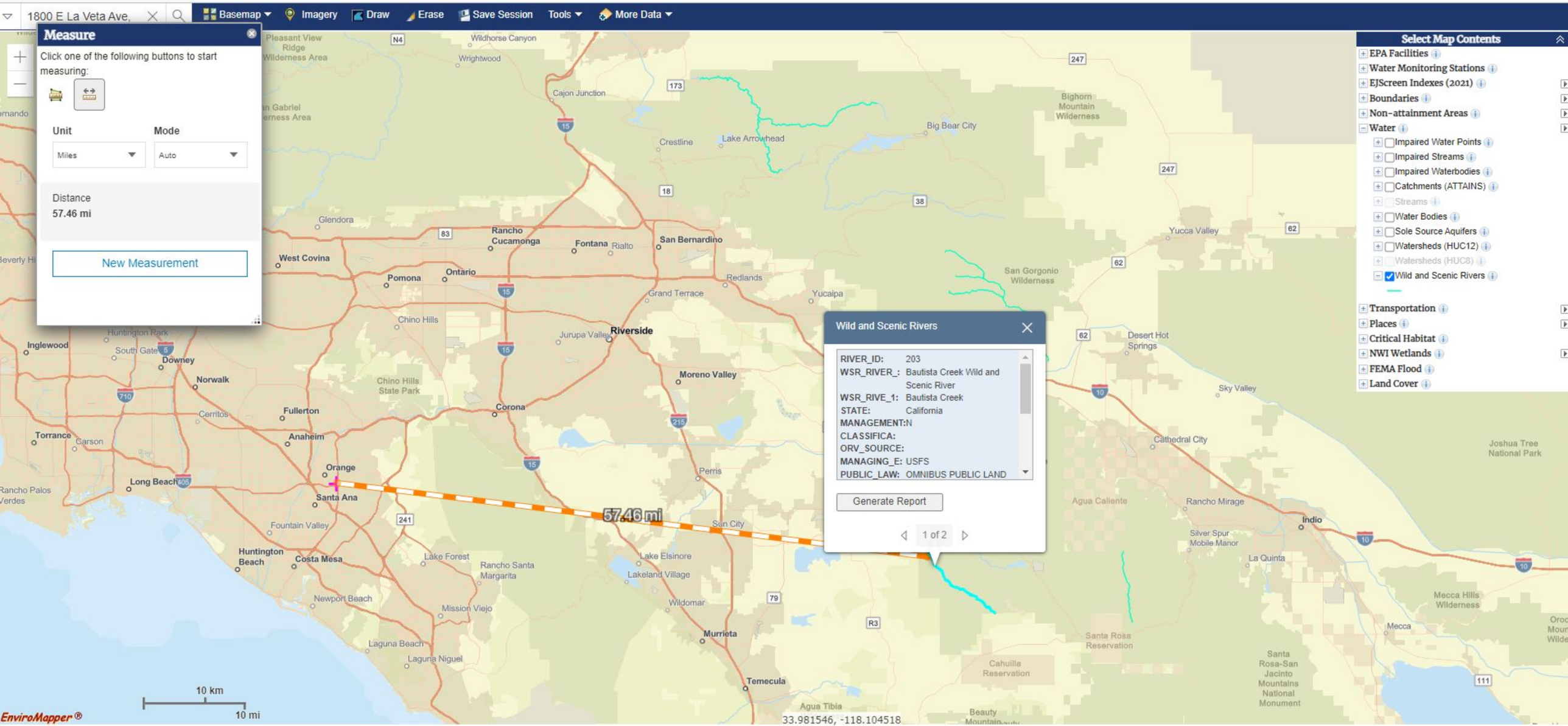


Attachment 16. National Wetlands Inventory Map


BASEMAPS
MAP LAYERS
Wetlands
Riparian
Riparian Mapping Areas
Data Source
Source Type
Image Scale
Image Year
Areas of Interest
FWS Managed Lands
Historic Wetland Data
Measure
Eldorado Plaza
Santiago Creek
LEGEND
Wetlands
Estuarine and Marine Deepwater
Estuarine and Marine Wetland
Freshwater Emergent Wetland
Freshwater Forested/Shrub Wetland
Freshwater Pond
Lake
Other
Riverine
Riparian
Forested/Shrub
Herbaceous
1:4,514
33.783 | -117.842
Esri, HERE, Garmin, iPC | Maxar | U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov
POWERED BY esri

Attachment 17. Wild and Scenic Rivers Map

1800 E La Veta Ave, | Basemap | Imagery | Draw | Erase | Save Session | Tools | More Data



EnviroMapper®

33.981546, -118.104518

Attachment 18. EJScreen Community Report

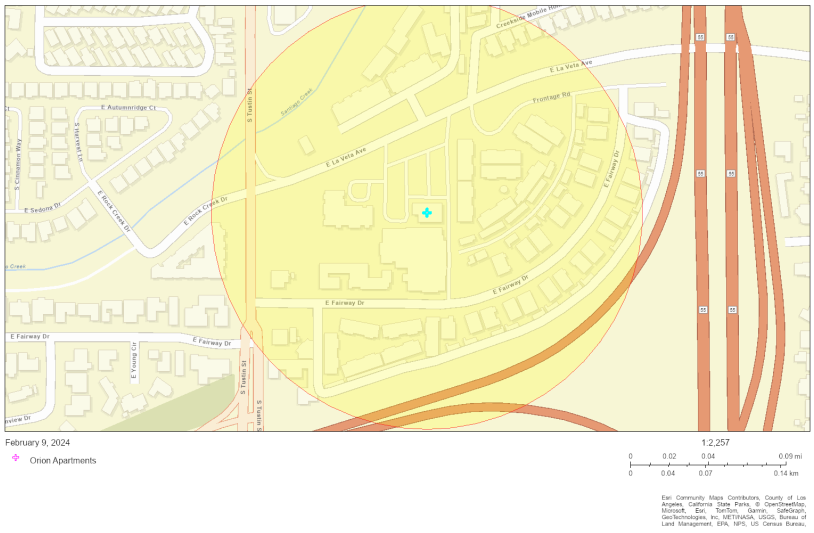
EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Orange, CA

0.125 miles Ring Centered at 33.779390,-117.833980
Population: 722
Area in square miles: 0.05

A3 Landscape



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
No language data available.	

COMMUNITY INFORMATION

- Low income: 52 percent
- People of color: 61 percent
- Less than high school education: 14 percent
- Limited English households: 0 percent
- Unemployment: 2 percent
- Persons with disabilities: 7 percent
- Male: 46 percent
- Female: 54 percent
- 81 years — Average life expectancy
- $20,140 — Per capita income
- Number of households: 247
- Owner occupied: 15 percent

BREAKDOWN BY RACE

- White: 39%
- Black: 0%
- American Indian: 0%
- Asian: 0%
- Hawaiian/Pacific Islander: 0%
- Other race: 0%
- Two or more races: 0%
- Hispanic: 61%

BREAKDOWN BY AGE

From Ages 1 to 4	9%
From Ages 1 to 18	25%
From Ages 18 and up	75%
From Ages 65 and up	14%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	0%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

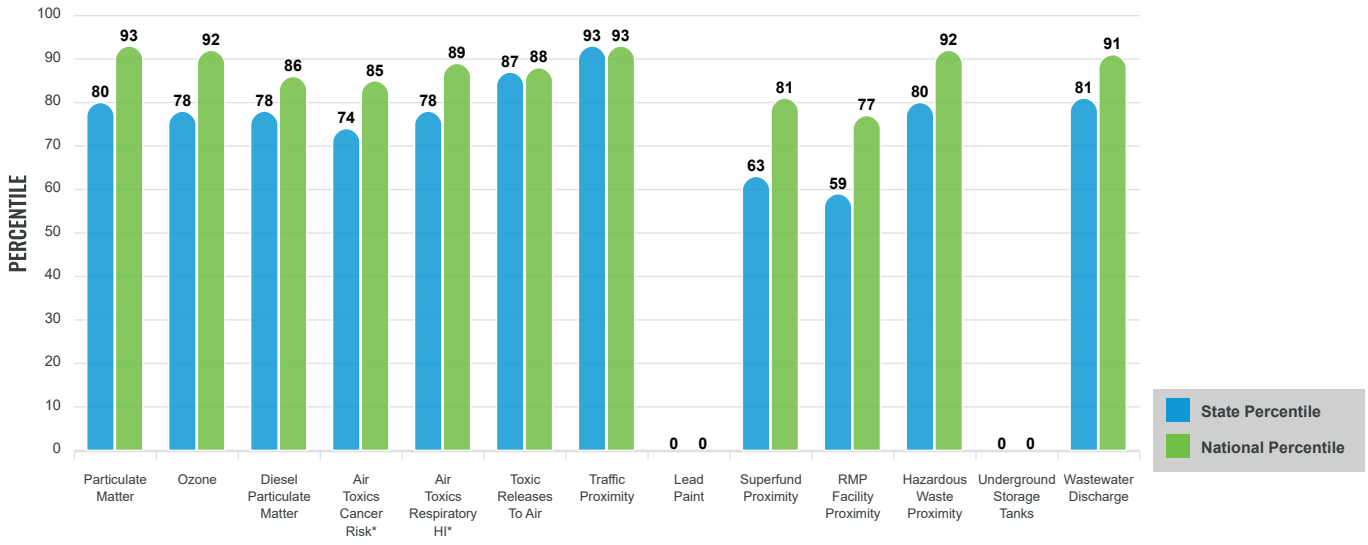
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

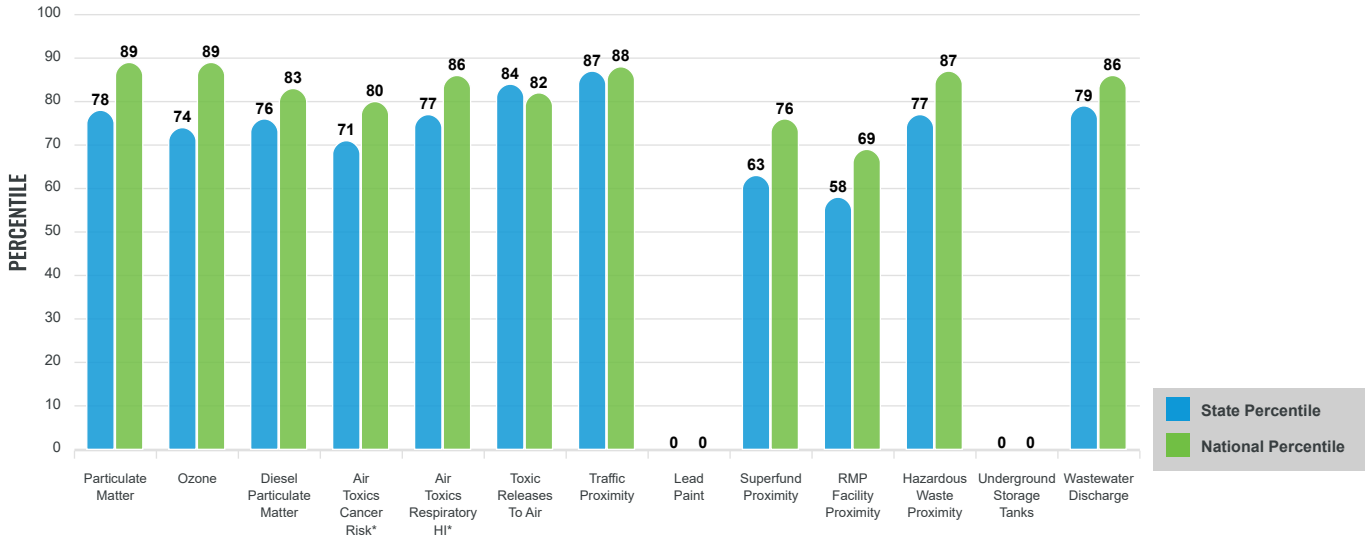
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 0.125 miles Ring Centered at 33.779390,-117.833980

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	10.5	8.65	79	8.08	97
Ozone (ppb)	69.9	65.9	69	61.6	93
Diesel Particulate Matter (µg/m^3)	0.353	0.26	73	0.261	77
Air Toxics Cancer Risk* (lifetime risk per million)	30	27	42	25	52
Air Toxics Respiratory HI*	0.4	0.34	58	0.31	70
Toxic Releases to Air	2,000	780	89	4,600	73
Traffic Proximity (daily traffic count/distance to road)	4,800	510	99	210	99
Lead Paint (% Pre-1960 Housing)	0	0.31	0	0.3	0
Superfund Proximity (site count/km distance)	0.082	0.17	49	0.13	60
RMP Facility Proximity (facility count/km distance)	0.19	0.57	45	0.43	55
Hazardous Waste Proximity (facility count/km distance)	7.8	5.9	71	1.9	94
Underground Storage Tanks (count/km^2)	0	1.5	0	3.9	0
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.22	4	72	22	86
SOCIOECONOMIC INDICATORS					
Demographic Index	56%	45%	69	35%	80
Supplemental Demographic Index	17%	15%	64	14%	68
People of Color	61%	61%	47	39%	73
Low Income	52%	28%	85	31%	82
Unemployment Rate	2%	7%	20	6%	29
Limited English Speaking Households	0%	9%	0	5%	0
Less Than High School Education	14%	16%	57	12%	68
Under Age 5	9%	6%	83	6%	83
Over Age 64	14%	16%	51	17%	42
Low Life Expectancy	17%	18%	48	20%	30

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund 0
Hazardous Waste, Treatment, Storage, and Disposal Facilities 0
Water Dischargers 0
Air Pollution 0
Brownfields 0
Toxic Release Inventory 0

Other community features within defined area:

Schools 0
Hospitals 0
Places of Worship 0

Other environmental data:

Air Non-attainment ..... Yes
Impaired Waters ..... Yes

Selected location contains American Indian Reservation Lands* ..... No
Selected location contains a "Justice40 (CEJST)" disadvantaged community ..... No
Selected location contains an EPA IRA disadvantaged community ..... No

Report for 0.125 miles Ring Centered at 33.779390,-117.833980

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	17%	18%	48	20%	30
Heart Disease	5.3	5.2	59	6.1	35
Asthma	9.7	9.5	56	10	46
Cancer	5.5	5.3	59	6.1	35
Persons with Disabilities	8.1%	10.9%	29	13.4%	19

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	6%	13%	51	12%	48
Wildfire Risk	0%	30%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	10%	10%	62	14%	48
Lack of Health Insurance	17%	7%	94	9%	87
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	No	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for 0.125 miles Ring Centered at 33.779390,-117.833980

Attachment 19. Preliminary Traffic Analysis

300 Corporate Pointe, Suite 470, Culver City, CA 90230
T: (310) 473-6508 | www.crainandassociates.com

To: Doug Keys, Transportation Analyst, City of Orange
From: Daniel Hendricks, Associate Transportation Planner, Crain & Associates
Subject: Preliminary Traffic Analysis for the Senior Affordable Housing Project at 1800 E. La Veta Avenue, City of Orange, CA

USA Properties (the "Client") is preparing a formal entitlement application for the proposed affordable senior housing community (the "Project") located at 1800 E. La Veta Avenue in the City of Orange, California, (the "City"). The Project consists of the development of 166 senior affordable residential housing units and ancillary amenity space across three buildings. The site is currently occupied by the main campus of the Rehabilitation Institute of Southern California (RIO). The RIO is relocating their main campus, and the existing RIO buildings will be removed to accommodate the Project. As a development project consisting entirely of affordable housing and located within a one-half mile of fixed route bus service, the Project will provide reduced on-site parking below the amount required by the City's Zoning Code. As part of the formal entitlement package, the City's Public Works department has requested that a preliminary traffic analysis be prepared for the Project. Crain & Associates is assisting the Client by providing transportation planning services to prepare and process the Project's preliminary traffic analysis with the City. Outlined below are an estimate of the Project trip generation and trip distribution percentages to assist in the determination of whether additional transportation analysis will be required of the proposed Project.

PRELIMINARY TRAFFIC ANALYSIS

PROJECT DESCRIPTION

The Project site is an approximately 3.85 acre parcel located at the southeast corner of Tustin Street & La Veta Avenue. The site is located immediately northwest of the interchange between the Costa Mesa Freeway (State Route 55 [SR-55]) and Garden Grove Freeway (SR-22). The site is bounded by La Veta Avenue to the north, Tustin Street to the west, Fairway Drive and a multifamily residential building to the south, and a multifamily housing development to the east. The Project consists of the development of three mid-rise residential building spread across the Project site, which will house 166 senior affordable housing units along with residential amenity spaces, including a clubroom, computer area, and fitness room. The site currently houses the RIO main campus, which consists of the 34,300 square-foot main building and a 2,110 square-foot ancillary outhouse. Both of these existing buildings will be removed in conjunction with the development of the Project. The Project site also contains a 40-unit senior affordable housing development that will remain after the completion of the Project. Since the Project consists entirely of affordable housing and is located with a one-half mile of fixed route bus service, the Project will provide 169 surface automobile spaces, which is less than the amount required by the City's Zoning Code. Of these 169 spaces, three will be set aside for the community leasing office and 166 will be reserved for community residents and guests.

PROJECT SITE PLAN AND ACCESS

Figure 1 shows the Project site plan. The Project site would be accessed via La Veta Avenue and Fairway Drive. The Project proposes to maintain the existing western driveway along La Veta Avenue as the primary site driveway. The existing middle driveway along Fairway Drive, which currently provides access to a small parking and loading area, will be maintained and will provide secondary access to the Project site. The

existing driveways at the northeast, southwest, and southeast corners of the Project site will be removed as part of the Project. All parking areas on the Project site can be accessed via both the La Veta Avenue and Fairway Drive driveways.

PROJECT TRIP GENERATION

Trip generation rates from Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition, 2017) and empirical driveway counts collected at the Project site driveways in January 2019 were utilized to determine the Project trip generation. The trip generation equations and rates in the ITE manual are nationally recognized and are used as the basis for most transportation-related studies conducted in the City and the surrounding region. Information was obtained from the *Trip Generation Manual* for ITE Land Use Code (LUC) 252 – Senior Housing (Attached). The General Urban/Suburban rates were used, which are based on data collected at sites with little, if any, transit and other alternative mode availability. To be conservative, the Project trip generation does not include transit/walk-in or pass-by adjustments.

To determine the trip generation of the existing rehabilitation center use, comprehensive trip generation surveys of vehicle traffic entering and exiting the parking and loading areas of the Project site were used. The surveys were conducted on Tuesday, January 7 and Wednesday, January 8, 2020 between the hours of 6:00 AM (one hour before the facility opens at 7:00 AM) and 7:00 PM (one hour after the facility closes at 6:00 PM). The timing of these counts permitted the observation of vehicles entering the facility prior to opening, and exiting the facility after closing. Therefore, it is assumed that all trips generated by the rehabilitation center are captured within the count data. The driveway count data sheets are provided in Attachment B.

Inbound and outbound vehicular traffic volumes were collected at the five driveways during 15-minute intervals. Using the 15-minute count data, the hourly trip generation was determined by combining 15-minutes volumes for each 60 minute period during the count period (6:00 AM – 7:00 PM). The hourly volumes for the two count days were averaged and the two-day average hourly volumes were then reviewed to determine the peak hour trip generation occurring during the AM and PM peak periods. Per the City's Circulation Element, the AM and PM peak periods occur between 7:00 AM and 9:00 AM and 4:00 PM and 6:00 PM, respectively. The AM and PM peak hour trip generation for the existing uses on the Project site are shown in Table 1 and the two-day average hourly trip generation for the Project site is provided in Attachment B. As shown, the existing uses on the Project site generate an average of 125 trips (83 inbound, 42 outbound) during the AM peak and 48 trips (10 inbound, 38 outbound) during the PM peak hour. Between the hours of 6:00 AM and 7:00 PM, the existing uses generate an average of 876 trips.

Table 1
Existing Site Empirical Trip Generation

	Daily (6:00 AM – 7:00 PM)	AM Peak Hour (8:00 -9:00 AM)			PM Peak Hour (4:00- 5:00 PM)		
		In	Out	Total	In	Out	Total
Trips	876	83	42	125	10	38	48

As the existing senior affordable housing development on the Project site is accessed by the same driveways as the rehabilitation center use, the trip generation estimates from the empirical counts had to be adjusted to remove trips associated with the existing senior housing development. The ITE trip generation rates from

the *Trip Generation Manual* for LUC 252 were applied to the existing senior affordable housing use. Since the empirical driveway counts were taken between 6:00 AM and 7:00 PM, the existing senior housing use daily trip generation, based on ITE rates, had to be adjusted to account only for trips during the count period. The adjustment of daily trips was applied based on the percentage of daily trips occurring during each hour of the day for LUC 252 provided in Appendix A of the Residential Use section of the *Trip Generation Manual*. Based on these percentages, 18.5 percent of daily trips associated with a senior housing development occur between the hours of 7:00 PM and 6:00 AM. With this adjustment, the existing senior affordable housing development is estimated to generate 121 vehicle trips between 6:00 AM and 7:00 PM; 8 trips during the AM peak hour; and 10 trips during the PM peak hour.

The trips associated with the existing senior affordable housing use were then subtracted from the daily and peak hour empirical trip generation for the existing uses on the Project site to determine the trips associated with the existing rehabilitation center use. The rehabilitation center use is estimated to generate 755 daily trips, with 177 and 38 trips during the AM and PM peak hours, respectively.

The trip generation rates and calculated Project trip generation are shown in Table 1 below. Applying these unadjusted General Urban/Suburban trip rates and existing use credit for the rehabilitation center use, the Project is anticipated to generate -141 net daily trips, including -84 net AM peak hour trips and 5 net PM peak hour trips.

Table 1 – Trip Generation Rates and Calculations

Land Use	ITE Code	Intensity[2]	Average Weekday	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Generation Rates									
Senior Adult Housing - Attached	252	1 du	3.70	35%	65%	0.20	55%	45%	0.26
Trip Generation Summary									
Description		**Size**	**Average Weekday**	**AM Peak Hour**			**PM Peak Hour**		
				In	**Out**	**Total**	**In**	**Out**	**Total**
PROPOSED USES									
Residential									
Senior Adult Housing (Attached)		166 du	614	12	21	33	24	19	43
Proposed Project Trips			**614**	**12**	**21**	**33**	**24**	**19**	**43**
EXISTING USES									
Existing Site Driveway Counts[3]			876	83	42	125	10	38	48
Residential									
Senior Adult Housing (Attached)		40 du	148	3	5	8	6	4	10
Adjustment for Trips Occuring Outside Count Period[4]			-27	0	0	0	0	0	0
Senior Adult Housing (Attached) for Trips Occurring during Driveway Count Period			121	3	5	8	6	4	10
Medical									
Rehabilitation Center[3]		36,410 sf	755	80	37	117	4	34	38
Existing Project Trips			**755**	**80**	**37**	**117**	**4**	**34**	**38**
Net Project Trips			**-141**	**-68**	**-16**	**-84**	**20**	**-15**	**5**

Notes:

1) ITE *Trip Generation Manual* (10th Edition, 2017) trip generation rates and directional distributions applied for Land Use Codes 252 (Senior Housing [Attached]) The General Urban/Suburban setting was selected as most appropriate for the Project location.
2) du = Dwelling Units; ksf = Thousands of Square Feet of Gross Leasable Floor Area or Gross Floor Area.
3) Driveway counts collected at the Project site driveway locations were used to develop the trip generation of the existing rehabilitaion center which will be removed as part of the Project. The site is presently occupied by an approimately 36,410 square feet rehabilitation center and a 40 unit senior affordable housing development, which will remain on-site. Adjustments were made to the driveway counts to isolate only trips associated with the rehabilitation center use. It is assumed that all rehabilitation center trips occur within the count window between 6 AM to 7 PM.
4) Adjustments made to the daily trip generation estimate for the existing senior housing development to account for trips occuring outside of the empirical driveway count time period (6 AM to 7 PM). Appendix A of the Residential Use section of the ITE *Trip Genation Manual* (10th Edition, 2017) presents the percentage of daily trips that occur during each hour of the day. Based on these percenteages, an 18.5% reduction was applied to account for trips occuring between 7 PM and 6AM.

TRIP DISTRIBUTION AND ASSIGNMENT

The Project trip distribution is based on are the nature of the Project uses, existing traffic patterns, characteristics of the surrounding roadway system, geographic location of the Project site and its proximity to freeways and major travel routes, employment centers to which residents would likely be attracted, and the various regions generating visitors. The resulting Project distribution percentages are shown in Attachment C.

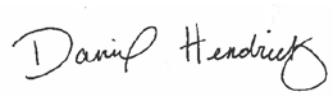
PRELIMINARY TRAFFIC ANALYSIS CONCLUSIONS

As demonstrated by the Project trip generation and the Project distribution percentages, it is anticipated that the Project will not generate in excess of 100 net vehicle trips during the AM and PM peak hours and the Project will not add 1,600 daily trips to the arterial network. Additionally, the Project will not add 51 or more trips to nearby intersections during the peak hours. Thus, per the *City of Orange Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (July 2020), the Project is not anticipated to require further level of service (LOS) analysis. Additionally, since the Project consists entirely of affordable housing, the Project is expected to result in a less-than-significant vehicle miles traveled (VMT) impact and is screened from conducting further VMT analysis.

SIGNATURES

The above preliminary traffic analysis was prepared to determine the level of additional analysis required for the Project. Should you have any questions, please call (310) 473-6508.

Recommended by:



January 11, 2021

Consultants Representative

Date

Approved by:

City of Orange

Date

ATTACHMENT A
CONCEPTUAL PROJECT SITE PLAN

ATTACHMENT A

1/10/2021

FN: LaVeta(1800 E)RehabOrange\SITE-PLAN

CONCEPTUAL PROJECT SITE PLAN

CRAIN

ATTACHMENT B
EMPIRICAL DRIVEWAY COUNT DATA SHEETS AND EXISTING USE TWO-DAY AVERAGE HOURLY TRIP GENERATION

City:	Orange
Location:	Western Driveway on La Veta Avenue
Date:	Tuesady 1/7/2020
Count Type:	Driveway

	Entering	Exiting	Total
6:00	0	0	0
6:15	1	0	1
6:30	3	0	3
6:45	3	0	3
7:00	11	0	11
7:15	27	0	27
7:30	17	0	17
7:45	5	0	5
8:00	14	1	15
8:15	22	0	22
8:30	23	0	23
8:45	16	0	16
9:00	14	0	14
9:15	15	1	16
9:30	5	0	5
9:45	12	0	12
10:00	11	2	13
10:15	7	1	8
10:30	1	0	1
10:45	2	0	2
11:00	2	0	2
11:15	1	2	3
11:30	0	0	0
11:45	2	1	3
12:00	2	0	2
12:15	8	1	9
12:30	6	1	7
12:45	8	0	8
13:00	7	0	7
13:15	8	1	9
13:30	8	2	10
13:45	9	0	9
14:00	9	0	9
14:15	6	0	6
14:30	10	0	10
14:45	12	0	12
15:00	12	0	12
15:15	9	0	9
15:30	19	2	21
15:45	3	1	4
16:00	3	2	5
16:15	3	0	3
16:30	0	0	0
16:45	2	0	2
17:00	4	0	4
17:15	1	0	1
17:30	0	0	0
17:45	2	0	2
18:00	0	0	0
18:15	2	0	2
18:30	0	0	0
18:45	0	0	0
TOTAL	**367**	**18**	**385**

City:	Orange
Location:	Eastern Driveway on La Veta Avenue
Date:	Tuesady 1/7/2020
Count Type:	Driveway

	Entering	Exiting	Total
6:00	0	0	0
6:15	0	1	1
6:30	0	0	0
6:45	0	0	0
7:00	1	5	6
7:15	1	5	6
7:30	3	4	7
7:45	0	4	4
8:00	3	6	9
8:15	2	4	6
8:30	0	8	8
8:45	3	5	8
9:00	2	7	9
9:15	0	4	4
9:30	0	7	7
9:45	0	7	7
10:00	0	8	8
10:15	0	6	6
10:30	0	6	6
10:45	1	4	5
11:00	0	7	7
11:15	1	5	6
11:30	0	1	1
11:45	0	4	4
12:00	0	6	6
12:15	0	2	2
12:30	2	3	5
12:45	0	3	3
13:00	0	7	7
13:15	0	4	4
13:30	0	4	4
13:45	0	7	7
14:00	1	11	12
14:15	1	12	13
14:30	3	16	19
14:45	0	8	8
15:00	3	29	32
15:15	0	23	23
15:30	0	14	14
15:45	0	12	12
16:00	0	18	18
16:15	0	7	7
16:30	0	3	3
16:45	0	2	2
17:00	0	4	4
17:15	0	4	4
17:30	0	1	1
17:45	0	7	7
18:00	0	0	0
18:15	0	3	3
18:30	0	0	0
18:45	0	3	3
TOTAL	**27**	**321**	**348**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	Orange
Location:	Western Driveway on Fairway Drive
Date:	Tuesady 1/7/2020
Count Type:	Driveway

	Entering	Exiting	Total
6:00	0	0	0
6:15	0	1	1
6:30	1	0	1
6:45	1	0	1
7:00	1	2	3
7:15	1	0	1
7:30	0	0	0
7:45	2	0	2
8:00	0	0	0
8:15	0	1	1
8:30	2	0	2
8:45	1	0	1
9:00	1	1	2
9:15	2	0	2
9:30	0	1	1
9:45	0	0	0
10:00	0	1	1
10:15	2	0	2
10:30	0	0	0
10:45	1	0	1
11:00	0	0	0
11:15	0	0	0
11:30	1	3	4
11:45	2	1	3
12:00	1	1	2
12:15	0	0	0
12:30	0	1	1
12:45	0	0	0
13:00	0	0	0
13:15	2	1	3
13:30	1	0	1
13:45	1	2	3
14:00	0	0	0
14:15	0	0	0
14:30	0	0	0
14:45	0	1	1
15:00	2	2	4
15:15	0	1	1
15:30	0	1	1
15:45	0	0	0
16:00	0	2	2
16:15	1	0	1
16:30	0	0	0
16:45	0	1	1
17:00	0	1	1
17:15	0	1	1
17:30	0	0	0
17:45	1	0	1
18:00	0	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
TOTAL	**27**	**26**	**53**

City:	Orange
Location:	Central Driveway on Fairway Drive
Date:	Tuesady 1/7/2020
Count Type:	Driveway

	Entering	Exiting	Total
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	0	0	0
7:15	0	0	0
7:30	0	0	0
7:45	1	0	1
8:00	0	0	0
8:15	0	0	0
8:30	0	0	0
8:45	0	0	0
9:00	0	1	1
9:15	0	0	0
9:30	1	1	2
9:45	0	0	0
10:00	0	0	0
10:15	0	0	0
10:30	1	1	2
10:45	0	0	0
11:00	1	1	2
11:15	0	0	0
11:30	1	0	1
11:45	0	0	0
12:00	1	2	3
12:15	0	0	0
12:30	0	0	0
12:45	0	0	0
13:00	0	0	0
13:15	0	0	0
13:30	0	0	0
13:45	0	0	0
14:00	0	0	0
14:15	0	0	0
14:30	0	0	0
14:45	0	0	0
15:00	0	1	1
15:15	0	0	0
15:30	0	0	0
15:45	0	0	0
16:00	0	0	0
16:15	0	0	0
16:30	0	0	0
16:45	0	0	0
17:00	0	0	0
17:15	0	0	0
17:30	0	0	0
17:45	0	0	0
18:00	0	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
TOTAL	**6**	**7**	**13**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	Orange
Location:	Eastern Driveway on Fairway Drive
Date:	Tuesady 1/7/2020
Count Type:	Driveway

	Entering	Exiting	Total
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	0	0	0
7:15	0	0	0
7:30	0	2	2
7:45	0	3	3
8:00	0	2	2
8:15	0	2	2
8:30	0	7	7
8:45	0	3	3
9:00	0	10	10
9:15	0	3	3
9:30	0	3	3
9:45	0	1	1
10:00	1	0	1
10:15	0	2	2
10:30	0	0	0
10:45	0	0	0
11:00	0	1	1
11:15	0	0	0
11:30	0	1	1
11:45	0	0	0
12:00	0	0	0
12:15	0	0	0
12:30	1	1	2
12:45	0	1	1
13:00	0	1	1
13:15	0	1	1
13:30	0	1	1
13:45	0	1	1
14:00	1	2	3
14:15	0	3	3
14:30	0	3	3
14:45	0	4	4
15:00	0	0	0
15:15	1	1	2
15:30	0	5	5
15:45	0	2	2
16:00	0	3	3
16:15	0	0	0
16:30	0	0	0
16:45	0	0	0
17:00	0	0	0
17:15	1	0	1
17:30	0	0	0
17:45	0	0	0
18:00	0	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
TOTAL	**5**	**69**	**74**

City:	Orange
Location:	TOTAL DRIVEWAYS
Date:	Tuesady 1/7/2020
Count Type:	Driveway

	Entering	Exiting	Total
6:00	0	0	0
6:15	1	2	3
6:30	4	0	4
6:45	4	0	4
7:00	13	7	20
7:15	29	5	34
7:30	20	6	26
7:45	8	7	15
8:00	17	9	26
8:15	24	7	31
8:30	25	15	40
8:45	20	8	28
9:00	17	19	36
9:15	17	8	25
9:30	6	12	18
9:45	12	8	20
10:00	12	11	23
10:15	9	9	18
10:30	2	7	9
10:45	4	4	8
11:00	3	9	12
11:15	2	7	9
11:30	2	5	7
11:45	4	6	10
12:00	4	9	13
12:15	8	3	11
12:30	9	6	15
12:45	8	4	12
13:00	7	8	15
13:15	10	7	17
13:30	9	7	16
13:45	10	10	20
14:00	11	13	24
14:15	7	15	22
14:30	13	19	32
14:45	12	13	25
15:00	17	32	49
15:15	10	25	35
15:30	19	22	41
15:45	3	15	18
16:00	3	25	28
16:15	4	7	11
16:30	0	3	3
16:45	2	3	5
17:00	4	5	9
17:15	2	5	7
17:30	0	1	1
17:45	3	7	10
18:00	0	0	0
18:15	2	3	5
18:30	0	0	0
18:45	0	3	3
TOTAL	**432**	**441**	**873**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	Orange
Location:	Western Driveway on La Veta Avenue
Date:	Wednesday 1/8/2020
Count Type:	Driveway

	Entering	Exiting	Total
6:00	0	0	0
6:15	2	0	2
6:30	2	0	2
6:45	4	0	4
7:00	11	0	11
7:15	22	0	22
7:30	15	0	15
7:45	17	0	17
8:00	16	0	16
8:15	11	1	12
8:30	22	0	22
8:45	19	0	19
9:00	13	1	14
9:15	14	0	14
9:30	11	1	12
9:45	14	0	14
10:00	9	0	9
10:15	2	0	2
10:30	4	0	4
10:45	1	0	1
11:00	3	2	5
11:15	1	1	2
11:30	5	1	6
11:45	4	0	4
12:00	2	1	3
12:15	8	0	8
12:30	10	0	10
12:45	13	0	13
13:00	5	0	5
13:15	9	0	9
13:30	6	0	6
13:45	9	0	9
14:00	11	2	13
14:15	11	0	11
14:30	7	0	7
14:45	10	0	10
15:00	14	0	14
15:15	4	0	4
15:30	11	1	12
15:45	8	0	8
16:00	4	1	5
16:15	2	0	2
16:30	1	0	1
16:45	1	0	1
17:00	1	0	1
17:15	1	3	4
17:30	0	0	0
17:45	2	0	2
18:00	2	2	4
18:15	3	1	4
18:30	0	0	0
18:45	3	0	3
TOTAL	**380**	**18**	**398**

City:	Orange
Location:	Eastern Driveway on La Veta Avenue
Date:	Wednesday 1/8/2020
Count Type:	Driveway

	Entering	Exiting	Total
6:00	0	0	0
6:15	0	1	1
6:30	0	0	0
6:45	0	1	1
7:00	1	3	4
7:15	2	9	11
7:30	3	7	10
7:45	0	0	0
8:00	1	6	7
8:15	1	5	6
8:30	2	8	10
8:45	2	4	6
9:00	1	16	17
9:15	0	5	5
9:30	0	5	5
9:45	0	5	5
10:00	0	11	11
10:15	0	3	3
10:30	0	5	5
10:45	0	4	4
11:00	0	6	6
11:15	1	5	6
11:30	1	4	5
11:45	0	2	2
12:00	0	6	6
12:15	0	5	5
12:30	1	2	3
12:45	0	5	5
13:00	0	4	4
13:15	1	2	3
13:30	0	6	6
13:45	0	13	13
14:00	0	20	20
14:15	0	8	8
14:30	2	13	15
14:45	1	6	7
15:00	0	21	21
15:15	0	21	21
15:30	0	10	10
15:45	0	14	14
16:00	0	27	27
16:15	0	1	1
16:30	0	3	3
16:45	0	0	0
17:00	0	3	3
17:15	1	1	2
17:30	2	2	4
17:45	0	4	4
18:00	0	2	2
18:15	0	3	3
18:30	0	1	1
18:45	0	2	2
TOTAL	**23**	**320**	**343**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	Orange
Location:	Western Driveway on Fairway Drive
Date:	Wednesday 1/8/2020
Count Type:	Driveway

	Entering	Exiting	Total
6:00	0	1	1
6:15	1	1	2
6:30	0	0	0
6:45	1	1	2
7:00	1	1	2
7:15	2	1	3
7:30	0	1	1
7:45	2	0	2
8:00	1	0	1
8:15	2	0	2
8:30	0	1	1
8:45	1	0	1
9:00	0	0	0
9:15	1	1	2
9:30	1	1	2
9:45	0	0	0
10:00	0	0	0
10:15	1	0	1
10:30	0	2	2
10:45	1	1	2
11:00	0	0	0
11:15	0	0	0
11:30	0	0	0
11:45	1	2	3
12:00	0	0	0
12:15	0	0	0
12:30	1	1	2
12:45	0	0	0
13:00	2	0	2
13:15	1	0	1
13:30	0	0	0
13:45	1	1	2
14:00	1	1	2
14:15	0	1	1
14:30	0	0	0
14:45	0	0	0
15:00	0	1	1
15:15	0	1	1
15:30	0	1	1
15:45	0	2	2
16:00	0	1	1
16:15	0	2	2
16:30	1	1	2
16:45	1	0	1
17:00	0	0	0
17:15	0	0	0
17:30	0	0	0
17:45	0	0	0
18:00	0	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
TOTAL	**24**	**27**	**51**

City:	Orange
Location:	Central Driveway on Fairway Drive
Date:	Wednesday 1/8/2020
Count Type:	Driveway

	Entering	Exiting	Total
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	0	0	0
7:15	0	0	0
7:30	0	0	0
7:45	0	0	0
8:00	0	0	0
8:15	0	0	0
8:30	0	0	0
8:45	0	0	0
9:00	0	0	0
9:15	1	0	1
9:30	0	1	1
9:45	1	1	2
10:00	2	0	2
10:15	1	2	3
10:30	0	1	1
10:45	0	0	0
11:00	0	0	0
11:15	0	0	0
11:30	0	0	0
11:45	0	0	0
12:00	0	0	0
12:15	1	1	2
12:30	0	0	0
12:45	0	0	0
13:00	0	0	0
13:15	1	1	2
13:30	0	0	0
13:45	0	0	0
14:00	0	0	0
14:15	0	0	0
14:30	0	0	0
14:45	0	0	0
15:00	0	0	0
15:15	0	0	0
15:30	0	0	0
15:45	0	0	0
16:00	0	0	0
16:15	0	0	0
16:30	0	0	0
16:45	0	0	0
17:00	0	0	0
17:15	0	0	0
17:30	0	0	0
17:45	0	0	0
18:00	0	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
TOTAL	**7**	**7**	**14**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	Orange
Location:	Eastern Driveway on Fairway Drive
Date:	Wednesday 1/8/2020
Count Type:	Driveway

	Entering	Exiting	Total
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	1	0	1
7:15	0	1	1
7:30	0	4	4
7:45	0	2	2
8:00	0	2	2
8:15	1	2	3
8:30	0	7	7
8:45	0	9	9
9:00	1	3	4
9:15	0	2	2
9:30	0	4	4
9:45	0	1	1
10:00	0	1	1
10:15	1	2	3
10:30	0	0	0
10:45	0	0	0
11:00	0	0	0
11:15	0	0	0
11:30	0	1	1
11:45	0	0	0
12:00	0	0	0
12:15	0	0	0
12:30	0	0	0
12:45	0	0	0
13:00	0	2	2
13:15	0	2	2
13:30	0	1	1
13:45	0	0	0
14:00	0	1	1
14:15	0	3	3
14:30	0	2	2
14:45	0	5	5
15:00	0	4	4
15:15	0	1	1
15:30	0	1	1
15:45	0	1	1
16:00	0	1	1
16:15	0	1	1
16:30	1	0	1
16:45	0	0	0
17:00	0	0	0
17:15	0	0	0
17:30	0	0	0
17:45	0	0	0
18:00	0	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
TOTAL	**5**	**66**	**71**

City:	Orange
Location:	TOTAL DRIVEWAYS
Date:	Wednesday 1/8/2020
Count Type:	Driveway

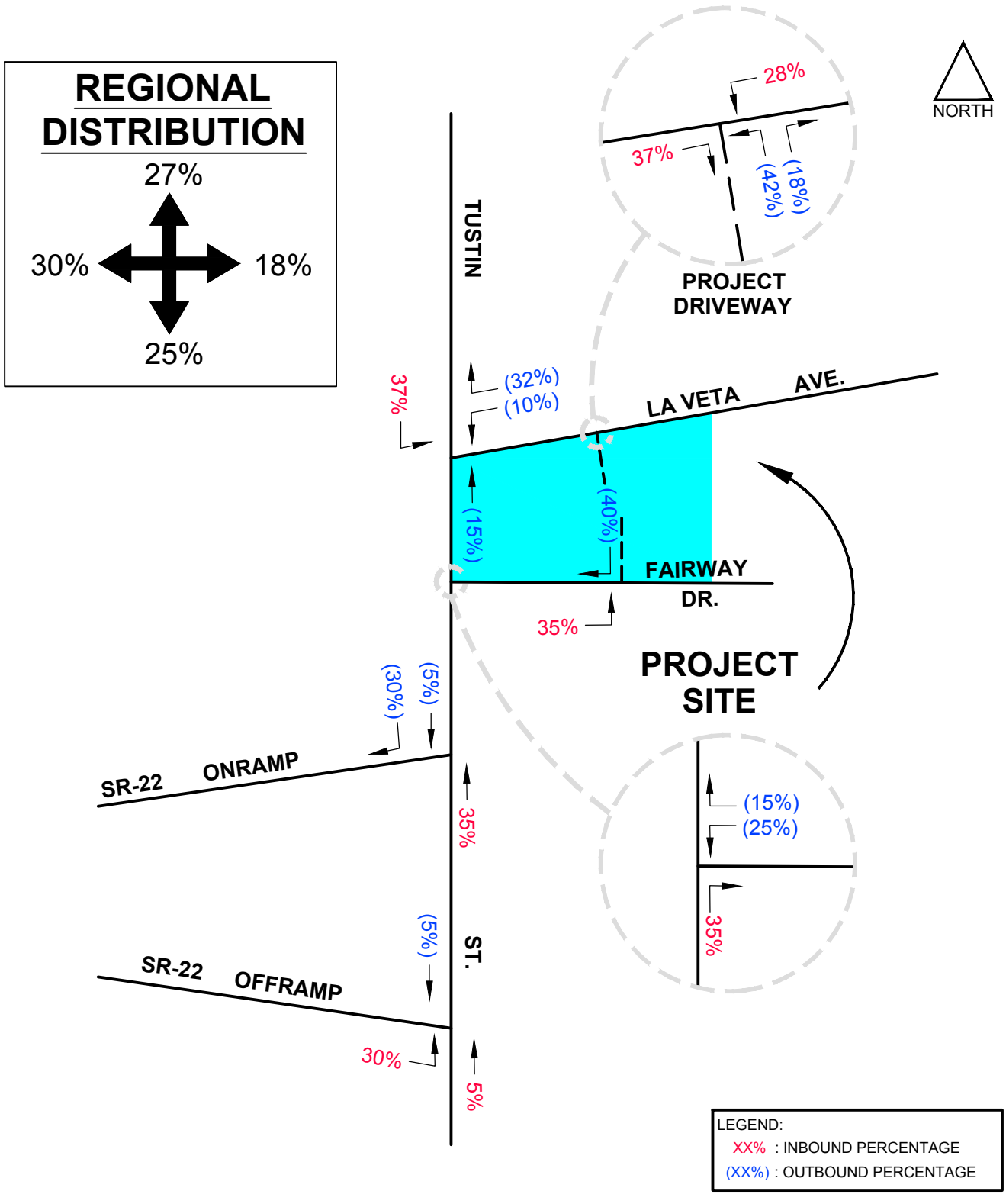
	Entering	Exiting	Total
6:00	0	1	1
6:15	3	2	5
6:30	2	0	2
6:45	5	2	7
7:00	14	4	18
7:15	26	11	37
7:30	18	12	30
7:45	19	2	21
8:00	18	8	26
8:15	15	8	23
8:30	24	16	40
8:45	22	13	35
9:00	15	20	35
9:15	16	8	24
9:30	12	12	24
9:45	15	7	22
10:00	11	12	23
10:15	5	7	12
10:30	4	8	12
10:45	2	5	7
11:00	3	8	11
11:15	2	6	8
11:30	6	6	12
11:45	5	4	9
12:00	2	7	9
12:15	9	6	15
12:30	12	3	15
12:45	13	5	18
13:00	7	6	13
13:15	12	5	17
13:30	6	7	13
13:45	10	14	24
14:00	12	24	36
14:15	11	12	23
14:30	9	15	24
14:45	11	11	22
15:00	14	26	40
15:15	4	23	27
15:30	11	13	24
15:45	8	17	25
16:00	4	30	34
16:15	2	4	6
16:30	3	4	7
16:45	2	0	2
17:00	1	3	4
17:15	2	4	6
17:30	2	2	4
17:45	2	4	6
18:00	2	4	6
18:15	3	4	7
18:30	0	1	1
18:45	3	2	5
TOTAL	**439**	**438**	**877**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

ATTACHMENT B
REHABILITATION INSTITUTE OF SOUTHERN CALIFORNIA
TWO-DAY AVERAGE HOURLY TRIP GENERATION

	Hour Beginning At	Inbound	Outbound	Total	
	6:00	10	4	14	
	6:15	23	9	32	
	6:30	49	15	64	
	6:45	65	24	89	
AM PEAK PERIOD	7:00	74	27	101	
	7:15	78	30	108	
	7:30	70	30	100	
	7:45	75	36	111	
	8:00	83	42	125	← AM Peak Hour
	8:15	81	53	134	← Hour of Highest Trip Generation
	8:30	78	54	132	
	8:45	63	50	113	
	9:00	55	47	102	
	9:15	51	39	90	
	9:30	41	39	80	
	9:45	35	35	70	
	10:00	25	32	57	
	10:15	16	29	45	
	10:30	11	27	38	
	10:45	12	25	37	
	11:00	14	26	40	
	11:15	14	25	39	
	11:30	20	23	43	
	11:45	27	22	49	
	12:00	33	22	55	
	12:15	37	21	58	
	12:30	39	22	61	
	12:45	36	25	61	
	13:00	36	32	68	
	13:15	40	44	84	
	13:30	38	51	89	
	13:45	42	61	103	
	14:00	43	61	104	
	14:15	47	72	119	
	14:30	45	82	127	
	14:45	49	83	132	
	15:00	43	87	130	
	15:15	31	85	116	
	15:30	27	67	94	
	15:45	14	53	67	
PM PEAK PERIOD	16:00	10	38	48	← PM Peak Hour
	16:15	9	15	24	
	16:30	8	14	22	
	16:45	8	12	20	
	17:00	8	16	24	
	17:15	7	14	21	
	17:30	7	13	20	
	17:45	6	12	18	
	18:00	5	9	14	
	18:15	4	7	11	
	18:30	2	3	5	
	18:45	2	3	5	
	DAILY TOTALS	**436**	**440**	**876**	

ATTACHMENT C
PROJECT TRIP DISTRIBUTION PERCENTAGES



ATTACHMENT C

1/10/2021

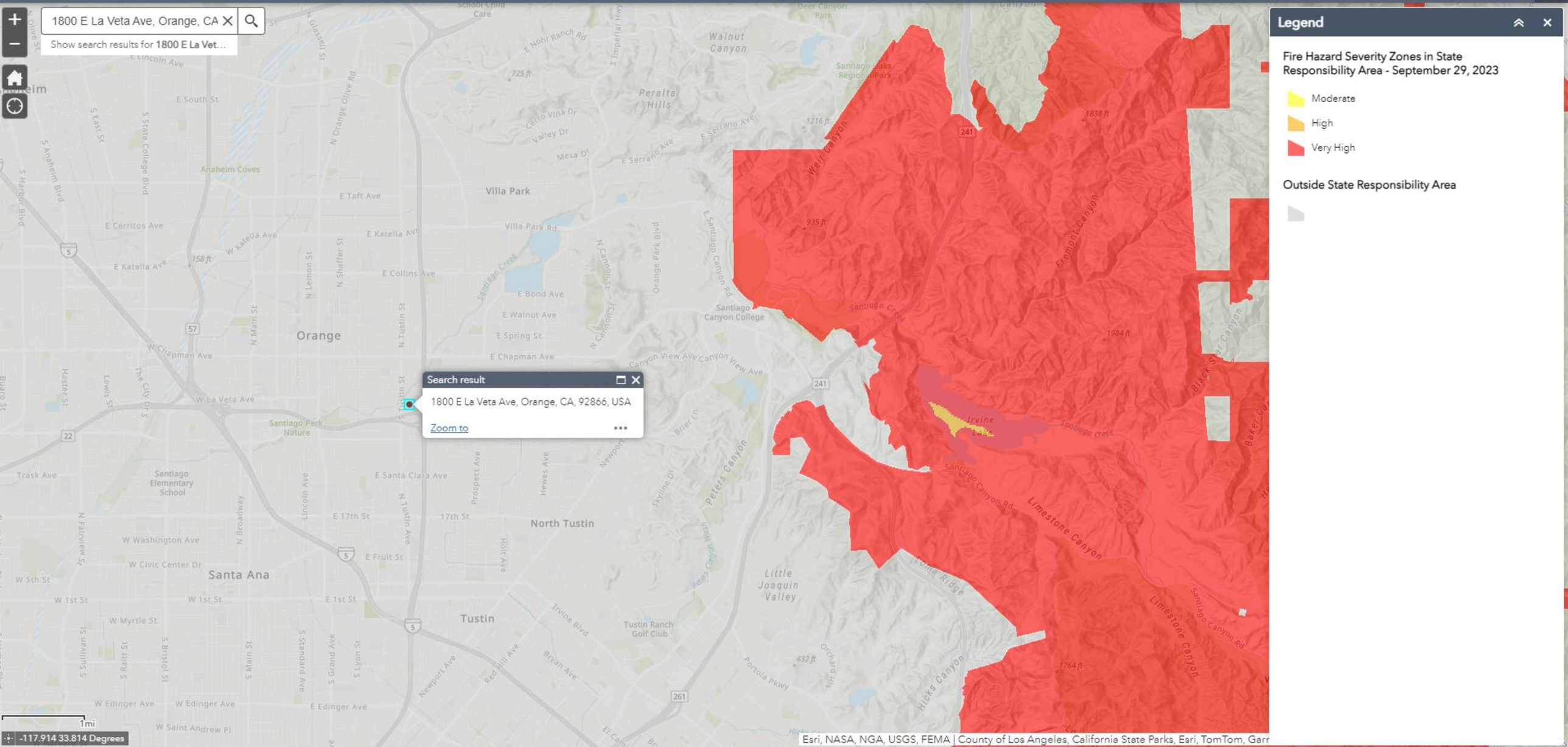
FN: LaVeta(1800 E)RehabOrange\PROJ-DIST

PROJECT TRIP DISTRIBUTION PERCENTAGES

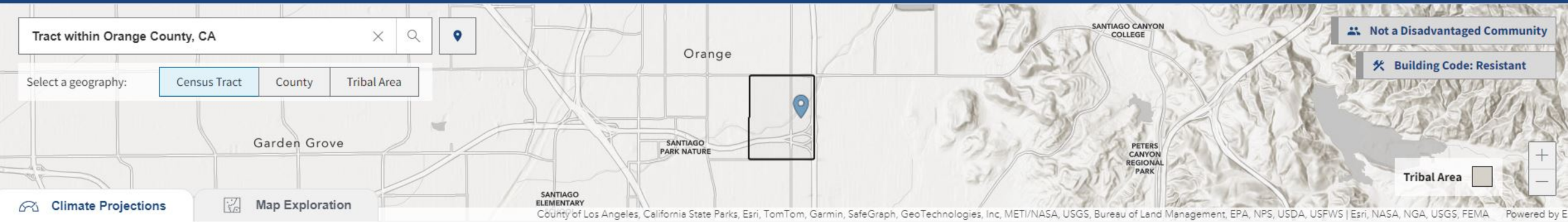
Attachment 20. CalFIRE Fire Hazard Severity Zones Map

Fire Hazard Severity Zones in State Responsibility Area

September 29 2023 - **Effective April 1 2024**



Attachment 21. Climate Mapping for Resilience and Adaptation



Climate Hazards

- Extreme Heat
- Drought
- Wildfire
- Flooding
- Coastal Inundation

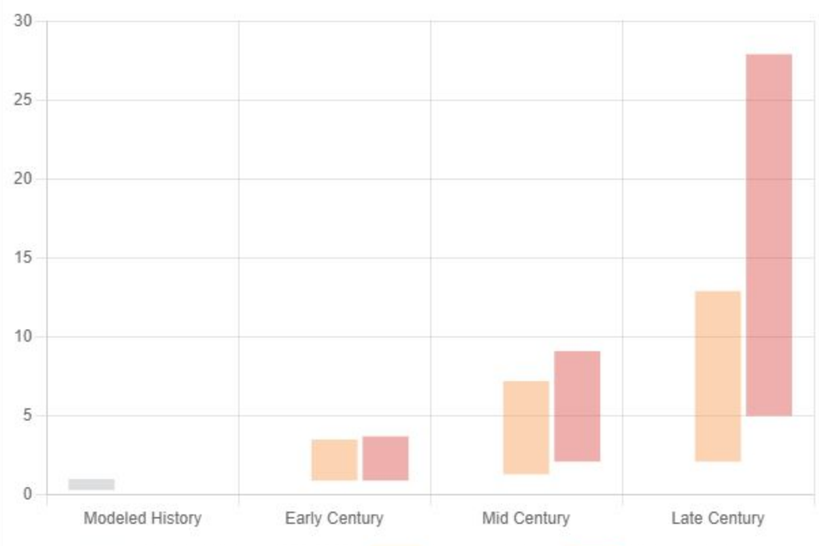
Climate Projections for Early Century (2015–2044)

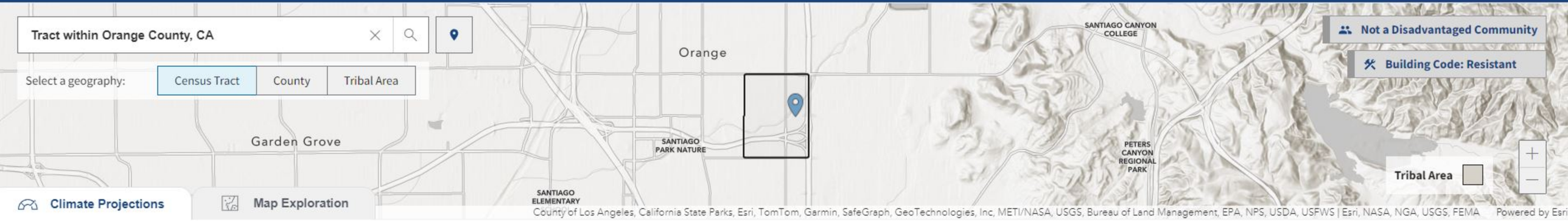
	Lower emissions	Higher emissions
Annual days with maximum temperature > 90°F	22.5 Days + 9.3 since 1976-2005	23.7 Days + 10.5 since 1976-2005
Annual days with maximum temperature > 95°F	7.1 Days + 3.6 since 1976-2005	7.6 Days + 4.1 since 1976-2005
Annual days with maximum temperature > 100°F	1.7 Days + 1.0 since 1976-2005	1.8 Days + 1.2 since 1976-2005
Annual days with maximum temperature > 105°F	0.3 Days + 0.2 since 1976-2005	0.3 Days + 0.2 since 1976-2005
Annual single highest maximum temperature	98.9 °F + 2.5 since 1976-2005	99.2 °F + 2.8 since 1976-2005
Annual highest maximum temperature averaged over a 5-day period	92.7 °F + 2.5 since 1976-2005	92.9 °F + 2.7 since 1976-2005
Cooling-degree days (CDD)	1,068.3 Degree Days	1,119.3 Degree Days

Indicator Details

Chart Table

Annual days with maximum temperature > 100°F





Climate Hazards

- Extreme Heat
- Drought
- Wildfire
- Flooding
- Coastal Inundation

Climate Projections for Early Century (2015–2044)

	Lower emissions	Higher emissions
Average annual total precipitation	13.9 Inches - 0.1 since 1976-2005	14.3 Inches + 0.3 since 1976-2005
Days per year with precipitation (wet days)	52.1 Days - 1.9 since 1976-2005	52.0 Days - 1.9 since 1976-2005
Days per year with no precipitation (dry days)	313.1 Days + 1.9 since 1976-2005	313.1 Days + 1.9 since 1976-2005
Maximum number of consecutive dry days	123.0 Days + 2.0 since 1976-2005	123.9 Days + 2.9 since 1976-2005
Annual days with maximum temperature > 90°F	22.5 Days + 9.3 since 1976-2005	23.7 Days + 10.5 since 1976-2005
Annual days with maximum temperature > 100°F	1.7 Days + 1.0 since 1976-2005	1.8 Days + 1.2 since 1976-2005

Indicator Details

Chart Table

Average annual total precipitation