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December 5, 2024

VIA E-MAIL

Chris Veirs
Principal Planner
City of Claremont
207 Harvard Avenue
Claremont, CA 91711

Re: 840 S. Indian Hill Boulevard - AB 1633 Notice

Dear Mr. Veirs:

This firm represents Claremont 2 Inv, LLC (“Claremont 2”) in connection with its proposed 840 S. Indian Hill Boulevard project in the City of Claremont. Claremont 2 submitted a formal entitlement application on July 25, 2024, which was deemed complete pursuant to the Permit Streamlining Act (“PSA”) on August 25, 2024. Pursuant to Government Code Section 65589.5(h)(6)(D), as added by Assembly Bill 1633 (“AB 1633”), this letter (the “AB 1633 Notice”) provides written, formal notice that Claremont 2 has submitted substantial evidence that the project qualifies for at least one (and likely more) exemptions from the California Environmental Quality Act (“CEQA”).

AB 1633 was added to the Housing Accountability Act (“HAA”), which was enacted with the goal of “meaningfully and effectively curbing the capability of local governments to deny, reduce the density for, or render infeasible housing development projects.” (*California Renters Legal Advocacy & Education Fund v. City of San Mateo* (2021) 68 Cal.App.5th 820, 830-831.) Specifically, AB 1633 amended the HAA to expand the definition of “disapprove the housing development project” to include instances where, for qualifying projects, a local agency either (a) fails to “make a determination of whether the project is exempt” from CEQA within ninety (90) days of the applicant’s written notice or (b) concludes that the project is not exempt without substantial evidence supporting that determination. (Govt. Code § 65589.5(h)(6)(D)(i) and (ii).)

As discussed below, the project meets all applicable criteria and is eligible under AB 1633 and there is substantial evidence that the project is exempt under CEQA’s Class 32 exemption (the infill development exemption). Also, because this notice is provided after “60 days from the date on which the project application has been determined or deemed to be complete” under the PSA, Claremont 2’s written notice is timely. Therefore, Claremont 2 respectfully requests that the City (1) review the attached materials and (2) formally determine

that the project is exempt from CEQA no more than 90 days after receipt of this AB 1633 Notice.

I. AB 1633 Eligibility

The project meets the threshold requirements for eligibility under the HAA's CEQA provisions, as enacted through AB 1633.

a. Site Constraints

- i. The project site is not located in the Coastal Zone. It is located in the City of Claremont, which is at the eastern boundary of Los Angeles County, more than 40 miles from the Pacific Ocean.¹ (Govt. Code §§ 65589.5(h)(6)(D)(I)(ia), 65913.4(a)(6)(A).) See Attachment A.
- ii. The site is not prime farmland or farmland of statewide importance.² The site is also not zoned or designated for agricultural production or preservation by a local ballot measure approved by the voters. (Govt. Code §§ 65589.5(h)(6)(D)(I)(ia), 65913.4(a)(6)(B).) See Attachment B.
- iii. The site does not have wetlands as defined by the U.S. Fish and Wildlife Service.³ (Govt. Code §§ 65589.5(h)(6)(D)(I)(ia), 65913.4(a)(6)(C).) The site is developed with urban uses. See Attachment C.
- iv. The site is not located within a mapped Very High Fire Hazard Severity Zone, either a Local Responsibility Area or a State Responsibility Area, per the maps prepared by Department of Forest and Fire Protection.⁴ See Attachment D. (Govt. Code § 65589.5(h)(6)(D)(I)(ib).)

¹ See California Coastal Commission Coastal Zone Boundary Map for Los Angeles County available at <https://www.coastal.ca.gov/maps/czb/>.

² See California Department of Conservation California Important Farmland Finder, which identifies the site as *Urban and Built-Up Land*.

³ See U.S. Fish and Wildlife Service's National Wetlands Inventory, which shows no wetlands on the site. The Wetlands Inventory is available at <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>.

⁴ CalFire LRA and SRA maps available at [https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/new-folder-\(2\)/claremont.pdf?rev=9567d3973c534ef0812deab102cc5ae7&hash=7FB9150AF245476297335BCE95ABC1F6](https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/new-folder-(2)/claremont.pdf?rev=9567d3973c534ef0812deab102cc5ae7&hash=7FB9150AF245476297335BCE95ABC1F6) and https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map-2022/fire-hazard-severity-zones-maps-2022-files/fhsz_county_sra_11x17_2022_losangeles_3.pdf?rev=8332cd92d19a410e80153711bbae4d74&hash=662234F0F323C2F8CCD56EB9BE8F6A35.

- v. The site is not on a hazardous waste site, according to Envirostor and Geotracker.⁵ See Attachment E. (Govt. Code §§ 65589.5(h)(6)(D)(I)(ia), 65913.4(a)(6)(E).)
- vi. The Fault Activity Map of California shows that the site is not in a delineated fault zone. See Attachment F.⁶ (Govt. Code §§ 65589.5(h)(6)(D)(I)(ia), 65913.4(a)(6)(F).) Nevertheless, the project would comply with all applicable California Building Code requirements related to seismic protection, along with any local building standards.
- vii. According to FEMA's National Flood Hazard Layer Viewer, the site is not mapped special flood hazard area subject to inundation by the one percent annual chance of flood. See Attachment G.⁷ (Govt. Code §§ 65589.5(h)(6)(D)(I)(ia), 65913.4(a)(6)(G).)
- viii. According to FEMA's National Flood Hazard Layer Viewer, the site is not in a mapped regulatory floodway. See Attachment H. (Govt. Code §§ 65589.5(h)(6)(D)(I)(ia), 65913.4(a)(6)(H).)
- ix. The site does not contain lands identified for conservation in an adopted natural community conservation plan, habitat conservation plan, or other adopted natural resource protection plan because there are no such plans that cover the site. (Govt. Code §§ 65589.5(h)(6)(D)(I)(ia), 65913.4(a)(6)(I).)
- x. The site is developed with urban uses, including tennis courts and a maintained lawn, and does not contain habitat for protected species identified as candidate, sensitive, or species of special status. See Attachment I and Biological Resources Survey (Exhibit A) included with this notice. (Govt. Code §§ 65589.5(h)(6)(D)(I)(ia), 65913.4(a)(6)(J).)

⁵ Department of Toxic Substances, Envirostor, available at <https://www.envirostor.dtsc.ca.gov/public/map/>. State Water Resources Control Board, GeoTracker, available at <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Sacramento>.

⁶ Fault Activity Map of California available at <https://maps.conservation.ca.gov/cgs/fam/>.

⁷ FEMA National Flood Hazard Viewer available at <https://www.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>.

- xi. According to the National Conservation Easement Database, the site is not under a conservation easement.⁸ See Attachment J. (Govt. Code §§ 65589.5(h)(6)(D)(I)(ia), 65913.4(a)(6)(K).)

b. Location Requirement

The project complies with the location requirements in AB 1633. It is on a legal parcel in an urbanized area (as identified on the US Census Bureau Urbanized Area Reference Map: Los Angeles-Long Beach-Anaheim, CA, and as defined by Public Resources Code § 21071). It also meets two of AB 1633's specified criteria, each of which confer eligibility. First, it is adjoined on three sides by parcels with urban uses.⁹ (Govt. Code § 65589.5(h)(6)(D)(i)(II)(id).) Second, the site is proximately (within one mile) of more than six amenities included on the list in Government Code Section 65589.5, subdivision (h)(D)(ii)(IV)(ib), as follows:

- Super King Market
- Wheeler Park, and Montvue Park
- Montvue Elementary, and Vista Del Valle Elementary
- Claremont Pharmacy
- Tri-State Community Health Center
- Waterwise Community Center & Chino Basin, and Blaisdell Senior Center

(See Attachment K.)

c. Density

The project exceeds the minimum density required to invoke AB 1633, which is 15 dwelling units/acre. (Govt. Code § 65589.5(h)(6)(D)(i)(III).) The project proposes a density of approximately 23.4 units/gross acre (70 dwelling units on 3.0 gross acres).

⁸ National Conservation Easement Database, Mapping Application, available at <https://site.tplgis.org/NCED/planningapp/>.

⁹ The HAA does not define "urban uses" as a term. However, urban uses reflects those uses commonly found in urban areas. For reference, Government Code Section 65912.101 defines "urban uses" as any current or former residential, commercial, public institutional, or public park that is surrounded by other urban uses, parking lot or structure, transit or transportation facility, or retail use. The site adjoins such uses, with a former bus station and gas station to the west, a Motel 6 to the north, and residential uses to the east and south.

d. Eligibility for Exemption

There is substantial evidence in the record that the project is eligible for the exemption in CEQA Guidelines Section 15332 (the “Class 32 Infill Exemption”) and is not barred by any of the exceptions in CEQA Guidelines Section 15300.2. (Govt. Code § 65589.5(h)(6)(D)(i)(IV)(ia)-(ib).)

The project is also independently eligible for an exemption under CEQA Guidelines Section 15183, which exempts projects that are consistent with the development density established by existing zoning, general plan, or community plan policies for which an EIR was certified, except as might be necessary to examine whether there are project-specific effects which are peculiar to the project or the site. (CEQA Guidelines § 15183; see also *Hilltop Group, Inc. v. County of San Diego* (2024) 99 Cal.App.5th 890, 906 [court of appeals classifying § 15183 as an “exemption” and concluding that county board of supervisors improperly required an EIR]; see also *Lucas v. City of Pomona* (2023) 92 Cal.App.5th 508, 538 [recognizing “the exemption under” Guidelines § 15183].)

The project site is identified on the City’s Housing Element Sites Inventory and was rezoned as part of the City’s Housing Element implementation. The City prepared and certified the Environmental Impact Report for the Housing Element Update (“HE EIR”).¹⁰ The HE EIR comprehensively analyzed potential impacts associated with implementation of the Housing Element and, as evidenced by the technical reports provided with this AB 1633 Notice, there are no impacts particular to the project that was not analyzed in the HE EIR.

II. AB 1633 Notice

This AB 1633 Notice provides all of the information required by AB 1633 to serve as the applicant’s written notice under the Housing Accountability Act. (Govt. Code § 65589.5(h)(6)(D)(i)(V)(ia).)

a. Identifying Information Required for a Notice of Exemption (Govt. Code § 65589.5(h)(6)(D)(i)(V)(ia)(Ia))

Brief Description of Project: The project proposes to construct a 70-unit for-sale, townhome development on an approximately 3.0-acre site. The project would consist of 59 market-rate units, 7 moderate-income units, and 4 low-income units. The project primarily proposes three-story units, although two-story units are provided. The project is eligible for the benefits of the State Density Bonus Law (“DBL”), which includes a 5% density bonus (3.3 dwelling units rounded to 4.0 units), one (1)

¹⁰ The Draft HE EIR is available here: <https://files.ceqanet.opr.ca.gov/272894-2/attachment/bmdpX6BZJAfl61BdZvvnSX6pSXHNLG98URQS-wK2vcyXdf4bSjGiUvuhQmLD2UxW6N1ckBUfn0H47Q2L0>. The Final HE EIR is available here: <https://portal.laserfiche.com/Portal/DocView.aspx?id=266668&repo=r-634094de>.

concession/incentive, unlimited waivers of development standards that preclude the project, as proposed, and DBL parking standards. The primary entry to the project would be provided from W. American Avenue. The project provides 151 parking spaces, exceeding required parking. The project site is identified on the City's Housing Element Site Inventory.

A complete site plan was submitted to the City on July 25, 2024.

Location of the Project: The project site is 840 S. Indian Hill Boulevard, Claremont, California, 91711.



Applicant's Name: The applicant is Claremont 2 Inv. LLC. The applicant's address is 3121 Michelson Drive, Suite 150, Irvine, CA 92612.

Identity of Person Undertaking the Project, If Different From Applicant: The applicant is undertaking the project.

- b. Citation to CEQA or CEQA Guidelines Section(s) Under Which the Project is Exempt (Govt. Code § 65589.5(h)(6)(D)(i)(V)(ia)(Ib))

The project is eligible for the Class 32 Infill Exemption. (CEQA Guidelines § 15332). The project is a Housing Element Site Inventory site and is also exempt pursuant to CEQA Guidelines Sections 15183 and 15183.3. The project would have no peculiar impacts compared to those analyzed in the HE EIR associated within implementation of the City's Housing Element.

- c. Brief Statement of Reasons Supporting Exemption(s) (Govt. Code § 65589.5(h)(6)(D)(i)(V)(ia)(Ic))

- i. *Class 32 Infill Exemption*: The Class 32 Infill Exemption has five qualifications:
 1. The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
 2. The proposed development occurs within city limits on a site of no more than five acres substantially surrounded by urban uses.
 3. The project site has no value as habitat for endangered, rare or threatened species.
 4. The approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
 5. The site can adequately be served by all required utilities and public services.

As discussed below, and supported by the technical reports attached, all five Class 32 Infill Exemption criteria are met.

- a. *The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.*

The project site is designated *Residential 22* and zoned *RM Medium Density 2,000*, each of which permit a base density of 22 dwelling units/acre (or 66 base dwelling units). The project proposes 70 for-sale dwelling units, 59 of which would be market rate units, seven (7) units would be moderate-income units (or 10% of the base units), and four (4) units would be low-income units (or 5% of the base units), consistent with the affordability requirements of CMC Chapter 16.036, *Inclusionary Housing*. The reservation of 10% of the base units entitles the project to a 5% density bonus pursuant to the DBL. A 5% density bonus equates to 3.3 dwelling units ($66 \times .05 = 3.3$), which rounds up to four (4) density bonus units. (Govt. Code § 65915(f)(5).)

The project requests an incentive/concession to deviate from the utility undergrounding requirement, and waivers to reduce the 75-foot setback from single-family zones and the 20-foot front setback requirement. With those deviations, the project is consistent with all *applicable* development standards and policies. (*Wollmer v. City of Berkeley* (201) 193 Cal.App.4th 1329, 1348 [a project's need for waivers/reductions from standards under the DBL does not disqualify it from Class 32 and courts have concluded that waived zoning standards are not "applicable" for purposes of Class 32 eligibility].) The project's consistency with the General Plan and zoning standards is further illustrated in the plans submitted on July 25, 2024. Also, pursuant to the

HAA, the project is also “deemed consistent” with all applicable policies, plans, standards and other requirements because the application was deemed complete by law on August 24, 2024 and 30 days passed without the City, in writing, identifying any alleged inconsistencies. (Govt. Code § 65589.5(j)(2).)

The City also identified the site on the Housing Element’s Site Inventory as a candidate site for rezoning to accommodate a share of the City’s Regional Housing Needs Assessment (“RHNA”). The City completed its rezoning of the site in July 2024 (as approved by ordinances of the City Council on June 25 and July 9, 2024). Thus, the City very-clearly contemplated the development of housing on the project site, and at the density proposed.

- b. *The proposed development occurs within city limits on a site of no more than five acres substantially surrounded by urban uses.*

The site is 3.0 gross acres, within the limits of the City of Claremont. It is substantially surrounded by urban uses, with a former bus station and gas station to the west, a Motel 6 to the north, and residential uses to the east and south.

- c. *The project site has no value as habitat for endangered, rare or threatened species.*

The project site is developed with urban uses, and has no value as habitat for endangered, rare or threatened species. A Biological Resources Survey (“BRA”) was prepared by Stantec (Exhibit A), which analyzed whether the project site had habitat for any special-status plant or animal species. The BRA included both a literature review of potential species and a reconnaissance biological survey and habitat assessment. It concluded that the project site, which is entirely developed disturbed/developed, does not have any value as habitat for endangered, rare or threatened species.

The BRA’s conclusions are consistent with the HE EIR’s analysis, which concluded that development of the HE sites was not expected to result in significant adverse impacts to special status species or habitats because the lack of suitable habitat to support special status species in already developed and disturbed areas. In fact, the HE EIR did not identify the project site was one of the HE sites with potential effects on biological species, reflecting the developed/disturbed nature of the project site. (HE EIR Table 4.3-1.) The BRA confirms the assumptions of the HE EIR’s analysis with respect to the project site.

- d. *The approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.*

The approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

Traffic: TJW Engineering, Inc. (“TJW”) prepared a VMT Screening Memorandum (Exhibit B) for the proposed project, which provides substantial evidence that the project would not result in a traffic impact. The VMT Screening Memorandum used the City of Claremont Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment (August 2020) (“City’s Guidelines”) and the San Gabriel Valley Council of Government’s (“SGVCOG”) VMT Assessment Tool to determine that the project would result in a greater 15% reduction from the baseline VMT per service population, which is the threshold established in the City’s Guidelines. Thus, the project would not result in a VMT impact.

The HE EIR, which was prepared to evaluate potential impacts associated with development of the HE sites, including the project site, concluded that implementation of the HE would “not conflict with existing” programs, plans, ordinances, or policies addressing the circulation system. (HE EIR at p. 4.6-7.) Specifically, the HE EIR found that projects “proposed under the Housing Element Update would be required to comply with the goals and policies outlined in” the City’s 2006 General Plan Circulation and Mobility Element, zoning code, and other applicable documents. The project must comply with, among other things, the standards outlined in the 2006 General Plan, which encourages alternative forms of mobility, increased walking and cycling, and making pedestrian safety a priority. The buildout of the HE sites, including the project, encourages development of infill sites and sites close to transit, and would improve residential transit access. Because HE projects would be subject to applicable standards, including safety standards, the HE EIR concluded implementing project, which would largely be infill development in close proximity to transit, would not result in significant impacts.¹¹

Likewise, the HE EIR determined that HE projects would not introduce hazardous road design features or incompatible uses that could result in a significant impact. (HE EIR at p. 4.6-8 – 9.) To the extent HE projects required modifications to public rights-of-way, such modifications “would be required to be consistent with appropriate regulations and design standards....” (*Id.*) The project proposes primary access from W. American Avenue, which connects to S. Indian Hill Boulevard, a Major Arterial roadway in the City. The HE projects – like the project – also would not result in inadequate emergency access due to mandatory compliance with applicable plans, policies, and programs. (HE EIR at p. 4.6-9.)

Collectively, TJW’s VMT Screening Memorandum and the significant analysis in the HE EIR provide substantial evidence that the project would not result in a traffic impact.

¹¹ It is worth noting that level of service “LOS” or some other measure of auto delay shall not be considered a significant impact on the environment. (*Citizens for Positive Growth & Preservation v. City of Sacramento* (2019) 43 Cal.App.5th 609, 626 [LOS or some similar measure of vehicular capacity or traffic congestion, “shall not be considered a significant impact on the environment”]; (CEQA Guidelines § 15064.3(a) [“a project’s effect on automobile delay **shall not** constitute a significant environmental impact”]; *Ocean Street Extension Neighborhood Assn. v. City of Santa Cruz* (2021) 73 Cal.App.5th 985, 1021 (allegations challenging an EIR’s analysis of a project’s effect on traffic based on inconsistencies with General Plan goals of maintaining an LOS D or better condition were moot because “LOS-based traffic analysis is no longer a consideration to determine if a project’s impact is significant....”].)

Noise: MD Acoustics, LLC (“MD”) prepared a comprehensive Cat32 Exemption Noise Impact Assessment (“Noise Assessment”) (Exhibit C), which analyzed whether construction and/or operation of the proposed project would result in significant noise impacts. The Noise Assessment concludes that no significant impacts would result. Specifically, the Noise Assessment found, on the basis of substantial evidence, that temporary, construction noise would not result in a significant impact under either standard Federal Transportation Administration thresholds or the City’s Noise Ordinance, compliance with which is a regulatory requirement. Likewise, operational noise would not result in significant impacts.

Air Quality: The project’s Focused Air Quality Impacts Study (“AQIS”) (Exhibit D), prepared by MD, found that the project’s construction and operation of 70 residential units would not result in any significant air quality impact. First, the project would not exceed applicable SCAQMD regional thresholds for either construction or operation. Second, the project would not generate localized emissions that would exceed SCAQMD’s Localized Significance Thresholds (“LST”). SCAQMD’s LST methodology uses an air quality dispersion model to back-calculate the emissions per day that would cause or contribute to a violation of any short-term federal or state air quality standards. The LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. The SCAQMD’s screening procedures “are by design conservative, that is, the predicted impacts tend to overestimate the actual impacts.” (SCAQMD Final LST Methodology at p. 4-1.)

The AQIS’s LST analysis also demonstrates the project would not result in exposure of sensitive receptors to substantial concentrations of TACs. First, The project’s construction emissions are well below the applicable LST thresholds, including with respect to anticipated PM emissions. Likewise, operational emissions are well below applicable thresholds. Second, as discussed in the HE EIR, HE implementing projects are not expected to result in health risks because construction is short-term and PM emissions (which are the TAC most associated with construction) are expected to be minimal (as further evidenced by the AQIS). As the HE EIR notes, SCAQMD CEQA Guidance does not require a preparation of a health risk assessment for short-term construction emissions given such emissions are an extremely limited duration of a 30-year risk exposure calculation. Finally, the project proposes residential uses, which are not associated with TAC emissions.

The AQIS also determined that the project would not conflict with or obstruct the implementation of the applicable air quality plan, the 2022 Air Quality Management Plan, which is consistent with the conclusion in the HE EIR. (HE EIR at p. 4.2-17 – 19.)

Water Quality: The Preliminary Hydrology Study (Exhibit E) prepared by C&V Consulting, Inc. and compliance with local, state, and federal law provides substantial evidence that the project will not adversely impact water quality. Chapter 8.28 of the CMC, for instance, requires that standards be followed and measures (including best management practices) implemented to ensure no water quality impacts. CMC Section 8.28.020 states that the purpose

of Chapter 8.28 is “to protect the health and safety of the residents of the [City of Claremont] by protecting the beneficial uses, marine habitats, and ecosystems of receiving waters from pollutants carried by stormwater and non-stormwater discharges.” Also, the project would be subject to the Construction General Permit, which governs construction under the National Pollutant Discharge Elimination System. The HE EIR’s analysis further supports the conclusion that implementation of the HE, including development of the HE sites, will not result in impacts to water quality through adherence to applicable local, state, and federal regulations. As discussed in the Preliminary Hydrology Study, the project incorporates sufficient water retention/storage to ensure that existing hydrology (runoff) conditions are maintained.

- e. *The site can be adequately served by all required utilities and public services.*

The HE EIR analyzed, in depth, whether implementation of the HE projects can be adequately served by utilities and public services. The HE EIR’s analysis constitutes substantial evidence that the project can be adequately served. HE EIR Section 4.8 concluded that there is adequate water supply, water infrastructure, stormwater infrastructure and other utilities to serve the HE project. The project applicant also has will-serve letters from various utilities/service providers, showing adequate service. (Exhibit F.)

The HE EIR also concluded that the HE projects, collectively, would not result in impacts to public services, including police, fire, schools, and parks. The project’s population growth is within the assumptions of the HE EIR relative to implementation of the HE, and would be minor compared to the existing service populations of both the Los Angeles County Fire Department and Claremont Police Department. As discussed in the HE EIR, payment of taxes (property and sales) as well as applicable development impact fees (e.g., LACFD Development Fee Program) would ensure that adequate public services continue to be provided in the City. (See HE EIR Initial Study at pp. 65-69.)

- ii. *No Exceptions Set Forth in CEQA Guidelines Section 15300.2 Apply*

The exceptions to the use of the Class 32 exemption, as set forth in CEQA Guidelines Section 15300.2, do not apply to the project such that the Class 32 exemption is inapplicable. The project, when considered with successive projects of the same type in the same place over time would not create significant cumulative impacts. The HE EIR’s analysis demonstrates that cumulative impacts would not result with implementation of the HE or individual implementing projects, such as the proposed project. The project’s technical studies, as referenced and described in this AB 1633 Notice, provide additional support for the conclusion that no cumulative impacts would result. The HE EIR identified only one potential significant effect, which is not a cumulative effect. It related to potential for projects to impact historic resources. The project would not result in any such impacts, as the site is developed with modern tennis courts. The courts are not older than 45 years old, and are standard courts without any specific, unique features. The project would not cause a substantial adverse change in the significance of a historic resource.

Also, there are no unusual circumstances that could cause a significant impact. There are no unusual circumstances posed by the project or the site, as supported by the inclusion of the project site in the City's HE. It is an urban, developed in-fill site, consistent with the development pattern of the City. Also, as supported by the HE EIR and the project's technical analyses, the project would not cause a significant impact.

The project would not result in damage to scenic resources within a state scenic highway. The nearest officially designated state scenic highway is a portion of State Route 2 that extends through the San Gabriel Mountains, with the closest point more than 19 miles from the project site.¹² The nearest eligible scenic highway is Route 39, located more than 11 miles from the project site. The project would not damage scenic resources within a state scenic highway.

Finally, the property is not on the Cortese List, as discussed above in the AB 1633 site eligibility section.

iii. *Guidelines Sections 15183*

The project is also independently eligible for an exemption under CEQA Guidelines Section 15183, which exempts projects that are consistent with the development density established by existing zoning, general plan, or community plan policies for which an EIR was certified, except as might be necessary to examine whether there are project-specific effects which are peculiar to the project or the site. (CEQA Guidelines § 15183; see also *Hilltop Group, Inc. v. County of San Diego* (2024) 99 Cal.App.5th 890, 906 [court of appeals classifying § 15183 as an “exemption” and concluding that county board of supervisors improperly required an EIR]; see also *Lucas v. City of Pomona* (2023) 92 Cal.App.5th 508, 538 [recognizing “the exemption under” Guidelines § 15183].)

The project site is identified on the HE's Sites Inventory and was analyzed in conjunction with the City's HE implementation under the certified HE EIR. There are no project-specific significant effects that are particular to the project or the site, as evidenced by the discussion above and supported by the HE EIR and technical reports provided in conjunction with this AB 1633 Notice.

d. Copy of Record Excerpts Constituting Substantial Evidence

This AB 1633 Notice, inclusive of Attachments A-K and Exhibits A-F, contains the copy of the excerpts from the record constituting substantial evidence that the criteria of Government Code Section 65589.5(h)(6)(D)(i)(I) through (IV) are satisfied. (Govt. Code § 65589.5(h)(6)(D)(i)(V)(ia)(Id).)

¹² See California State Scenic Highway Map available at:
<https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>.

III. Conclusion

I very much appreciate your time and attention to this matter. This letter and the enclosed information hereby provides the City of Claremont notice of the applicability of AB 1633 and substantial evidence in support of the applicability of AB 1633 and the Class 32 Infill Exemption to the proposed project (as well as the CEQA Guidelines Section 15183 exemption).

Please do not hesitate to contact me with any questions. Claremont 2 Inv, LLC looks forward to a quick determination of the project's qualification for a CEQA exemption.

Sincerely,

Cox, Castle & Nicholson LLP

Christopher Burt

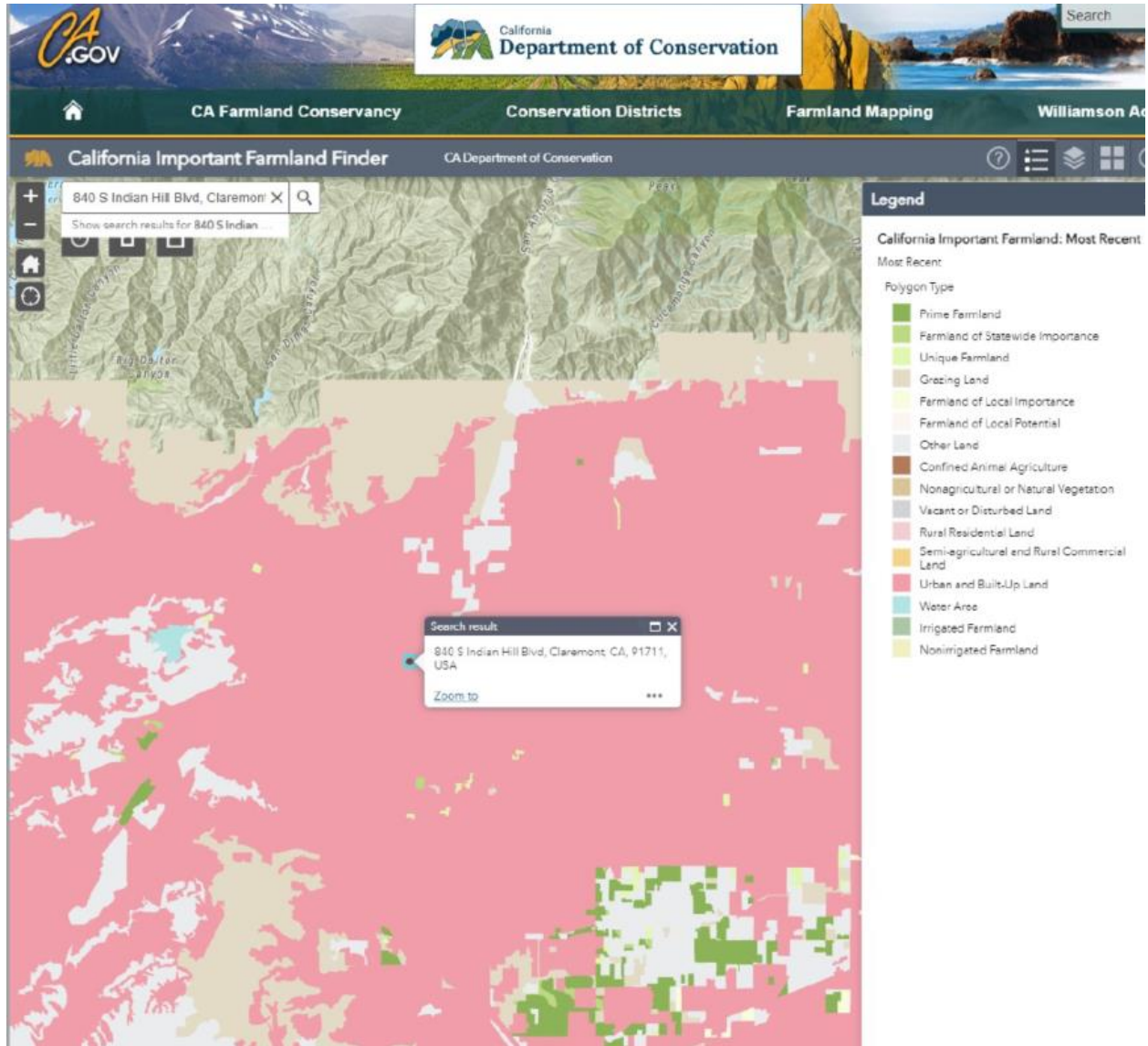
ATTACHMENT A
California Coastal Commission Coastal Zone Map

California Coastal Commission Coastal Zone Map



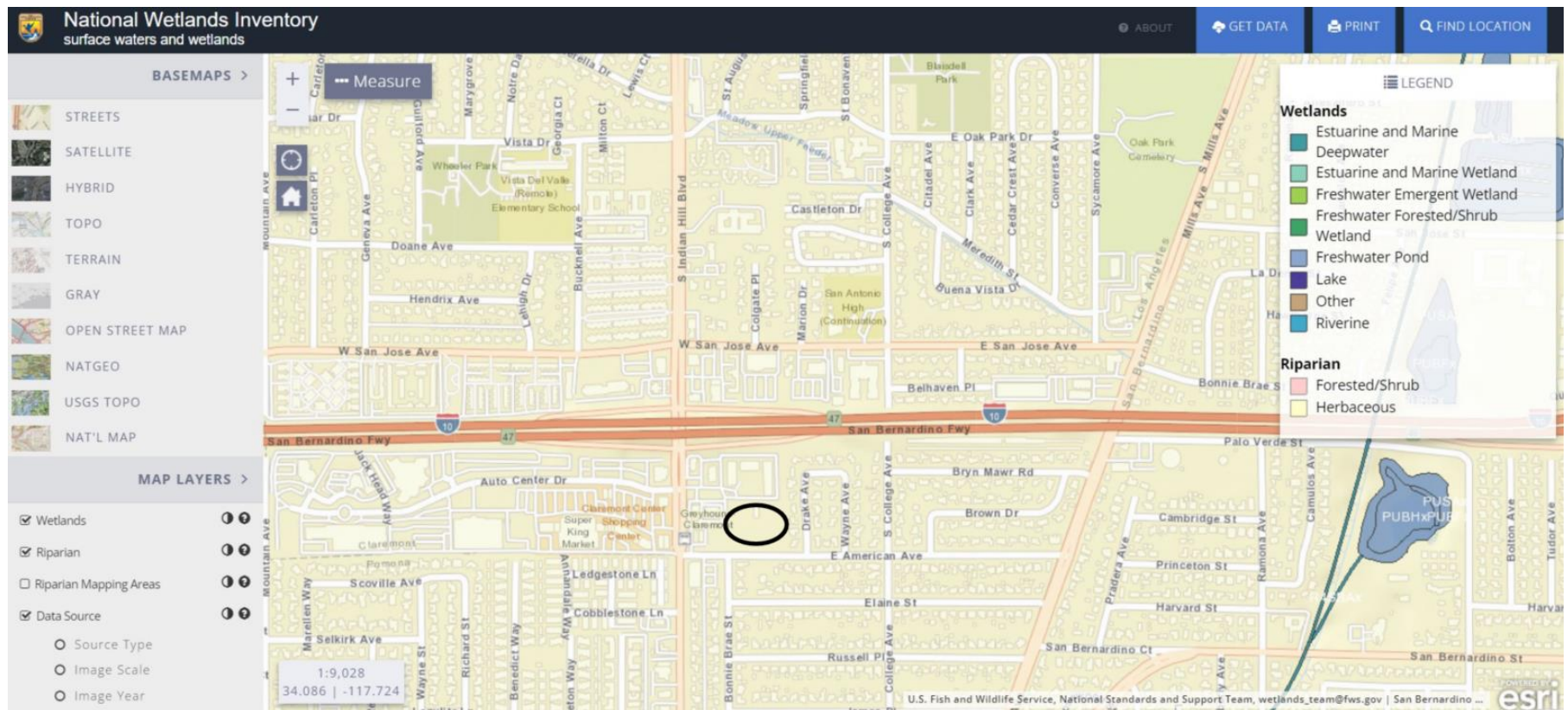
ATTACHMENT B
California Department of Conservation Important Farm Finder Map

California Department of Conservation Important Farm Finder Map



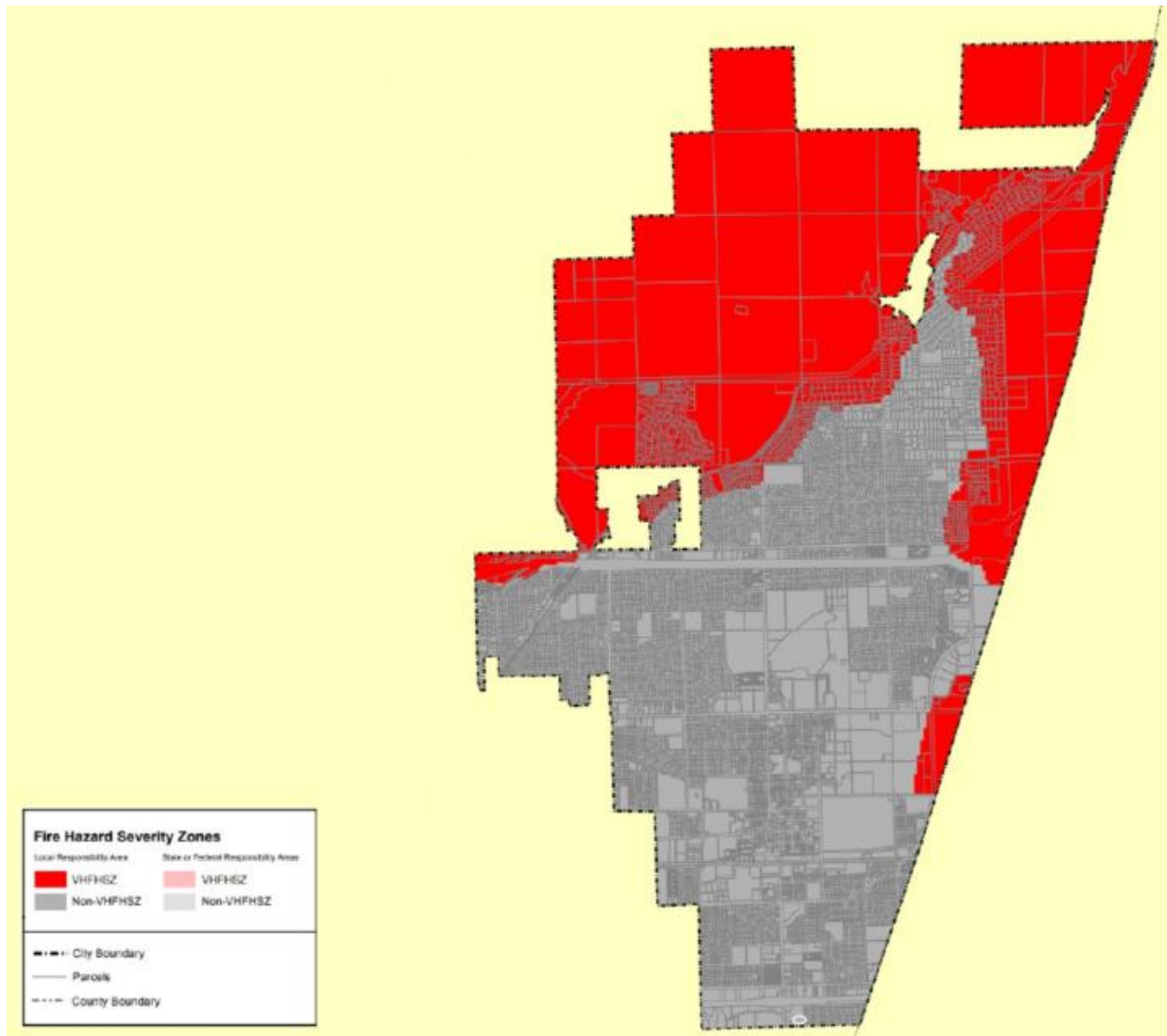
ATTACHMENT C
National Wetlands Inventory

National Wetlands Inventory



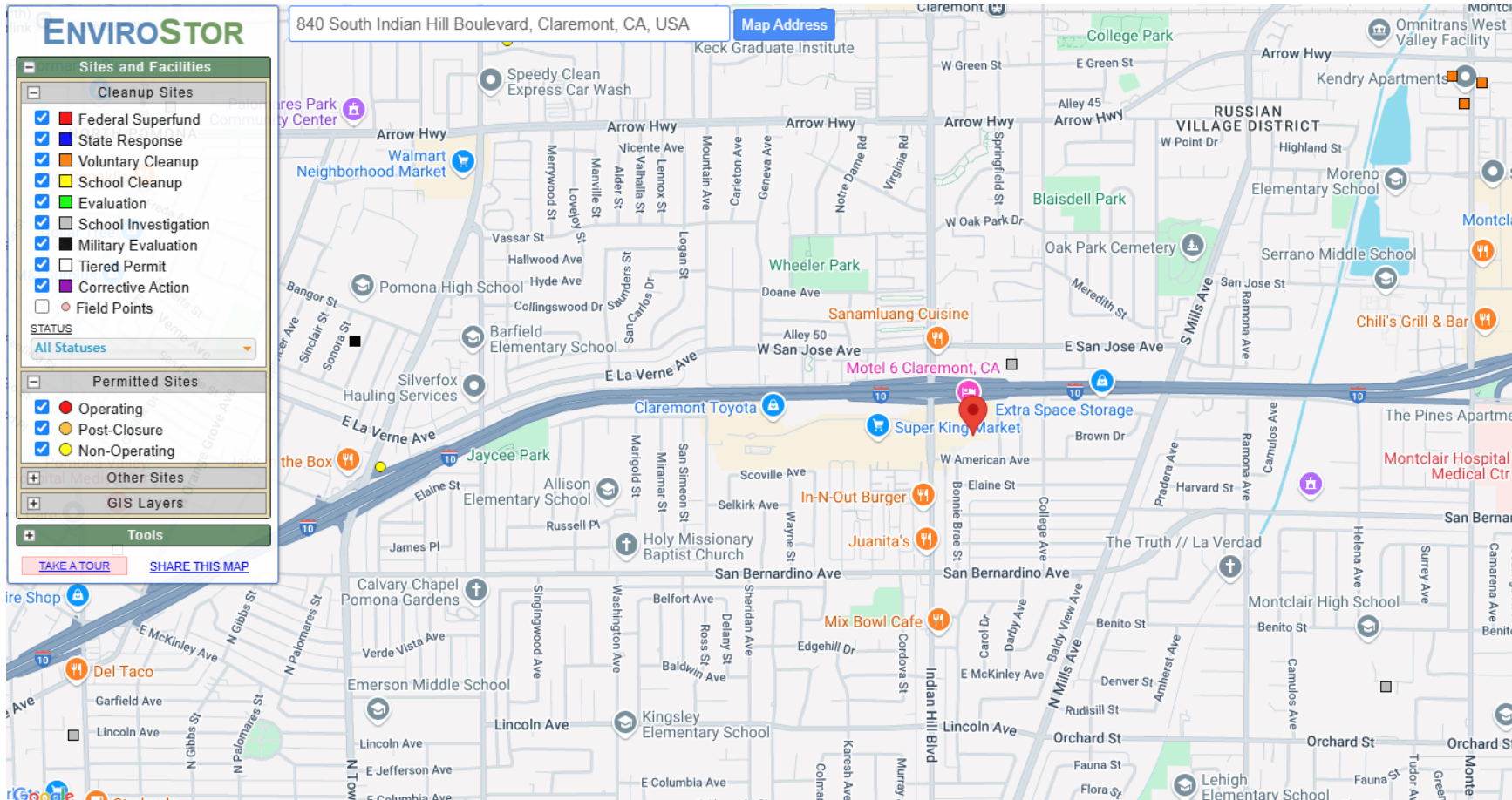
ATTACHMENT D
CALFIRE Very High Fire Hazard Severity Zones Map

CALFIRE Very High Fire Hazard Severity Zones Map

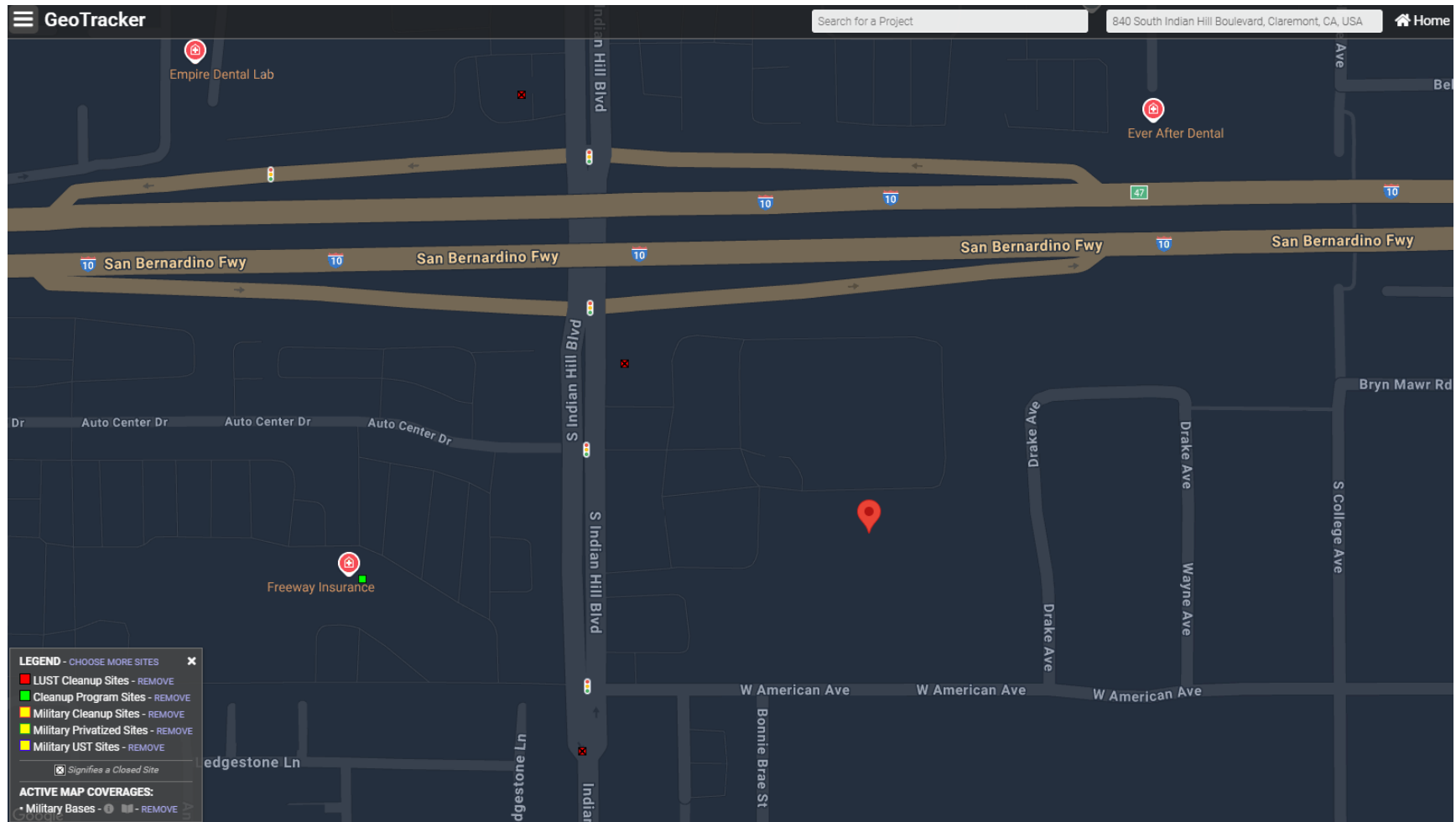


ATTACHMENT E
Hazardous Waste Site Maps

EnviroStor Hazardous Waste Site Map



GeoTracker Hazardous Waste Site Map



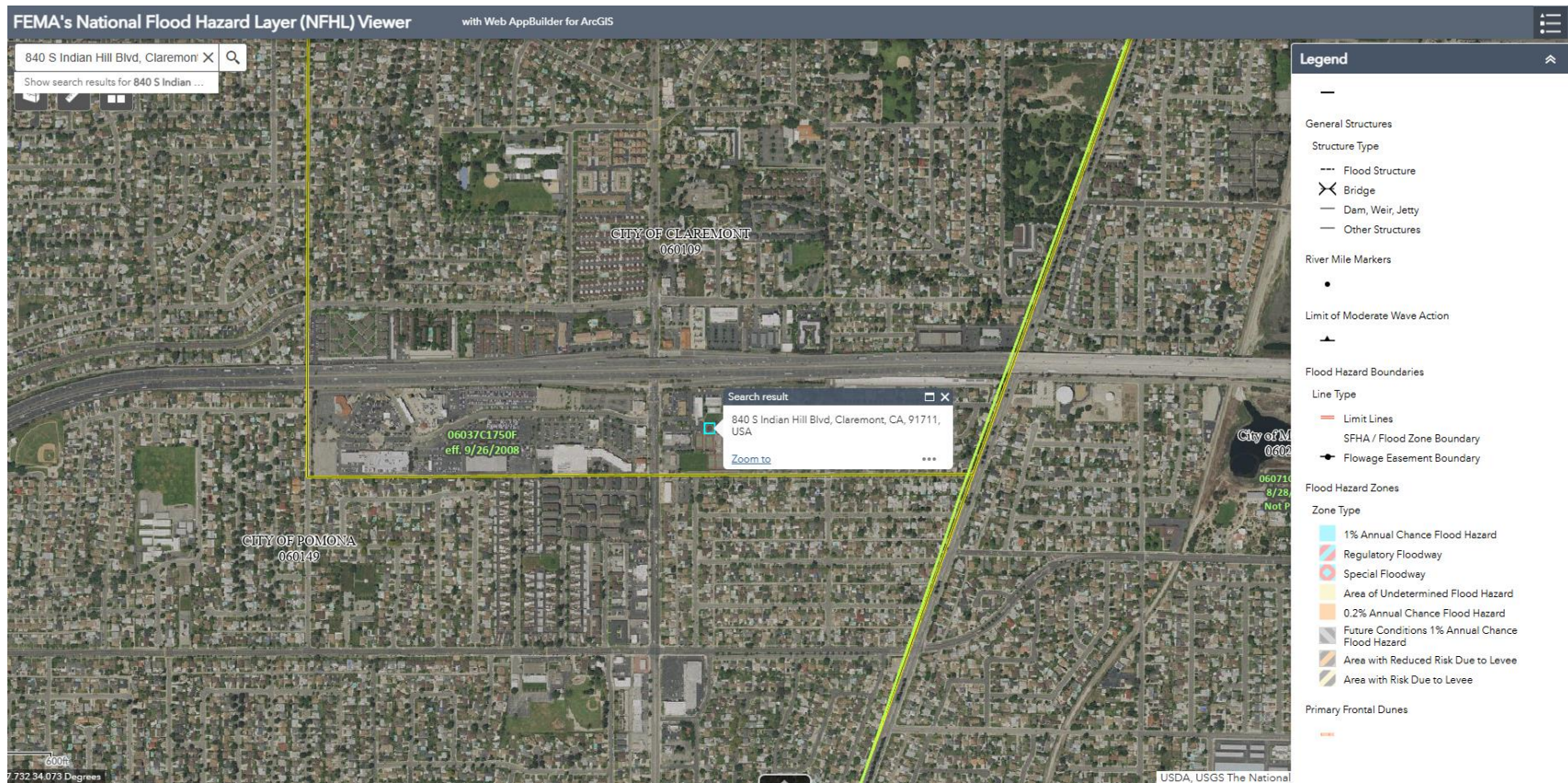
ATTACHMENT F
California Department of Conservation Fault Activity Map

California Department of Conservation Fault Activity Map



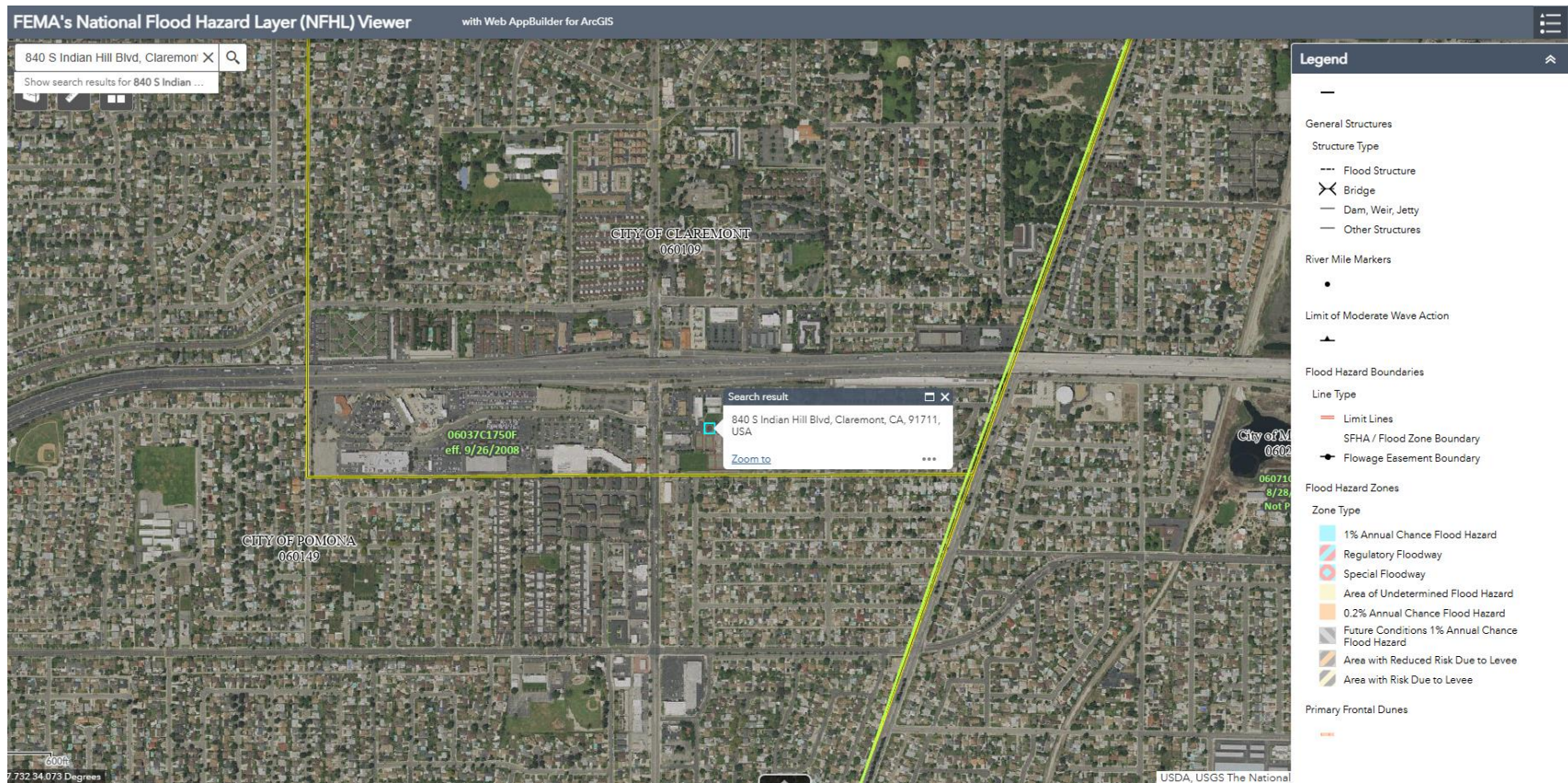
ATTACHMENT G
FEMA National Flood Hazard Layer Map

FEMA National Flood Hazard Layer Viewer Map



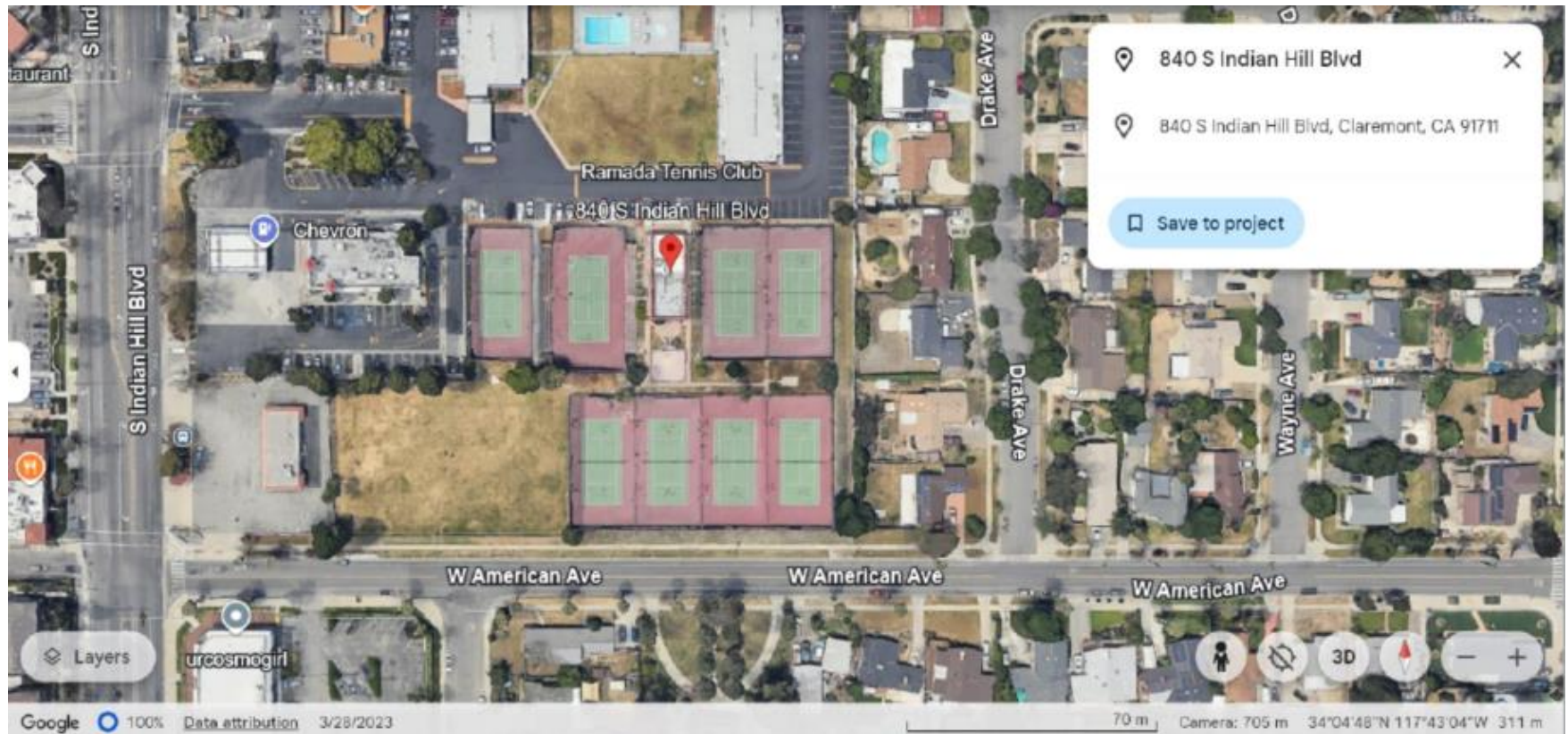
ATTACHMENT H
FEMA National Flood Hazard Layer Map

FEMA National Flood Hazard Layer Viewer Map



ATTACHMENT I
Urban Uses Map of Property

Urban Uses Map of Property



ATTACHMENT J
National Conservation Easement Database Map

National Conservation Easement Database Map



ATTACHMENT K
Surrounding Amenities Map

Surrounding Amenities Map

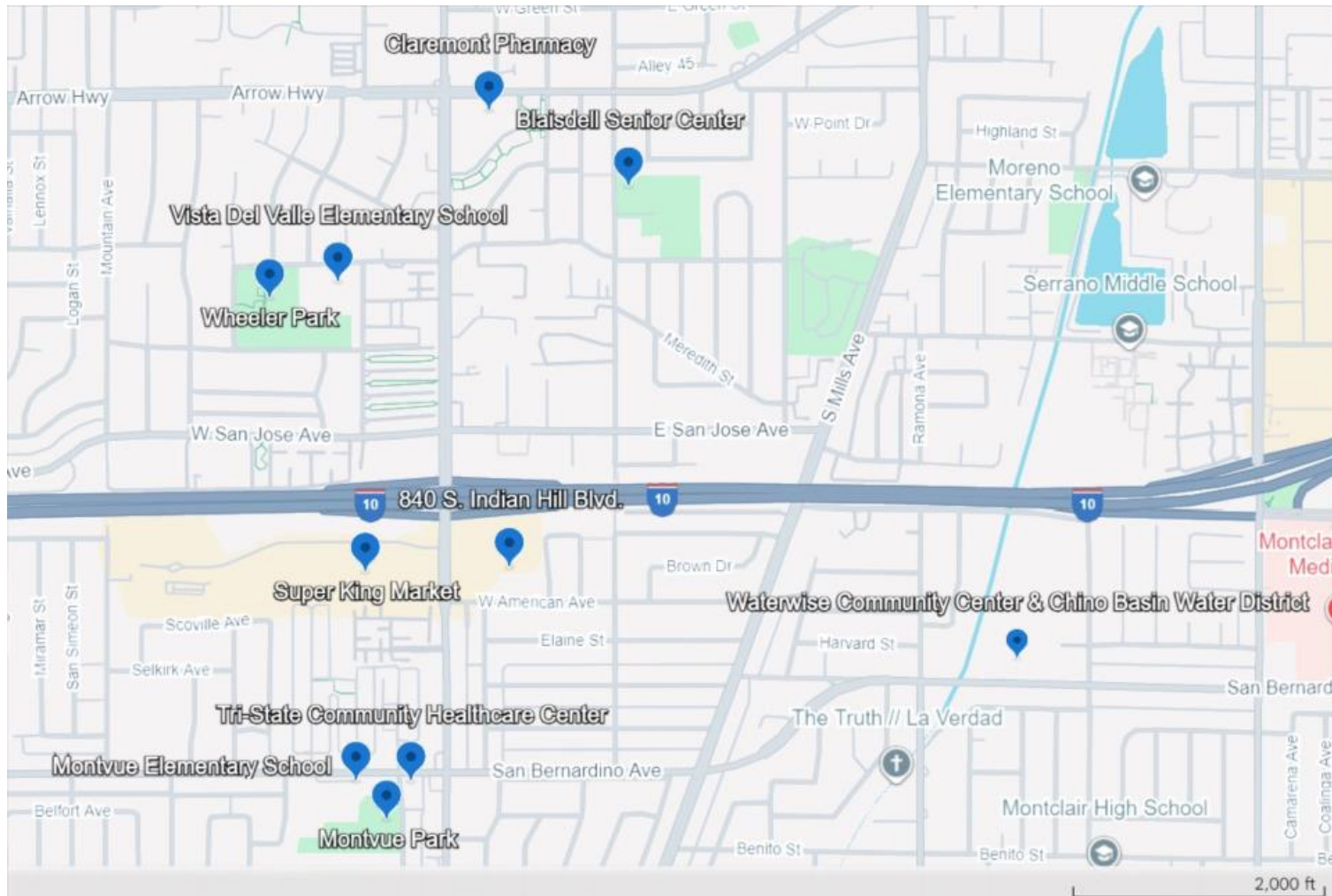


EXHIBIT A

To:	Patrick Chien, Director - Development City Ventures 3121 Michelson Drive, Suite 150 Irvine, CA 92612	From:	Hannah Hart, Project Biologist Stantec Consulting Services, Inc. 4572 Telephone Road, Suite 916 Ventura, CA 93003
Project/File:	185805579	Date:	December 4, 2024

Reference: Biological Resources Survey – 840 South Indian Hill Boulevard, Claremont, California

Project Location

The proposed 840 South Indian Hill Boulevard Project (Project) site is located on South Indian Hill Boulevard in Claremont, Los Angeles County, California. The Project site is approximately 0.20 miles south of Interstate 10 and is adjacent to residential and commercial properties (see Figure 1). The approximately 3.00-gross acre Project site is also referred to herein as the Biological Study Area (BSA).

Methods

A reconnaissance biological survey and habitat assessment was conducted during daylight hours on November 26, 2024, by Stantec Consulting Services (Stantec) biologist Hannah Hart. The BSA was surveyed on foot by walking throughout the BSA. Plants were identified based on professional knowledge and experience and/or by using keys, descriptions, and illustrations in Jepson Flora Project, 2024. Wildlife species, including birds, were identified by sight, sound, or their sign. Prior to the survey, a preliminary literature review of readily available resources was performed, and a query of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) was conducted using the RareFind 5 Internet application tool for a search area encompassing the BSA and a 2-mile buffer (CNDDB 2024).

Biological Survey and Habitat Assessment

The purpose of this reconnaissance survey was to identify and assess the habitat suitability for special-status plant and wildlife species and to document an inventory of plant and wildlife species within the BSA.

Reference: Biological Resources Survey – 840 South Indian Hill Boulevard, Claremont, California

Habitat Types

Disturbed/Developed

The entire BSA (approximately 3.0-gross acres) is entirely developed and is categorized as disturbed/developed. Disturbed/developed areas are characterized by areas that either completely lack vegetation (e.g., structures, roads), or are dominated by ruderal and/or weedy species. The BSA has a dilapidated building, a concrete pad, 8 dilapidated tennis courts, concrete walking paths, previously planted and maintained vegetation comprised of mostly non-native ornamental species planted within mulch, and a grassy field (see Figure 2).

Plants and Wildlife Species Observed

The reconnaissance survey resulted in the documentation of one native and 10 non-native plant species as presented in Table 1. Table 2 lists all wildlife species observed within and adjacent to the BSA. It is important to note that other wildlife may use the BSA either as wintering habitat, seasonal breeding, or as occasional migrants.

Table 1. Plant Species Observed within the BSA

Scientific Name	Common Name	Native/Non-Native ¹
<i>Aloe sp.</i>	unknown aloe	Non-native
<i>Cortaderia jubata</i>	pampas grass	Non-native
<i>Euphorbia maculata</i>	spotted spurge	Non-native
<i>Ficus microcarpa</i>	Chinese banyan tree	Non-native
<i>Lantana camara</i>	common lantana	Non-native
<i>Malva parviflora</i>	cheeseweed mallow	Non-native
<i>Olea europaea</i>	olive	Non-native
<i>Ricinus communis</i>	castor bean	Non-native
<i>Salvia greggii</i>	Autumn sage	Non-native
<i>Quercus agrifolia</i>	coast live oak	Native
<i>Ulmus parvifolia</i>	Chinese elm	Non-native
Notes: ¹ Native/Non-native = Native species are those that occur naturally in an area, per Jepson Flora Project 2024.		

Reference: Biological Resources Survey – 840 South Indian Hill Boulevard, Claremont, California

The coast live oak tree was located just outside of the BSA limits at the northeastern corner. That tree would not be impacted by the Project. The Project is required to comply with Claremont Municipal Code Section 16.300.060, which requires that projects be designed to preserve and/or retain on-site significant mature trees to the greatest extent possible.

Table 2. Wildlife Species Observed within and adjacent to the BSA

Scientific Name	Common Name
<i>Corvus corax</i>	crow
<i>Felis catus</i>	domestic cat
<i>Haemorhous mexicanus</i>	house finch
<i>Mimus polyglottos</i>	northern mockingbird
<i>Sayornis nigricans</i>	black phoebe

Common Wildlife

Birds were identified by sight and sound and were observed throughout the BSA. All avian species identified in the BSA during the biological survey are listed in Table 2. No nests were observed at the time of this survey; however suitable habitat for nesting birds exists within the BSA.

Generally, the distribution of mammals on a given site is associated with the presence of factors such as access to perennial water, topographical and structural components (e.g., rock piles, vegetation) that provide cover and support prey base, and the presence of suitable soils for fossorial mammals (e.g., sandy areas). Domestic cats were the only mammals observed during the biological survey within the BSA, however suitable habitat for common mammals such as California ground squirrel (*Otospermophilus beecheyi*) exist within and around the BSA.

Many reptile species are difficult to detect, even when present, due to their cryptic behavior and life history traits such as foraging, thermoregulation, fossorial habits, and camouflage. Several factors influence the presence of reptile species including the diversity of plant communities, substrate, soil type, and presence of refugia such as rock piles, boulders, and native debris. No reptiles were observed at the time of the survey, however suitable habitat conditions exist for common reptile species like the western fence lizard (*Sceloporus occidentalis*).

Amphibians often require a source of standing or flowing water to complete their life cycle; however, some terrestrial species can survive in drier areas by remaining in moist environments found beneath leaf litter and fallen logs, or by burrowing into the soil. No standing or flowing water was found within the BSA; therefore, amphibians are not likely to be found in the BSA.

Reference: Biological Resources Survey – 840 South Indian Hill Boulevard, Claremont, California

Special Status Biological Resources

Special-status taxa include those listed as rare, threatened, or endangered under the Federal Endangered Species Act or California Endangered Species Act, taxa proposed for such listing, are listed as Species of Special Concern by CDFW, plants with California Rare Plant Rank (CRPR) 1-4, and other taxa that have been identified by United States Fish and Wildlife Service, CDFW, or local jurisdictions as unique or rare. No special-status plant or wildlife species were observed at the time of the survey, which is consistent with the urban, developed nature of the Project site and the surrounding environment.

Based on a CNDDDB record search, the following species have been recorded/observed within a 2-mile radius of the BSA: Nevin's barberry (*Berberis nevinii*), Plummer's mariposa-lily (*Calochortus plummerae*), mesa horkelia (*Horkelia cuneata* var. *puberula*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), white rabbit-tobacco (*Pseudognaphalium leucocephalum*), salt spring checkerbloom (*Sidalcea neomexicana*), San Bernardino aster (*Symphyotrichum defoliatum*), Southern California legless lizard (*Anniella stebbinsi*), Crotch's bumble bee (*Bombus crotchii*), American bumble bee (*Bombus pensylvanicus*), California diplectronan caddisfly (*Diplectrona californica*), western mastiff bat (*Eumops perotis californicus*), western yellow bat (*Lasiurus xanthinus*), California black rail (*Laterallus jamaicensis coturniculus*), white cuckoo bee (*Neolarra alba*), big free-tailed bat (*Nyctinomops macrotis*), and coastal California gnatcatcher (*Polioptila californica californica*) (see Figure 3a and 3b).

However, based on the current habitat within and/or near the BSA, no habitat is present that would support special-status plant and wildlife species, nor were any observed. Therefore, special-status plant and wildlife species are not expected to occur within or near the Project site nor does the Project site currently have value as habitat for endangered, rare or threatened species.

Migratory Birds

As noted above, there are several non-native, mature trees located on the project site and which have the potential to provide nesting sites for birds and raptors that are protected under the Migratory Bird Treaty Act (16 USC 703-712) (MTBA) and Fish and Game Code Sections 3503, 3503.5, and 3513. Because construction of the project could potentially occur during breeding, reproduction, and juvenile rearing periods for nesting birds and raptors (between February 15 and August 31), there is a potential for construction activities to negatively affect breeding or reproduction of bird and/or raptor species on or adjacent to the project site. However, compliance with the MBTA and the California Fish and Game Code, which are regulatory requirements, would ensure that no significant impact results from construction.

Once completed, the Project site would be improved with new landscaping, including trees, that could serve as habitat for nesting birds and/or raptors. The Project is not expected have a significant impact to nesting birds.

Aquatic Resources

No aquatic resources were observed within the BSA during the biological survey. No additional surveying or reporting will be required. Therefore, there no impacts are anticipated for aquatic resources.

Reference: Biological Resources Survey – 840 South Indian Hill Boulevard, Claremont, California

References

Calflora. Web application. 2024. Berkeley, California: The Calflora Database [a non-profit organization]. Available online: <https://www.calflora.org/>. Accessed November 2024.

California Department of Fish and Wildlife (CDFW). 2024. California's Wildlife Life History and Range. Available online: <https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range>. Accessed November 2024.

California Natural Diversity Data Base (CNDDB). 2024. RAREFIND database ed.3.1.1. Electronic database managed by the California Natural Diversity Data Base, Wildlife Data and Habitat Analysis Branch, California Department of Fish and Wildlife. Sacramento, California. Biogeographic Data Branch.

Jepson Flora Project. 2024. Jepson eFlora. Available online: <https://ucjeps.berkeley.edu/eflora/>. Accessed November 2024.

Thank you,

Stantec Consulting Services Inc.



Hannah Hart
Project Biologist
Phone: (747) 272-4150
hannah.hart@stantec.com

Appendices:

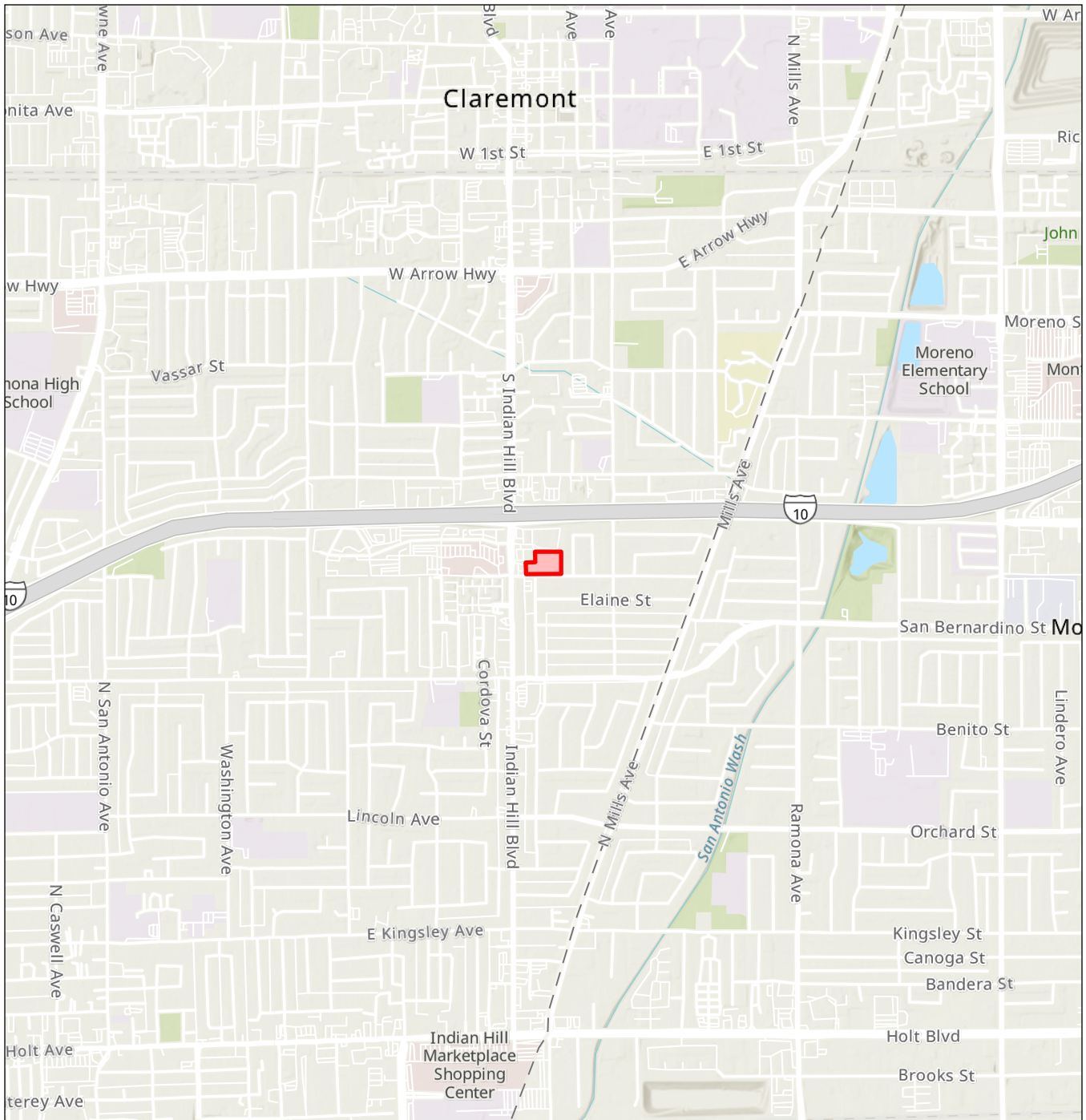
Appendix A: Figures


Appendix B: Photographs

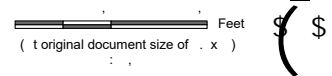
December 4, 2024
Patrick Chien

Reference: Biological Resources Survey – 840 South Indian Hill Boulevard, Claremont, California

Appendix A Figures



 Project Area



Project Location	Prepared by QS on	-
South Indian Hill Blvd.	TR by ST on	-
Claremont, Los Angeles County, CA	IR by HH on	-
Client/Project		

City Ventures, Inc.
South Indian Hill Blvd. Project

Figure No.

1


Project Location Map

Notes
1. Coordinate System: D StatePlane California V
FIPS 8311
2. Data Sources: Stantec, Esri, S, G, USGS, FEM, County of Los Angeles, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI, S, USGS, Bureau of Land Management, EP, PS, US Census Bureau, USD, USFWS

Disclaimer: This document has been prepared based on information provided by others as cited in the notes section. Stantec has not verified the accuracy and or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

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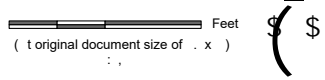


 Project Area

Vegetation Communities and Land Cover Types

 Disturbed Developed

Notes
1. Coordinate System: D StatePlane
California V FIPS Ft US
2. Data Sources: Stantec,
3. Background: USD IP,




Project Location	Prepared by QS on	- -
South Indian Hill Blvd.	TR by ST on	- -
Claremont, Los Angeles County, C	IR by HH on	- -

Client/Project
City Ventures, Inc.
South Indian Hill Blvd. Project

Figure No.
2
Title
Habitat Map / Vegetation Map

SouthIndianHillBlvd.aprx - By: qsmith
Revised:
SouthIndianHillBlvd -data gis_cad gis Pro
SouthIndianHillBlvd
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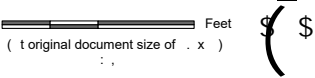


 Project Area

CNNDB Results Within Project Area

California black rail covers entire map area

- Notes**
- 1. Coordinate System: D StatePlane
California V FIPS Ft US
 - 2. Data Sources: Stantec, CDFW,
 - 3. Background: USD IP,



Project Location	Prepared by QS on	-
South Indian Hill Blvd.	TR by ST on	-
Claremont, Los Angeles County, C	IR by HH on	-

Client/Project
City Ventures, Inc.
South Indian Hill Blvd. Project

Figure No.
3b
Title
CNNDB Results within Project Area

December 4, 2024
Patrick Chien

Reference: Biological Resources Survey – 840 South Indian Hill Boulevard, Claremont, California

Appendix B Photographs

Reference: Biological Resources Survey – 840 South Indian Hill Boulevard, Claremont, California



Photo 1. View from southwestern portion of BSA facing southwest.



Photo 2. View from the southwestern portion of the BSA facing east.

Reference: Biological Resources Survey – 840 South Indian Hill Boulevard, Claremont, California



Photo 3. View from southwestern portion of the BSA facing northeast.



Photo 4. View from the eastern portion of the BSA facing west.

Reference: Biological Resources Survey – 840 South Indian Hill Boulevard, Claremont, California



Photo 5. View from northern portion of the BSA facing southeast.



Photo 6. Olive tree in the center of the BSA.

Reference: Biological Resources Survey – 840 South Indian Hill Boulevard, Claremont, California



Photo 7. Coast live oak tree outside of BSA, northeastern corner.

EXHIBIT B

November 11, 2024



TJW ENGINEERING, INC.
TRAFFIC ENGINEERING &
TRANSPORTATION PLANNING
CONSULTANTS

Mr. Patrick Chien
City Ventures
3121 Michelson Drive, Suite 150
Irvine, CA 92612

SUBJECT: 840 South Indian Hill VMT Screening Memorandum, City of Claremont

Dear Mr. Chien,

TJW Engineering, Inc. (TJW) is pleased to submit this Vehicle Miles Traveled (VMT) Screening for the proposed project located at 840 South Indian Hill Boulevard in the City of Claremont. The proposed project is for the construction of 70 multi-family dwelling units. The purpose of this memorandum is to summarize the project VMT Screening.

Proposed Project

The site for the proposed project is located at 840 South Indian Hill Boulevard in the City of Claremont. The proposed project is for the construction of 70 multi-family dwelling units. Site access will be provided via a proposed right-in/right-out driveway located on West American Way. A site plan is attached for reference.

Vehicle Miles Traveled (VMT) Screening

Senate Bill (SB) 743 was adopted in 2013 requiring the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within the California Environmental Quality Act (CEQA). For land use projects, OPR has identified Vehicle Miles Traveled (VMT) as the new metric for transportation analysis under CEQA. The regulatory changes to the CEQA guidelines that implement SB 743 were approved on December 28th, 2018, with an implementation date of July 1st, 2020, as the new metric.

The *City of Claremont Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment (City Guidelines)* (August 2020) provides screening criteria and requirements for VMT assessment of land use projects. Per *City Guidelines*, the SGVCOG VMT Assessment Tool at <https://apps.fehrandpeers.com/SGVCOGVMT/> is used to identify projects that may be screened from VMT analysis. The VMT Tool identified that the proposed project will be located in a traffic analysis zone (TAZ) that exceeds 16.22 VMT threshold for residential projects.

While the project does not screen from VMT analysis based on its location in a TAZ exceeding the VMT threshold, the VMT Tool evaluates additional factors contributing to the VMT of the project itself. The VMT Tool's approach to calculating the effectiveness of VMT reduction strategies are detailed in the *City*

Guidelines. These strategies, or factors, are specific design features of land use projects that may reduce a project's VMT below the threshold and, thus, result in the project making a less than significant impact.

From the *City Guidelines*, the first category of factors evaluated for the effectiveness of VMT reduction are Project Characteristics, or Tier 1. Three Tier 1 characteristics of the proposed project were identified by the VMT Tool's evaluation as reducing the project VMT. The first characteristic, PC01 – Increased Residential Density, was identified based on the VMT Tool calculation that the project will increase residential density from the existing 5.35 dwelling units per acre (du/ac) to 8.62 du/ac. The second, PC02 – Increase Developmental Diversity, was identified based on the VMT Tool calculation of the project increasing the residential diversity index from 0.49 to 0.5. The third, PC03 – Affordable Housing, was identified because six percent of the project's units will be affordable housing at the low-income level; it should be noted that an additional ten percent of the units will be offered at the moderate income level. These three factors reduce the project's VMT.

The second category of factors are Multimodal Infrastructure improvements, or Tier 2. One Tier 2 improvement proposed by the project was identified by the VMT Tool's evaluation as reducing project VMT. MI05 – Pedestrian Networks, or the improvement of the pedestrian network beyond the project frontage, was identified due to the crosswalks at Indian Hill Boulevard and American Avenue being included as part of the intersection improvement plans. The updating of the northern crosswalk to the ladder-style crosswalk, consistent with new crosswalk standards, is proposed to enhance pedestrian safety. Improving the pedestrian accessible network is expected to encourage residents to walk instead of drive, thereby reducing VMT.

The third category of factors are Parking improvement, or Tier 3. One Tier 3 improvement proposed by the project was identified by the VMT Tool's evaluation as reducing project VMT. Specifically, PK02 – Provide Bike Facilities, was identified based on the project's provision of bicycle parking on the project site. The improvement of the bicycle facilities by providing on-site bicycle parking is expected to encourage residents to use bicycles instead of passenger vehicles, thereby reducing VMT.

When evaluating the project and its Tier 1-3 reductions, the VMT Tool calculated that the VMT rate of the proposed project to be 15.1, under the 15.22 threshold. Therefore, the project is presumed to have a less than significant impact on VMT. A copy of the VMT Tool report is attached for reference.

Summary

This memorandum provides an overview of the VMT screening for the proposed project. Based on evaluation of the project by the online SGVCOG VMT Assessment Tool, the proposed project is expected to have a less than significant impact on VMT due to a combination of the project characteristics and proposed improvements. The project characteristics are expected to increase residential density, diversity of land use in the area, and provide affordable housing thereby reducing VMT. In addition, the project proposes off-site and on-site improvements to enhance multi-modal safety and access, thus reducing the project VMT.

Mr. Patrick Chien
840 South Indian Hill VMT Screening
November 11, 2024
Page 3

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,



Thomas Wheat, PE, TE
President
Registered Civil Engineer #69467
Registered Traffic Engineer #2565



David Chew, PTP
Transportation Planner



Travis Yokota
Assistant Transportation Planner

Project Details

Timestamp of Analysis: November 11, 2024, 12:21:22 PM

Project Name: 840 South Indian Hill

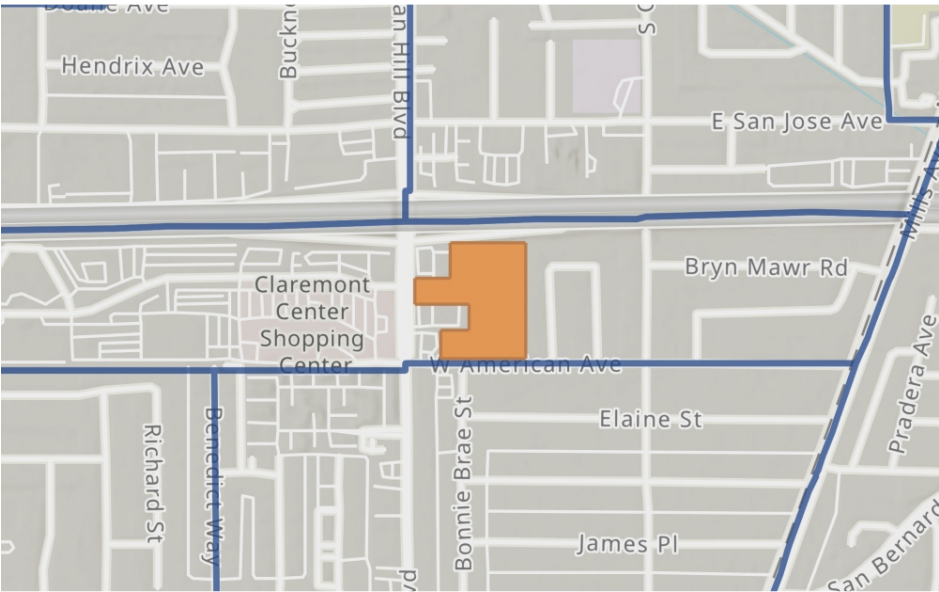
Project Description: Residential

Project Location

jurisdiction:	apn	TAZ
Claremont	8322-006-006	22448100

Inside a TPA?

No (Fail)



Analysis Details

Data Version: SCAG Regional Travel Demand Model
2016 RTP Base Year 2012

Analysis Methodology: TAZ

Baseline Year: 2024

Project Land Use

Residential:

Single Family DU:

Multifamily DU: 70

Total DUs: 70

Non-Residential:

Office KSF:

Local Serving Retail KSF:

Industrial KSF:

Residential Affordability (percent of all units):

Extremely Low Income: 0 %

Very Low Income: 0 %

Low Income: 6 %

Parking:

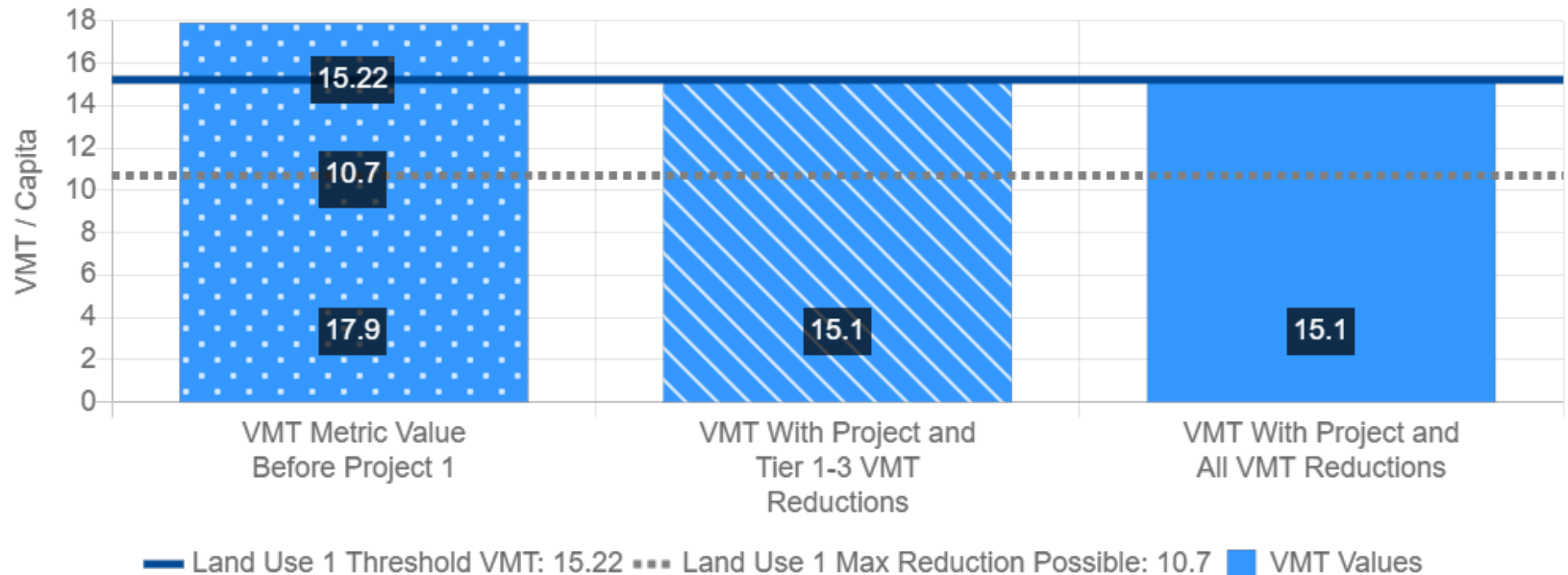
Motor Vehicle Parking:

Bicycle Parking:

Residential Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Residential
VMT Without Project 1:	Home-based VMT per Capita
VMT Baseline Description 1:	Subarea Average
VMT Baseline Value 1:	17.91
VMT Threshold Description 1:	-15%
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	17.9	15.1	15.1
Low VMT Screening Analysis	No (Fail)	Yes (Pass)	Yes (Pass)



Tier 1 Project Characteristics

PK02 Provide Bike Facilities

PC01 Increase Residential Density

Existing Residential Density:	5.35
With Project Residential Density:	8.62

PC02 Increase Residential Diversity

Existing Residential Diversity Index:	0.49
With Project Residential Diversity Index:	0.5

PC03 Affordable Housing

Low Income:	6 %
-------------	-----

Tier 2 Multimodal Infrastructure

MI05 Pedestrian Networks

Tier 3 Parking

EXHIBIT C

November 12, 2024

Mr. Patrick Chien
City Ventures
3121 Michelson Drive, Suite 150
Irvine, CA 92555

Subject: Multi-Family Residential – Cat32 Exemption Noise Impact Assessment – Claremont, CA

Dear Mr. Chien:

MD Acoustics, LLC (MD) has completed a noise impact assessment for the proposed Multi-Family Residential Development project located at 840 S Indian Hill Boulevard in the City of Claremont, CA. The Project has filed for a Categorical 32 Exemption (Cat32) in which an “Infill” Categorical Exemption (CEQA Guideline Section 15332) exempts infill development within urbanized areas if it meets certain criteria. The class consists of environmentally benign infill projects that are consistent with the local General Plan and Zoning requirements. This class is not intended for projects that would result in any significant traffic, noise, air quality, or water quality impacts. It may apply to residential, commercial, industrial, and/or mixed-use projects.

This noise assessment demonstrates the Project’s compliance with applicable noise regulations and lack of significant noise impacts. A list of definitions and terminology is located in Appendix A.

1.0 Project Description and Assessment Overview

The project proposes a multi-family residential development consisting of 64 3-story townhome units and 6 2-story townhomes on 3.0 acres. The project will also provide 150 parking spaces. The proposed project site plan is in Exhibit B.

Land uses surrounding the site include commercial uses to the north and west, and residential uses to the east and south. The Cable Airport is located 2.4 miles northeast of the project, and the Brackett Field Airport is located 3.3 miles northwest. The proposed project location is in Exhibit A.

2.0 Local Acoustical Requirements and CEQA Guidelines

The City of Claremont has outlined the following within the Claremont Municipal Code as it relates to noise regulation:

Per Section 16.154.020.D(1), the noise level limit for all residential zones is 60 dBA from 7AM to 10PM and 55 dBA from 10PM to 7AM. The noise level limit for all commercial zones is 65 dBA from 7AM to 10PM and 60 dBA from 10PM to 7AM. If the ambient noise level is measured to be higher than these standards, the ambient noise level becomes the standard.

Per Section 16.154.020.F(4), construction must occur between the hours of 7 AM and 8 PM on Monday through Saturday. Construction may only occur on Sundays or national holidays if it meets the standards of 16.154.020.D.

Per Section 16.154.020.F(4), construction noise levels, as measured on residential properties, must not exceed 65 dBA for a cumulative period of more than 15 minutes in any one hour, 70 dBA for a cumulative period of more than 10 minutes in any one hour, 79 dBA for a cumulative period of more than 5 minutes in any one hour or 80 dBA at any time; and any vibration created must not endanger the public health, welfare, and safety.

According to CEQA guidelines, the project would have a potential impact if it resulted in:

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Generation of excessive groundborne vibration or groundborne noise levels?
- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?

3.0 Study Method and Procedure

3.1 Ambient Noise Measurements

Two (2) 15-minute noise measurements were conducted at the project site on October 28, 2024. The sound level meter measured the Leq, Lmin, Lmax, and other statistical data (e.g., L2, L8...). The noise measurement was taken to determine the existing ambient noise levels. Noise data indicates that traffic and transformer noise are the primary sources of noise impacting the site and the adjacent uses. This assessment utilizes the ambient noise data as a basis and compares project operational levels to said data.

The results of the short-term noise data are presented in Table 1.

Table 1: Short-Term Measurement Summary, dBA

Location	Start Time	Stop Time	Leq	Lmax	Lmin	L(2)	L(8)	L(25)	L(50)	L(90)
NM1	7:45 AM	8:00 AM	58.0	77.7	53.3	61.8	58.5	57.4	56.4	54.8
NM2	8:17 AM	8:32 AM	60.4	70.9	53.9	65.2	62.9	61.2	59.5	56.1
Notes: 1. The noise monitoring location is illustrated in Appendix B.										

Noise data indicates the ambient noise level ranges from 58 to 60 dBA Leq near the project site and surrounding area. Additional field notes and photographs are provided in Appendix B.

For this evaluation, MD has compared the project’s projected noise levels to the existing ambient level.

It should also be noted that the City's General Plan Public Safety and Noise Element recognizes that the I-10 Freeway is a substantial source of noise in the area. Figure 6-6 shows the 2005 noise contours within the City, and identifies that the 65 CNEL contour from I-10 extends approximately to the City's southern boundary (along American Avenue). It extends across the existing residences to the east of the project site, with a portion of I-10's 70 CNEL noise contour extending to the residences immediately south of I-10. Thus, the noise measurements (which were taken early in the morning) are conservative, reflecting lower noise levels than have been recognized in the General Plan as existing.

3.2 FHWA Traffic Noise Model

The traffic noise analysis utilizes the Federal Highway Administration (FHWA) Traffic Noise Model, together with several key construction parameters. Key input speed, site conditions, average daily traffic (ADT), and vehicle mix data. The modeling does not take into account any existing barriers, structures, and/or topographical features that may further reduce noise levels. Traffic counts were taken from the Traffic Impact Analysis prepared for this project by TJW Engineering, Inc. ADTs were calculated based on the existing traffic counts. AM Peak Hour Trip Assignment numbers were used to calculate the trip generation for each segment of roadway.

The traffic noise model indicated that the existing noise level due to Indian Hill Blvd traffic is 67 dBA CNEL at the nearest residences to Indian Hill Blvd located southwest of the project site. The existing noise level due to American Ave is 57 dBA CNEL at the residences directly south of the site. The nighttime level is projected to be 48 dBA Leq at the nearest residential receptors to the east and south of the project site. Projections lined up with the measurements taken on site. See Appendix C.

3.3 FHWA Construction Noise Model

The construction noise analysis utilizes the FHWA Roadway Construction Noise Model methodology, together with several key construction parameters. Key inputs include distance to the sensitive receiver, equipment usage, % usage factor, and baseline parameters for the project site. The Project was analyzed based on the different construction phases. The FHWA has compiled data regarding the noise-generated characteristics of typical construction activities, which is presented in Table 2.

Table 2: RCNM Measured Noise Emission Reference Levels¹

Type	Typical Noise Level at 50 Feet (dBA)
Concrete Saw	90
Dozer	82
Grader	85
Tractor	84
Roller	80
Crane	81
Man Lift	75
Concrete Mixer Truck	79
Air Compressor	78
Notes: ¹ Referenced Noise Levels from the FHWA RCNM.	

3.3 Construction Vibration Model

Construction activities can produce vibration that may be felt by adjacent land uses. The construction of the proposed Project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a vibratory roller. A vibratory roller has a vibration impact of 0.210 inches per second peak particle velocity (PPV) at 25 feet which is likely perceptible but below any risk of architectural damage.

The fundamental equation used to calculate vibration propagation through average soil conditions and distance is as follows:

$$PPV_{\text{equipment}} = PPV_{\text{ref}} (25/D_{\text{rec}})^n$$

Where: PPV_{ref} = reference PPV at 25ft.

D_{rec} = distance from equipment to receiver in ft.

$n = 1.1$ (the value related to the attenuation rate through ground)

The thresholds from the Caltrans Transportation and Construction Induced Vibration Guidance Manual provide general thresholds and guidelines as to the vibration damage potential from vibratory impacts.

4.0 Traffic Noise Level Projections

Traffic noise along Indian Hill Blvd and American Ave will be the main source of noise impacting the project site and the surrounding area. The ADTs on Indian Hill Blvd and American Ave were calculated to be 16,200 and 2,700 respectively. Project trip ADTs were calculated to be 100 on Indian Hill Blvd and 200 on American Ave.

It takes a change of 3 dB or more to hear an audible difference, which would occur with a doubling of traffic. The project is anticipated to increase the existing CNEL by 0.1 dBA at residences near Indian Hill Blvd and by 0.3 dBA at residences near American Ave. Therefore, the impact is less than significant.

5.0 Project Operational Noise Level Projections

On-site operational noise includes a transformer and HVAC. All HVAC equipment is assumed to be located on the center of the rooftops of the buildings, with one unit per household. Equipment will be at least 55 feet away from the nearest residences to the east, and 80 feet away from the residences to the south. The maximum sound power level from a unit is assumed to be 78 dBA. Assuming all units are running simultaneously, the sound level is 54 dBA at the residences to the east, and 52 dBA at the residences to the south. Shielding from the existing 8-foot wall at the eastern property line will reduce the operational noise level to 42 dBA at the residences to the east. The nighttime ambient noise level of the surrounding residential properties is estimated to be 48 dBA at both residential uses. The noise due to the HVAC units operating simultaneously will increase the nighttime ambient noise level to 49 dBA at the residences to the east and 53 dBA at the residences to the south. These levels are below the 55 dBA noise limit set for nighttime residential areas.

Other features associated with the project (the operation of garage doors, people walking, etc.) would generate a small amount of noise. However, the noise generated by these activities would be consistent with the existing urban noise environment, and therefore the impact of these operational activities is negligible.

Operational noise levels comply with the limits set by the Claremont Municipal code. The impact is, therefore, less than significant. See Appendix D.

6.0 Construction Noise Impact

6.1 Construction Noise Projections

It is well-settled that construction noise is a common component of the urban environment, especially in Southern California. Therefore, to assess potential noise impacts from construction, jurisdictions often use the Federal Transportation Administration's Transit Noise and Vibration Impact Assessment Manual ("FTA Manual") to evaluate construction noise impacts, including the 80 dBA threshold. The FTA Manual notes that exceedances of the 80 dBA threshold may show an adverse community reaction.

The City of Claremont has adopted more specific standards for regulating construction noise. CMC Section 16.154.020.F(4) explains that construction noise is generally exempt from the noise and vibration standards if (a) activities take place between the hours of 7:00 AM and 8:00 PM on weekdays and Saturdays, (b) noise levels, as measured on residential properties, do not exceed 65 dBA for a cumulative period of more than 15 minutes in any one hour, 70 dBA for a cumulative period of more than 10 minutes in any one hour, 79 dBA for a cumulative period of more than 5 minutes in any one hour or 80 dBA at any time, and (c) any vibration created does not endanger the public health, welfare, and safety. The CMC establishes these standards as regulatory requirements, and projects must achieve those standards.

The degree of construction noise may vary for different areas of the project site and also vary depending on the construction activities. Noise levels associated with the construction will vary with the different phases of construction. Table 3 presents the construction noise levels at sensitive receptors with all equipment following this standard. This model also assumes the use of 15 dBA mufflers attached properly to each piece of equipment. A likely worst-case construction noise scenario assumes equipment is operating as close as 20 feet from the nearest sensitive receptor (nearest residence to the east) and an average of 170 feet from the nearest sensitive receptors through an hour time period. Given the size of the project site, construction equipment will likely be located nearest to the construction boundary for only limited periods. Also, typical operating cycles for construction equipment may involve one or two minutes of full power operation followed by three to four minutes at a lower power setting. The projected construction noise levels identified below considerably assume maximum power, and do not reflect likely reduction in power that will commensurately reduce noise. The insertion loss for the wall on the eastern property line was also calculated and applied to the results of Table 3. See Appendix E for calculations.

Table 3: Projected Construction Noise Levels (dBA, Leq)^{1,2}

Location	Phase	Construction Noise Level (Lmax)	Construction Noise Level (Leq)
Residential Property to the East	Demo	72	48
	Grade	66	46
	Build	67	46
	Pave	66	44
	Arch Coat	66	44
Residential Property to the South	Demo	73	64
	Grade	67	61
	Build	68	62
	Pave	67	60
	Arch Coat	67	60
<ol style="list-style-type: none"> 10 dBA insertion loss was calculated for eastern 8-foot wall using an insertion loss formula and is included in east residential calculations. See Appendix E. Projected noise levels include 15 dBA reduction from mufflers. 			

The project construction activities must occur within the permitted times and follow the noise limits as outlined by Section 16.154.020.F(4) of the City's Municipal Code. Construction noise will, therefore, comply with the local ordinances, and the impact will be less than significant. Construction noise will also meet the noise criteria outlined in the FTA Transit Noise and Vibration Impact Assessment Manual, which outlines a criteria of 80 dBA Leq at residential uses.

6.2 Construction Vibration Projections

Large vibratory rollers are anticipated during construction. The nearest existing building to anticipated construction activities is the commercial building located 30 feet to the west of the project site. At a distance of 30 feet, a large bulldozer would yield a worst-case 0.172 PPV (in/sec), which will be perceptible but below any risk of damage (0.5 in/sec PPV is the threshold of new residential structures). See Appendix E for calculations.

6.3 Compliance with Noise Ordinance

Construction operations must follow the City's Noise Ordinance, which states that construction, repair, or excavation work performed must occur within the permissible hours and cannot exceed specific standards (as discussed above). The project will be conditioned to comply with the City's Noise Ordinance. To ensure that the project's construction activities comply with the Noise Ordinance and do not disrupt the adjacent land uses, the project will implement the following standard practices as part of its design/construction:

1. Construction shall occur during the hours of 7 AM to 8PM on weekdays and Saturdays.
2. Mufflers that reduce levels at least 15 dBA shall be attached properly to all construction equipment.
3. The contractor shall locate equipment staging areas as far as possible, away from the sensitive receptors.

4. Idling equipment shall be turned off when not in use.
5. Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.

7.0 Conclusions

The project will be compliant with the City's Noise Ordinance, which will ensure that construction noise and vibration will not result in any significant environmental impacts. In addition, the project will not generate a noise impact during operation, but operation will be consistent with the existing, urban environment and will not exceed applicable standards. The Project is outside of the 65 dBA CNEL contours for the Cable and Brackett Field Airports. MD is pleased to provide this noise assessment for the proposed project. If you have any questions regarding this analysis, please call our office at (805) 426-4477.

Sincerely,
MD Acoustics, LLC



Naomi Jensen, INCE-USA
Acoustical Consultant



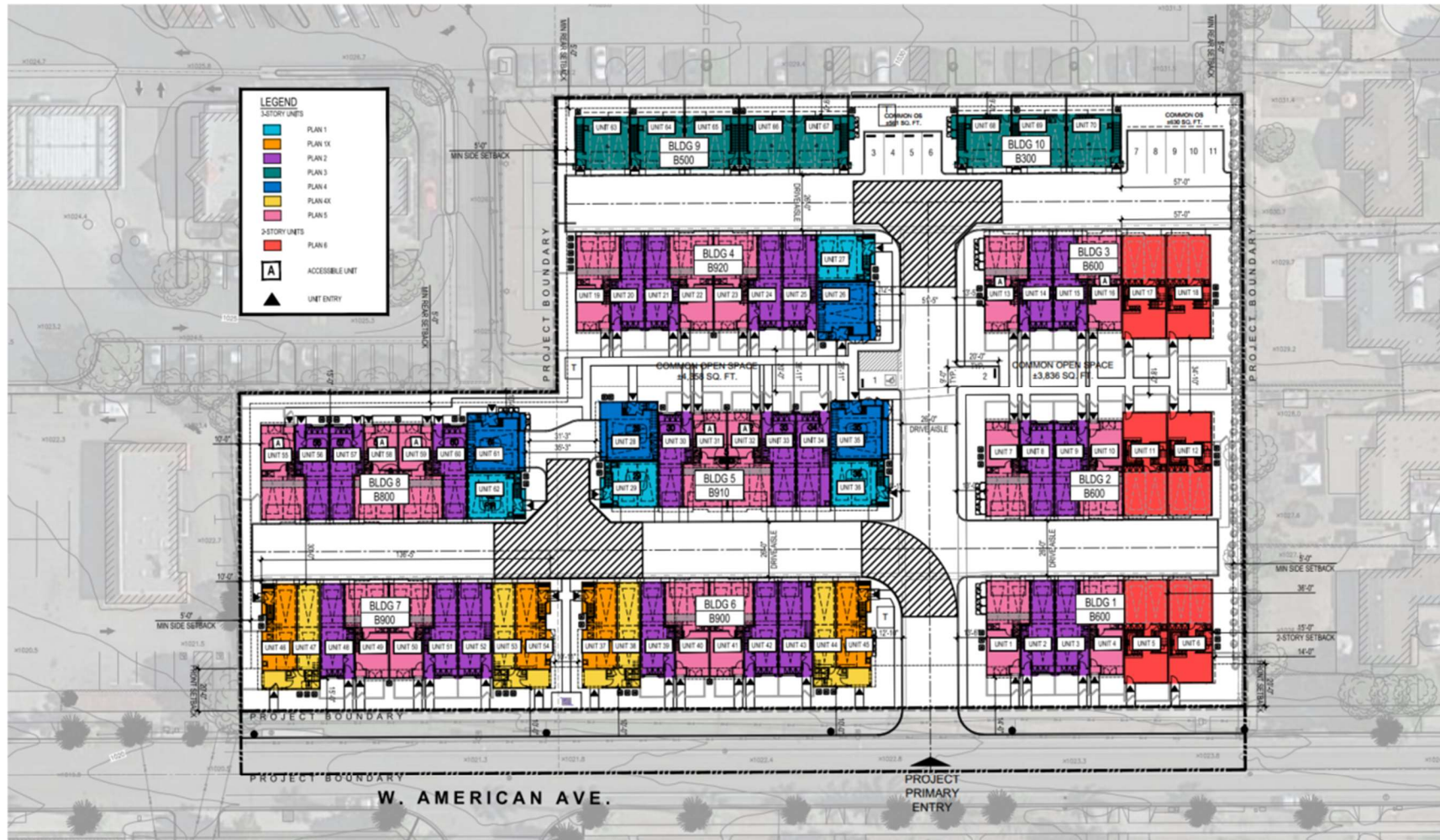
Claire Pincock, INCE-USA
Sr. Acoustical Consultant

Exhibit A
Location Map



Exhibit B

Site Plan



Appendix A

Glossary of Acoustical Terms

Glossary of Terms

A-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after the addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

Decibel (dB): A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A): A-weighted sound level (see definition above).

Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level. The energy average noise level during the sample period.

Habitable Room: Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking, or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

L(n): The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly L50, L90, L99, etc.

Noise: Any unwanted sound or sound which is undesirable because it interferes with speech and hearing or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

Noise Criteria (NC) Method: This metric plots octave band sound levels against a family of reference curves, with the number rating equal to the highest tangent line value as demonstrated in Figure 1.

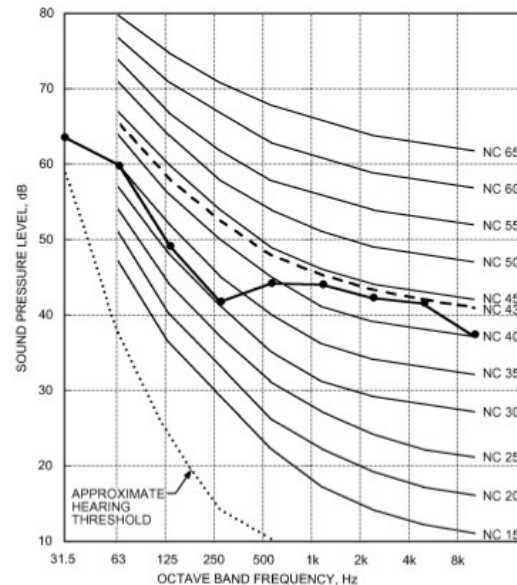
Percent Noise Levels: See L(n).

Room Criterion (RC) Method: When sound quality in the space is important, the RC metric provides a diagnostic tool to quantify both the speech interference level and spectral imbalance.

Sound Level (Noise Level): The weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum.

Sound Level Meter: An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

FIGURE 1: Sample NC Curves and Sample Spectrum Levels



Sound Transmission Class (STC): To quantify STC, a Transmission Loss (TL) measurement is performed in a laboratory over a range of 16 third-octave bands between 125 – 4,000 Hertz (Hz). The average human voice creates sound within the 125 – 4,000 Hz $1/3^{\text{rd}}$ octave bands.

STC is a single-number rating given to a particular material or assembly. The STC rating measures the ability of a material or an assembly to resist airborne sound transfer over the specified frequencies (see ASTM International Classification E413 and E90). In general, a higher STC rating corresponds with a greater reduction of noise transmitting through a partition.

STC is highly dependent on the construction of the partition. The STC of a partition can be increased by: adding mass, increasing or adding air space, and adding absorptive materials within the assembly. The STC rating does not assess low-frequency sound transfer (e.g. sounds less than 125 Hz). Special consideration must be given to spaces where the noise transfer concern has lower frequencies than speech, such as mechanical equipment and or/or music. The STC rating is a lab test that does not take into consideration weak points, penetrations, or flanking paths.

Even with a high STC rating, any penetration, air-gap, or “flanking path can seriously degrade the isolation quality of a wall. Flanking paths are the means for sound to transfer from one space to another other than through the wall. Sound can flank over, under, or around a wall. Sound can also travel through common ductwork, plumbing, or corridors. Noise will travel between spaces at the weakest points. Typically, there is no reason to spend money or effort to improve the walls until all weak points are controlled first.

Outdoor Living Area: Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

Percent Noise Levels: See L(n).

Sound Level (Noise Level): The weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum.

Sound Level Meter: An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Single Event Noise Exposure Level (SENEL): The dB(A) level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

Appendix B
Field Sheet

15-Minute Continuous Noise Measurement Datasheet - NM1, NM2

Project Name: 65 Units Claremont Noise
Project: #/Name: 0163-2023-011
Site Address/Location: 840 S Indian Hill Blvd
Date: 10/28/2024
Field Tech/Engineer: Jason Schuyler / Naomi Jensen

Site Observations:
Temperatures were in the high 50s, and winds were at 0 MPH. The site was locked, but because the Tennis courts are acoustically open, I was able to take NMs at the pinned locations on the outside of the tennis courts.

Sound Meter: XL2, NTI **SN:** A2A-08562-E0
Settings: A-weighted, slow, 1-sec, 15-minute interval
Site Id: NM1, NM2



15-Minute Continuous Noise Measurement Datasheet - Cont. - NM1, NM2

Project Name: 65 Units Claremont Noise

Calibrator:

Site Address/Location: 840 S Indian Hill Blvd

Cal Check: Pre-test: Post Test:

Site Id: NM1, NM2

Figure 1: NM1



Figure 2: NM1

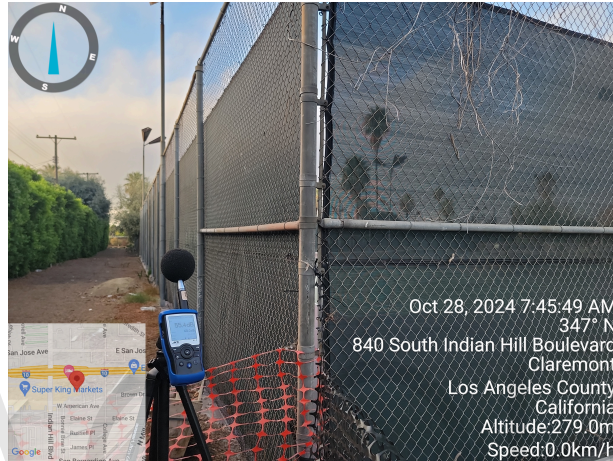


Figure 3: NM2

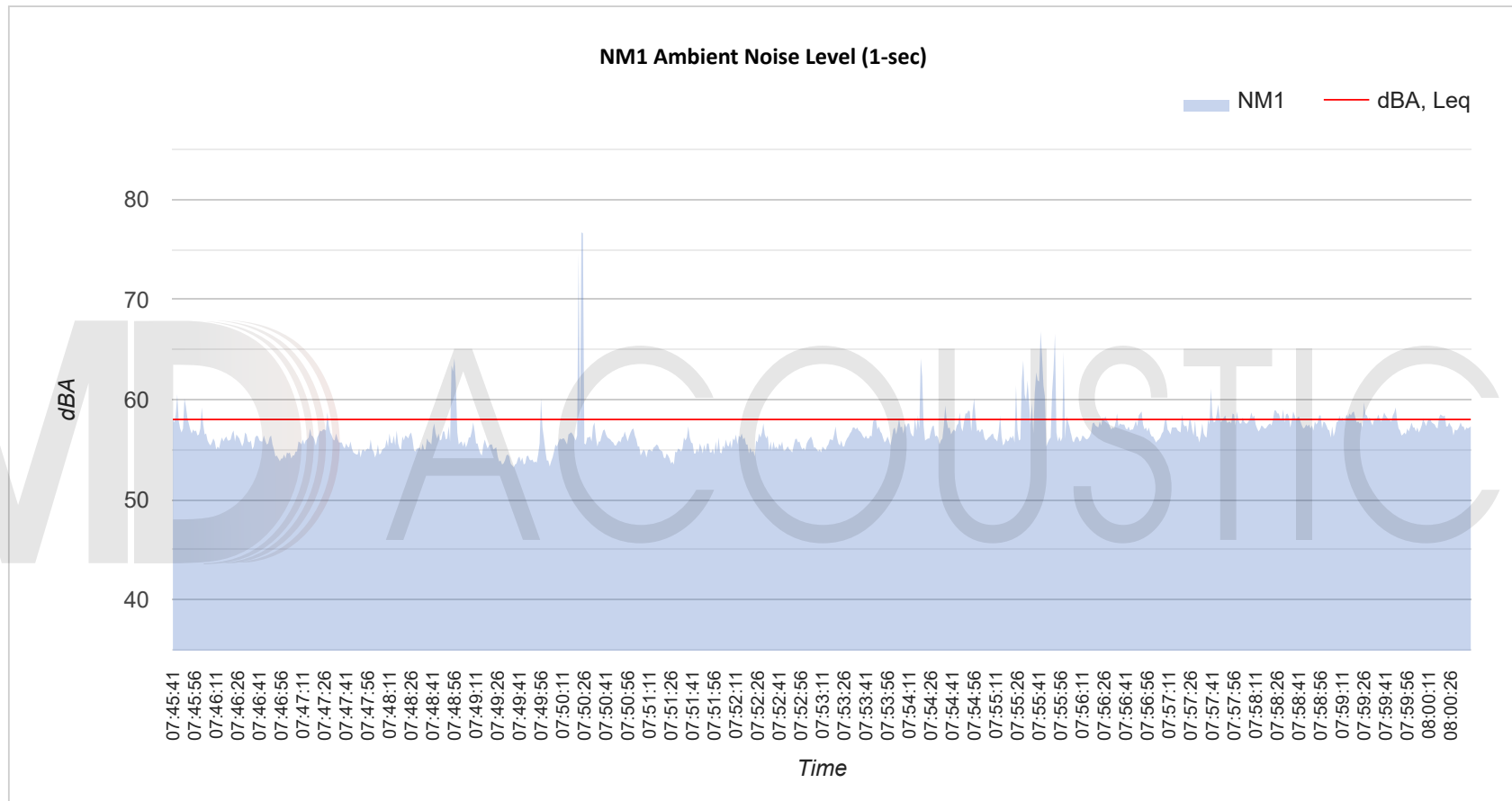


Table 1: Baseline Noise Measurement Summary

Location	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
NM1	7:45 AM	8:00 AM	58	77.7	53.3	61.8	58.5	57.4	56.4	54.8
NM2	8:17 AM	8:32 AM	60.4	70.9	53.9	65.2	62.9	61.2	59.5	56.1

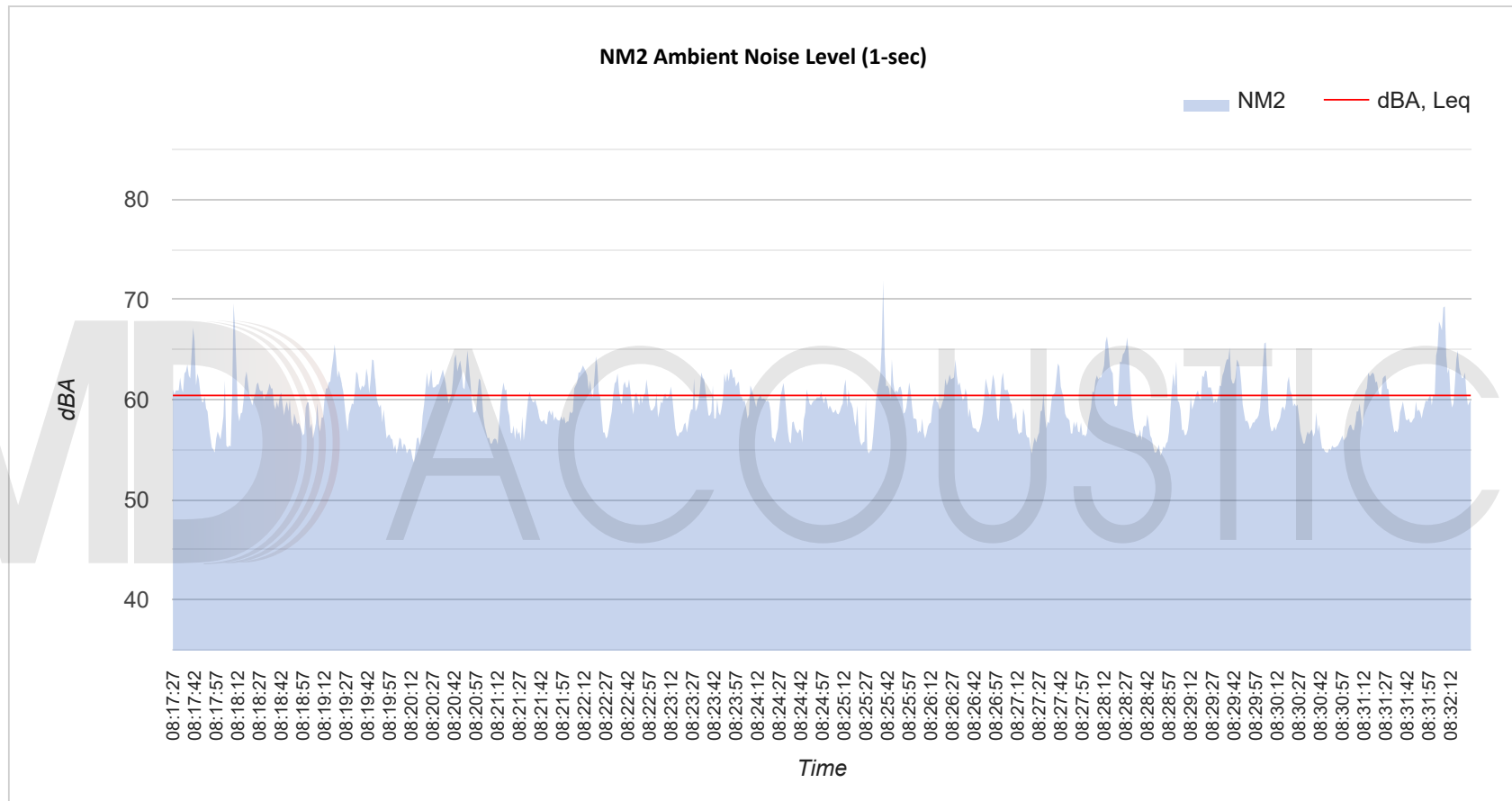
15-Minute Continuous Noise Measurement Datasheet - Cont. - NM1

Project Name:	65 Units Claremont Noise	Site Topo:	Flat and Open Tennis Courts	Noise Source(s) w/ Distance:
Site Address/Location:	840 S Indian Hill Blvd	Meteorological Cond.:	58F Partly cloudy, No wind	road noise and residential noise
Site Id:	NM1	Ground Type:	buildings and asphalt	

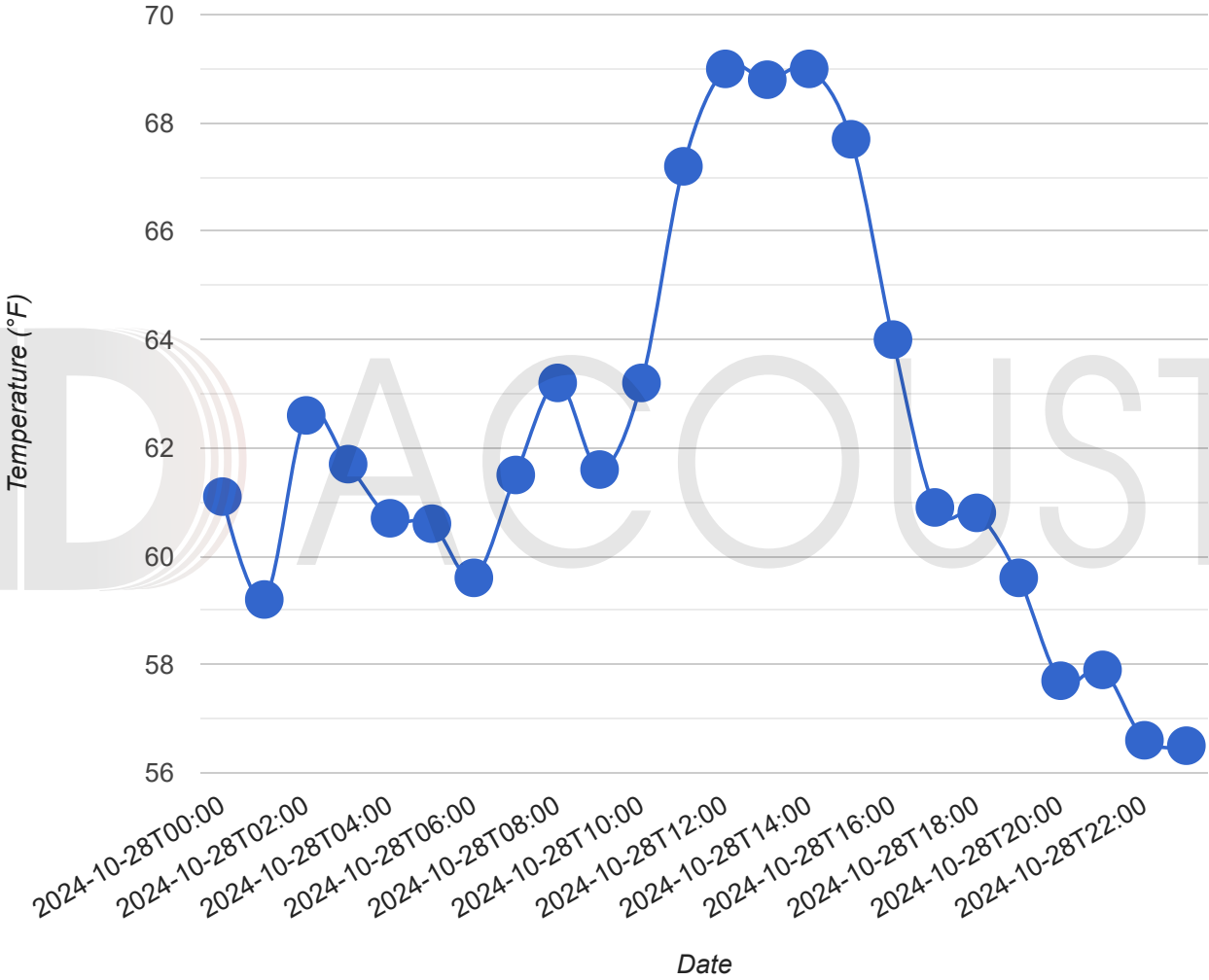


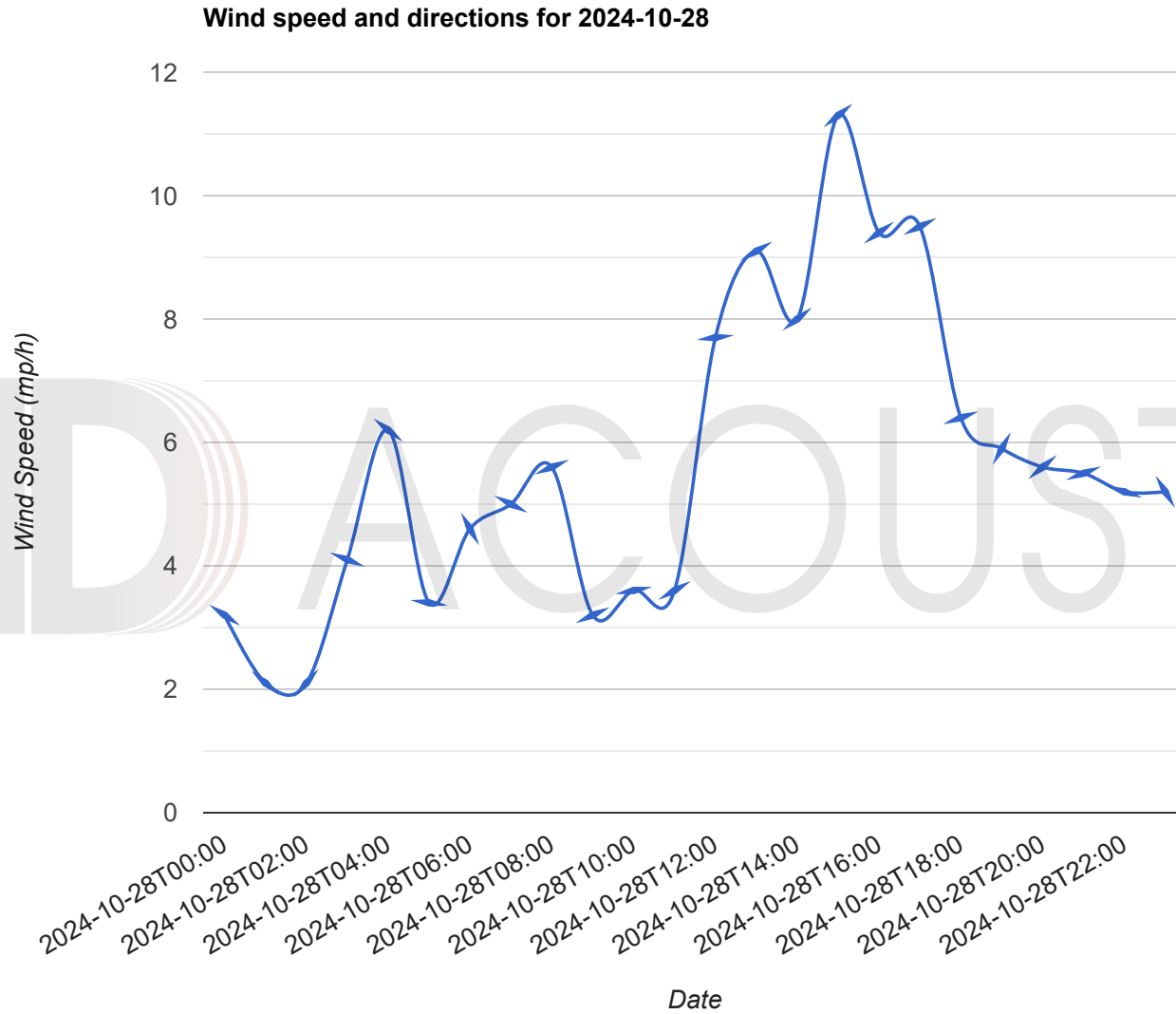
15-Minute Continuous Noise Measurement Datasheet - Cont. - NM2

Project Name:	65 Units Claremont Noise	Site Topo:	Flat open tennis courts	Noise Source(s) w/ Distance:
Site Address/Location:	840 S Indian Hill Blvd	Meteorological Cond.:	58F Partly cloudy, No wind	road noise and residential noise
Site Id:	NM2	Ground Type:	buildings and asphalt	



Weather forecast for 2024-10-28





Source: Global Forecast System (GFS) weather forecast model

Appendix C

Traffic

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: CLAREMONT MFR
ROADWAY: INDIAN HILL BLVD
LOCATION: RESIDENCES SW OF SITE

JOB #: 0163-2023-11
DATE: 8-Nov-24
ENGINEER: N. Jensen

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT = 16,200
SPEED = 40
PK HR % = 10
NEAR LANE/FAR LANE DI: 0
ROAD ELEVATION = 0.0
GRADE = 1.0 %
PK HR VOL = 1,620

RECEIVER INPUT DATA

RECEIVER DISTANCE = 70
DIST C/L TO WALL = 0
RECEIVER HEIGHT = 5.0
WALL DISTANCE FROM RECEIVER 70
PAD ELEVATION = 0.5
ROADWAY VIEW: LF ANGLE= -90
RT ANGLE= 90
DF ANGLE= 180

SITE CONDITIONS

AUTOMOBILES = 10
MEDIUM TRUCKS = 10 (10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS = 10

WALL INFORMATION

HTH WALL 0.0
AMBIENT= 0.0
BARRIER = 0 (0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	70.09	--
MEDIUM TRUCKS	4.0	70.02	--
HEAVY TRUCKS	8.0	70.04	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.5	64.6	62.8	56.8	65.4	66.0
MEDIUM TRUCKS	58.2	56.7	50.3	48.8	57.2	57.5
HEAVY TRUCKS	59.1	57.7	48.6	49.9	58.2	58.4
NOISE LEVELS (dBA)	67.7	65.9	63.2	58.1	66.7	67.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.5	64.6	62.8	56.8	65.4	66.0
MEDIUM TRUCKS	58.2	56.7	50.3	48.8	57.2	57.5
HEAVY TRUCKS	59.1	57.7	48.6	49.9	58.2	58.4
NOISE LEVELS (dBA)	67.7	65.9	63.2	58.1	66.7	67.2

NOISE CONTOUR (FT)

NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	37	115	365	1154
LDN	33	103	325	1029

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: CLAREMONT MFR
 ROADWAY: INDIAN HILL BLVD
 LOCATION: RESIDENCES SW OF SITE

JOB #: 0163-2023-11
 DATE: 8-Nov-24
 ENGINEER: N. Jensen

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT = 16,638
 SPEED = 40
 PK HR % = 10
 NEAR LANE/FAR LANE DI: 0
 ROAD ELEVATION = 0.0
 GRADE = 1.0 %
 PK HR VOL = 1,664

RECEIVER INPUT DATA

RECEIVER DISTANCE = 70
 DIST C/L TO WALL = 0
 RECEIVER HEIGHT = 5.0
 WALL DISTANCE FROM RECEIVER 70
 PAD ELEVATION = 0.5
 ROADWAY VIEW: LF ANGLE= -90
 RT ANGLE= 90
 DF ANGLE= 180

SITE CONDITIONS

AUTOMOBILES = 10
 MEDIUM TRUCKS = 10 (10 = HARD SITE, 15 = SOFT SITE)
 HEAVY TRUCKS = 10

WALL INFORMATION

HTH WALL 0.0
 AMBIENT= 0.0
 BARRIER = 0 (0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	70.09	--
MEDIUM TRUCKS	4.0	70.02	--
HEAVY TRUCKS	8.0	70.04	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.6	64.7	62.9	56.9	65.5	66.1
MEDIUM TRUCKS	58.3	56.8	50.4	48.9	57.4	57.6
HEAVY TRUCKS	59.2	57.8	48.7	50.0	58.4	58.5
NOISE LEVELS (dBA)	67.8	66.1	63.3	58.2	66.8	67.3

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.6	64.7	62.9	56.9	65.5	66.1
MEDIUM TRUCKS	58.3	56.8	50.4	48.9	57.4	57.6
HEAVY TRUCKS	59.2	57.8	48.7	50.0	58.4	58.5
NOISE LEVELS (dBA)	67.8	66.1	63.3	58.2	66.8	67.3

NOISE CONTOUR (FT)

NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	37	119	375	1186
LDN	33	106	334	1057

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: CLAREMONT MFR
ROADWAY: W AMERICAN AVE
LOCATION: RESIDENCES S OF SITE

JOB #: 0163-2023-11
DATE: 8-Nov-24
ENGINEER: N. Jensen

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT = 2,500
SPEED = 25
PK HR % = 10
NEAR LANE/FAR LANE DI: 0
ROAD ELEVATION = 0.0
GRADE = 1.0 %
PK HR VOL = 250

RECEIVER INPUT DATA

RECEIVER DISTANCE = 40
DIST C/L TO WALL = 0
RECEIVER HEIGHT = 5.0
WALL DISTANCE FROM RECEIVER 40
PAD ELEVATION = 0.5
ROADWAY VIEW: LF ANGLE= -90
RT ANGLE= 90
DF ANGLE= 180

SITE CONDITIONS

AUTOMOBILES = 10
MEDIUM TRUCKS = 10 (10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS = 10

WALL INFORMATION

HTH WALL 0.0
AMBIENT= 0.0
BARRIER = 0 (0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	40.15	--
MEDIUM TRUCKS	4.0	40.03	--
HEAVY TRUCKS	8.0	40.08	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	54.9	53.0	51.2	45.2	53.8	54.4
MEDIUM TRUCKS	49.3	47.8	41.5	39.9	48.4	48.6
HEAVY TRUCKS	51.5	50.1	41.1	42.3	50.7	50.8
NOISE LEVELS (dBA)	57.3	55.6	52.0	47.8	56.3	56.7

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	54.9	53.0	51.2	45.2	53.8	54.4
MEDIUM TRUCKS	49.3	47.8	41.5	39.9	48.4	48.6
HEAVY TRUCKS	51.5	50.1	41.1	42.3	50.7	50.8
NOISE LEVELS (dBA)	57.3	55.6	52.0	47.8	56.3	56.7

NOISE CONTOUR (FT)

NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	2	6	19	59
LDN	2	5	17	54

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: CLAREMONT MFR
 ROADWAY: W AMERICAN AVE
 LOCATION: RESIDENCES S OF SITE

JOB #: 0163-2023-11
 DATE: 8-Nov-24
 ENGINEER: N. Jensen

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT = 2,700
 SPEED = 25
 PK HR % = 10
 NEAR LANE/FAR LANE DI: 0
 ROAD ELEVATION = 0.0
 GRADE = 1.0 %
 PK HR VOL = 270

RECEIVER INPUT DATA

RECEIVER DISTANCE = 40
 DIST C/L TO WALL = 0
 RECEIVER HEIGHT = 5.0
 WALL DISTANCE FROM RECEIVER 40
 PAD ELEVATION = 0.5
 ROADWAY VIEW: LF ANGLE= -90
 RT ANGLE= 90
 DF ANGLE= 180

SITE CONDITIONS

AUTOMOBILES = 10
 MEDIUM TRUCKS = 10
 HEAVY TRUCKS = 10
 (10 = HARD SITE, 15 = SOFT SITE)

WALL INFORMATION

HTH WALL 0.0
 AMBIENT= 0.0
 BARRIER = 0 (0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	40.15	--
MEDIUM TRUCKS	4.0	40.03	--
HEAVY TRUCKS	8.0	40.08	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	55.2	53.3	51.6	45.5	54.1	54.7
MEDIUM TRUCKS	49.7	48.2	41.8	40.2	48.7	48.9
HEAVY TRUCKS	51.9	50.4	41.4	42.6	51.0	51.1
NOISE LEVELS (dBA)	57.6	55.9	52.4	48.1	56.6	57.0

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	55.2	53.3	51.6	45.5	54.1	54.7
MEDIUM TRUCKS	49.7	48.2	41.8	40.2	48.7	48.9
HEAVY TRUCKS	51.9	50.4	41.4	42.6	51.0	51.1
NOISE LEVELS (dBA)	57.6	55.9	52.4	48.1	56.6	57.0

NOISE CONTOUR (FT)

NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	2	6	20	64
LDN	2	6	18	58

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: CLAREMONT MFR
 ROADWAY: W AMERICAN AVE
 LOCATION: RESIDENCES E OF SITE

JOB #: 0163-2023-11
 DATE: 8-Nov-24
 ENGINEER: N. Jensen

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT = 2,700
 SPEED = 25
 PK HR % = 10
 NEAR LANE/FAR LANE DI: 0
 ROAD ELEVATION = 0.0
 GRADE = 1.0 %
 PK HR VOL = 270

RECEIVER INPUT DATA

RECEIVER DISTANCE = 45
 DIST C/L TO WALL = 0
 RECEIVER HEIGHT = 5.0
 WALL DISTANCE FROM RECEIVER 45
 PAD ELEVATION = 0.5
 ROADWAY VIEW: LF ANGLE= -90
 RT ANGLE= 90
 DF ANGLE= 180

SITE CONDITIONS

AUTOMOBILES = 10
 MEDIUM TRUCKS = 10 (10 = HARD SITE, 15 = SOFT SITE)
 HEAVY TRUCKS = 10

WALL INFORMATION

HTH WALL 0.0
 AMBIENT= 0.0
 BARRIER = 0 (0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.775	0.129	0.096	0.9742
MEDIUM TRUCKS	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	45.14	--
MEDIUM TRUCKS	4.0	45.02	--
HEAVY TRUCKS	8.0	45.07	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	54.7	52.8	51.1	45.0	53.6	54.2
MEDIUM TRUCKS	49.2	47.6	41.3	39.7	48.2	48.4
HEAVY TRUCKS	51.3	49.9	40.9	42.1	50.5	50.6
NOISE LEVELS (dBA)	57.1	55.4	51.9	47.6	56.1	56.5

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	54.7	52.8	51.1	45.0	53.6	54.2
MEDIUM TRUCKS	49.2	47.6	41.3	39.7	48.2	48.4
HEAVY TRUCKS	51.3	49.9	40.9	42.1	50.5	50.6
NOISE LEVELS (dBA)	57.1	55.4	51.9	47.6	56.1	56.5

NOISE CONTOUR (FT)

NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	2	6	20	64
LDN	2	6	18	58

Appendix D
Stationary Equipment

50PG03-14

Ultra High Efficiency Single Package Electric Cooling with
Optional Electric Heat Commercial Rooftop Units with Puron®
(R-410A) Refrigerant, Optional EnergyX™ (Energy Recovery
Ventilator)
2 to 12.5 Nominal Tons

Carrier

turn to the experts



Product Data



AHRI* CAPACITY RATINGS

50PG03-14

UNIT 50PG	NOMINAL CAPACITY (Tons)	NET COOLING CAPACITY (Btuh)	TOTAL POWER (kW)	SEER	EER†	SOUND RATING (dB)	IEER
03	2.0	24,000	2.1	14.1	11.5	75	—
04	3.0	35,800	3.1	14.1	11.7	73	—
05	4.0	47,500	4.0	15.0	12.2	72	—
06	5.0	58,500	4.9	14.8	12.2	78	—
07	6.0	69,000	5.8	—	12.2	78	13.0
08	7.5	88,000	7.0	—	12.7	80	13.5
09	8.5	102,000	8.4	—	12.4	80	13.4
12	10.0	119,000	9.9	—	12.2	80	13.0
14	12.5	150,000	13.2	—	11.5	83	11.6

LEGEND

EER – Energy Efficiency Ratio

SEER – Seasonal Energy Efficiency Ratio

Assuming 1 3-ton unit
per condo unit or single
family home

*Air Conditioning, Heating and Refrigeration Institute.

† AHRI does not require EER ratings for units with capacity below 65,000 Btuh.

NOTES:

1. Tested in accordance with AHRI Standards 210–94 (sizes 03–12), 360–93 (size 14).

2. Ratings are net values, reflecting the effects of circulating fan heat.

3. Ratings are based on:

Cooling Standard: 80°F db, 67°F wb indoor entering–air temperature and 95°F db air entering outdoor unit.

IPLV Standard: 80°F db, 67°F wb indoor entering–air temperature and 80°F db outdoor entering–air temperature.

4. All 50PG units are in compliance with Energy Star® and ASHRAE 90.1 2010 Energy Standard for minimum SEER and EER requirements.

5. Units are rated in accordance with AHRI sound standards 270 or 370.

6. Per AHRI, Integrated Energy Efficiency Ratio (IEER) became effective beginning January 1, 2010. Integrated Part–Load Value (IPLV) was superseded by IEER on January 1, 2010. IEER is intended to be a measure of merit for the part load performance of the unit. Each building may have different part load performance due to local occupancy schedules, building construction, building location and ventilation requirements. For specific building energy analysis, an hour–by–hour analysis program should be used.



Use of the AHRI Certified
TM Mark indicates a
manufacturer's
participation in the
program For verification
of certification for individual
products, go to
www.ahridirectory.org.

50PG

Appendix E
Construction Noise and Vibration Calculations

Compressor (air)	1	78	60	140	40	0	0.40	76.4	65.1
								76.4	65.1

¹FHWA Construction Noise Handbook: Table 9.1 RCNM Default Noise Emission Reference Levels and Usage Factors

Compressor (air)	1	78	20	200	40	0	0.40	86.0	62.0
								86.0	62.0

¹FHWA Construction Noise Handbook: Table 9.1 RCNM Default Noise Emission Reference Levels and Usage Factors

Barrier insertion loss For Flat Ground

Receiver - North P/L

Enter variables here:

Source Height H_s (ft)	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Receiver Height H_R (ft)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Barrier Height H_B (ft)	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Distance Source to barrier (ft)	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Distance Receiver to Barrier (ft)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Soft Ground = 1; Hard Ground = 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Calculations

A	15	15.033296	15.13274595	15.297059	15.524175	15.811388	16.155494	16.552945	17	17.492856	18.027756	18.601075	19.209373	19.849433	20.518285	21.213203
B	5.8309519	6.4031242	7.071067812	7.8102497	8.6023253	9.4339811	10.29563	11.18034	12.083046	13	13.928388	14.866069	15.811388	16.763055	17.720045	18.681542
C	20.223748	20.223748	20.22374842	20.223748	20.223748	20.223748	20.223748	20.223748	20.223748	20.223748	20.223748	20.223748	20.223748	20.223748	20.223748	20.223748
P	0.6072035	1.2126722	1.980065346	2.8835598	3.9027515	5.021621	6.2273761	7.5095368	8.8592976	10.269107	11.732396	13.243396	14.797013	16.388739	18.014581	19.670997
Ground type H_{eff} (with barrier)	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Ground type H_{eff} (no barrier)	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
H_{eff} (with barrier)	14.5	15.5	16.5	17.5	18.5	19.5	20.5	21.5	22.5	23.5	24.5	25.5	26.5	27.5	28.5	29.5
H_{eff} no barrier	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
G_B	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
G_{NB}	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
$A_{barrier}$	10.843458	13.83185	15.96033113	17.592769	18.907184	20.001914	20.936525	21.749606	22.467467	23.108801	23.687342	24.213468	24.695215	25.13893	25.549716	25.931738

$IL_{barrier}$	10.8	13.8	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

Barrier Height (ft) IL (dBA)

8	11
9	14
10	15
11	15
12	15
13	15
14	15
15	15
16	15
17	15
18	15
19	15
20	15
21	15
22	15
23	15

Barrier insertion loss For Flat Ground

Receiver - North P/L

Enter variables here:

Source Height H_s (ft)	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Receiver Height H_R (ft)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Barrier Height H_B (ft)	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Distance Source to barrier (ft)	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
Distance Receiver to Barrier (ft)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Soft Ground = 1; Hard Ground = 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Calculations

A	200	200.0025	200.0099998	200.0225	200.04	200.06249	200.08998	200.12246	200.15994	200.2024	200.24984	200.30227	200.35968	200.42205	200.4894	200.56171
B	5.8309519	6.4031242	7.071067812	7.8102497	8.6023253	9.4339811	10.29563	11.18034	12.083046	13	13.928388	14.866069	15.811388	16.763055	17.720045	18.681542
C	205.02195	205.02195	205.02195	205.02195	205.02195	205.02195	205.02195	205.02195	205.02195	205.02195	205.02195	205.02195	205.02195	205.02195	205.02195	205.02195
P	0.8090019	1.3836742	2.059117517	2.8107984	3.6203712	4.4745213	5.3636599	6.2808524	7.221032	8.1804475	9.1562822	10.14639	11.149115	12.163159	13.187496	14.221303
Ground type H_{eff} (with barrier)	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Ground type H_{eff} (no barrier)	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
H_{eff} (with barrier)	14.5	15.5	16.5	17.5	18.5	19.5	20.5	21.5	22.5	23.5	24.5	25.5	26.5	27.5	28.5	29.5
H_{eff} no barrier	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
G_B	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
G_{NB}	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
$A_{barrier}$	12.078664	14.404295	16.13033373	17.481777	18.581006	19.50094	20.288087	20.97366	21.579467	22.121245	22.610666	23.05659	23.465878	23.843938	24.195098	24.522868

$IL_{barrier}$	12.1	14.4	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
----------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

Barrier Height (ft) IL (dBA)

8	12
9	14
10	15
11	15
12	15
13	15
14	15
15	15
16	15
17	15
18	15
19	15
20	15
21	15
22	15
23	15

VIBRATION LEVEL IMPACT

Project: QQ Innovation Center

Date: 11/12/24

Source: Vibratory Roller

Scenario: Unmitigated

Location: Northeast commercial buildings

Address: South Loop Rd, Placer County

 $PPV = PPV_{ref}(25/D)^n$ (in/sec)**DATA INPUT**Equipment =
Type

1

Vibratory Roller

INPUT SECTION IN BLUE

PPVref =

0.21

Reference PPV (in/sec) at 25 ft.

D =

30.00

Distance from Equipment to Receiver (ft)

n =

1.10

Vibration attenuation rate through the ground

Note: Based on reference equations from Vibration Guidance Manual, California Department of Transportation, 2006, pgs 38-43.

DATA OUT RESULTS

PPV =

0.172

IN/SEC

OUTPUT IN RED

EXHIBIT D

November 18, 2024

Mr. Patrick Chien
City Ventures
3121 Michelson Drive, Suite 150
Irvine, CA 92555

Subject:

American Ave Multi-Family Development – Focused Air Quality Impact Study, City of Claremont, CA

Dear Mr. Chien:

MD Acoustics, LLC (MD) has completed a focused Air Quality Impact Evaluation for the proposed multi-family development located at 840 S Indian Hill Boulevard in the City of Claremont, CA. The purpose of this focused study is to evaluate the air quality construction and operational emissions generated by the proposed project and to compare the project emissions to South Coast Air Quality Management District's (SCAQMD) thresholds of significance as it relates to residential and commercial uses and consistency with applicable plans. A list of definitions and terminology is located in Appendix A.

1.0 Project Description

The Project Site is on approximately 2.67 acres. The Project includes the construction of 10 new residential buildings containing 70 residential dwelling units, 140 garage parking spaces, and 11 guest parking spaces. The proposed project site plan is in Appendix B.

Land uses surrounding the site include commercial uses to the west, American Avenue to the south, single-family residential uses to the east, and a Motel 6 to the north.

2.0 AQ Thresholds of Significance

Project emissions were compared to both regional and localized SCAQMD's thresholds of significance for construction and operational emissions^{1,2}.

3.0 Evaluation Procedure/Methodology

MD utilized the latest version of CalEEMod (2022.1.1.28) to calculate both the construction and operational emissions from the project site³. Project construction is modeled to commence no earlier than January 2025 and be completed by January 2026. Construction assumes demolition, site preparation, grading, building construction, paving, and architectural coating. CalEEMod defaults were utilized. Assumptions and output calculations are provided in Appendix C.

4.0 Local Ambient Conditions

The project site is located in South Coast Air Basin (SCAB) in the Pomona/Walnut Valley Source Receptor Area (SRA) 10⁴. The nearest air monitoring station to the project site is the Pomona Air Monitoring Station.

¹ <https://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>

² <https://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

³ <https://www.caleemod.com/>

⁴ <https://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf?sfvrsn=6>

Historical air quality data for the vicinity can be found both at CARB and SCAQMD's websites^{5,6}. Temperature and historical precipitation data can be found at the WRCC⁷.

4.1 SCAQMD and AQMP

The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the South Coast Air Basin, where the Project site is located. The SCAQMD operates monitoring stations in the SCAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The SCAQMD's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain state and federal ambient air quality standards in the SCAB. The SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

The most-recently adopted AQMP is the 2022 AQMP (SCAQMD 2022), which was adopted by the SCAQMD governing board on December 2, 2022. The 2022 AQMP is a regional blueprint for achieving air quality standards and healthy air. The 2022 AQMP was developed to address the requirements for meeting the U.S. EPA's NAAQS for ground-level O₃. The SCAB is classified as an "extreme" non-attainment area. The strategies of the 2022 AQMP include: wide adoption of zero-emissions technologies; low NO_x technologies where zero-emission technologies are not feasible; federal action; zero-emission technologies for residential and industrial sources; incentive funding in environmental justice areas; and prioritizing benefits on the most disadvantaged communities (SCAQMD 2022).

5.0 Findings

The following outlines the emissions for the project:

5.1 Regional Construction Emissions

The construction emissions for the project would not exceed the SCAQMD's daily emission thresholds at the regional level as indicated in Table 1, and therefore the impact would be considered less than significant.

⁵ <https://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year>

⁶ <https://www.arb.ca.gov/adam/>

⁷ <https://www.wrcc.dri.edu/summary/Climsmsca.html>

Table 1: Regional Significance – Construction Emissions (lbs/day)

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO ₂	PM10	PM2.5
Demolition						
On-Site ²	1.47	13.90	15.10	0.02	2.12	0.76
Off-Site ³	0.07	1.64	1.34	0.01	0.51	0.15
Total	1.54	15.54	16.44	0.03	2.63	0.91
Site Preparation						
On-Site ²	1.19	10.90	11.00	0.03	1.09	0.50
Off-Site ³	0.03	0.04	0.44	0.00	0.01	0.02
Total	1.22	10.94	11.44	0.03	1.10	0.52
Grading						
On-Site ²	1.51	14.10	14.50	0.02	3.42	1.93
Off-Site ³	0.15	9.25	4.07	0.05	2.15	0.65
Total	1.66	23.35	18.57	0.07	5.57	2.58
Building Construction						
On-Site ²	1.24	10.60	11.90	0.02	0.40	0.37
Off-Site ³	0.21	0.48	2.88	0.00	0.67	0.16
Total	1.45	11.08	14.78	0.02	1.07	0.53
Paving						
On-Site ²	1.13	6.13	8.21	0.01	0.27	0.25
Off-Site ³	0.06	0.26	0.97	0.00	0.25	0.06
Total	1.19	6.39	9.18	0.01	0.52	0.31
Architectural Coating						
On-Site ²	62.82	0.86	1.13	0.00	0.02	0.02
Off-Site ³	0.03	0.04	0.52	0.00	0.12	0.03
Total	62.85	0.90	1.65	0.00	0.14	0.05
Total of overlapping phases⁴	65.49	18.37	25.61	0.03	1.73	0.89
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Thresholds	No	No	No	No	No	No
Notes: ¹ Source: CalEEMod Version 2022.1.1.28 ² On-site emissions from equipment operated on-site that is not operated on public roads. ³ Off-site emissions from equipment operated on public roads. ⁴ Architectural coatings and paving phases may overlap.						

5.2 Localized Construction Emissions

Utilizing the construction equipment list and associated acreages per 8-hour day provided in the SCAQMD “Fact Sheet for Applying CalEEMod to Localized Significance Thresholds” (South Coast Air Quality Management District 2011b), the maximum number of acres disturbed in a day would be 1 acre during site preparation and grading (as shown in Table 2 below); therefore, the project emissions have been compared to the 1-acre per day localized significance threshold.

Table 2: Maximum Number of Acres Disturbed Per Day¹

Activity	Equipment	Number	Acres/8hr-day	Total Acres
Site Preparation	Graders	1	0.5	0.5
	Rubber Tired Dozers	1	0.5	0.5
Total Per Phase				1.0

Grading	Graders	1	0.5	0.5
	Rubber Tired Dozers	1	0.5	0.5
Total Per Phase				1.0
Notes: ¹ Source: CalEEMod output and South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2				

None of the analyzed criteria pollutants would exceed the LST emission thresholds at the nearest sensitive receptors as shown in Table 3, based upon a 25-meter threshold as the nearest sensitive receptor is located 15 meters to the east, as shown in the site map in Appendix B. Therefore, the impact would be less than significant from construction.

Table 3: Localized Significance – Construction Emissions (lbs/day)

Phase	On-Site Pollutant Emissions (pounds/day) ¹			
	NOx	CO	PM10	PM2.5
Demolition	13.90	15.10	2.12	0.76
Site Preparation	10.90	11.00	1.09	0.50
Grading	14.10	14.50	3.42	1.93
Building Construction	10.60	11.90	0.40	0.37
Paving	6.13	8.21	0.27	0.25
Architectural Coating	0.86	1.13	0.02	0.02
Total for overlapping construction phases ²	17.59	21.24	0.69	0.64
SCAQMD Threshold for 25 meters (82 feet)³	103	612	4	3
Exceeds Threshold?	No	No	No	No
Notes: ¹ Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for one-acre (see Table 2), to be conservative, in Pomona/Walnut Valley Source Receptor Area (SRA 10). ² Overlapping phases include building construction, paving, and architectural coating ³ The nearest sensitive receptors are the multi-family residential uses located 15 meters to the east of the project site; therefore, the 25-meter threshold was utilized, consistent with the direction in the SCAQMD's LST Methodology guidelines, which state that projects "with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters."				

5.3 Regional Operational Emissions

The operating emissions were based on year 2025, which is the anticipated opening year for the project. The CalEEMod default project trips and vehicle miles traveled (VMTs) were used.

The summer and winter emissions created by the proposed project's long-term operations were calculated and the highest emissions from either summer or winter are summarized in Table 4. The data in Table 4 shows that the operational emissions for the project would not exceed the SCAQMD's regional significance thresholds.

Table 4: Regional Significance – Operational Emissions (lbs/day)

Activity	Pollutant Emissions (pounds/day) ¹					
	VOC	NOx	CO	SO2	PM10	PM2.5
Area Sources ²	3.73	0.04	3.69	0.00	0.00	0.00
Energy Usage ³	0.01	0.18	0.08	0.00	0.01	0.01
Mobile Sources ⁴	1.19	1.04	11.10	0.03	2.50	0.65
Total Emissions	4.93	1.26	14.87	0.03	2.51	0.66
SCAQMD Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No
Notes: ¹ Source: CalEEMod Version 2022.1.1.28 ² Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.						

³ Energy usage consists of emissions from on-site natural gas usage.

⁴ Mobile sources consist of emissions from vehicles and road dust.

5.4 Localized Operational Emissions

Table 5 shows the calculated emissions for the proposed operational activities compared with appropriate LSTs. The LST analysis only includes on-site sources; however, the CalEEMod software outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table 5 include all on-site Project-related stationary sources and 10% of the Project-related new mobile sources.⁸ This percentage is an estimate of the amount of Project-related new vehicle traffic that will occur on-site.

Table 5: Localized Significance - Unmitigated Operational Emissions

On-Site Emission Source	On-Site Pollutant Emissions (pounds/day) ¹			
	NOx	CO	PM10	PM2.5
Area Sources ²	0.04	3.69	0.00	0.00
Energy Usage ³	0.18	0.08	0.01	0.01
On-Site Vehicle Emissions ⁴	0.10	1.11	0.25	0.07
Total Emissions	0.32	4.88	0.26	0.08
SCAQMD Threshold for 25 meters (82 feet)⁵	103	612	1	1
Exceeds Threshold?	No	No	No	No

Notes:

¹ Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for one-acre (see Table 2), to be conservative, in the Pomona/Walnut Valley Source Receptor Area (SRA 10).

² Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.

³ Energy usage consists of emissions from generation of electricity and on-site natural gas usage.

⁴ On-site vehicular emissions based on 1/10 of the gross vehicular emissions and road dust.

⁵ The nearest sensitive receptor is located 15 meters to the east of the property line; therefore, the 25-meter threshold has been used.

5.5 Consistency with Applicable Plans

Consistency with the City's General Plan

The project site is located in the City of Claremont. The project site has a current land use classification of Commercial Freeway. However, the City also identified the site on the Housing Element's Site Inventory as a candidate site for rezoning to accommodate a share of the City's Regional Housing Needs Assessment ("RHNA"). The City completed its rezoning of the site to Medium Residential RM (2,000) in July 2024 (as approved by ordinances of the City Council on June 25 and July 9, 2024).

The project would not be inconsistent with or obstruct any of the General Plan's policies related to air quality.

⁸ The project site is approximately 0.1 miles in length at its longest point; therefore the on-site mobile source emissions represent approximately 1/69th of the shortest CalEEMod default distance of 6.9 miles. Therefore, to be conservative, 1/34th the distance (dividing the mobile source emissions by 10) was used to represent the portion of the overall mobile source emissions that would occur on-site.

Furthermore, as a residential development would likely result in fewer vehicle trips than allowable Commercial Freeway uses such as service stations, restaurants, and big box retailers, the project would be within the assumptions of the City's zoning for traffic and related emissions and therefore would not cause a significant change from what is currently allowed by the City.

Air Quality Management Plan (AQMP)

With its rezoning to implement the Housing Element, the City prepared and certified the Housing Element Environmental Impact Report ("HE EIR"). The HE EIR concluded that the sites rezoning, which included the project site, would not conflict with or obstruct implementation of the AQMP because the rezoning was consistent with the growth assumptions in the 2016 AQMP (which was updated by the 2020 AQMP). Moreover, as discussed in the HE EIR, development of housing on the Housing Element sites would promote intensification and reuse of already developed lands with residential uses in close proximity to existing commercial areas and urban development, which would "help reduce reliance on the automobile and increase use of alternative transportation modes." For that reason and others stated in the HE EIR, the project would be consistent with the AQMP's control measures.

5.6 Odors

The project proposes to develop housing, which is not identified as an odor-causing use that could create odor impacts. The HE EIR confirms that development Housing Element sites for residential use are not anticipated "to create objectionable odors affecting a substantial number of people."

6.0 Conclusions

Construction and operational project emissions were evaluated and compared to both regional and localized SCAQMD's thresholds of significance. Project emissions are anticipated to be below SCAQMD's thresholds of significance with no mitigation. Therefore, the impact is less than significant.

The project would also not obstruct implementation of or be inconsistent with the 2020 AQMP. No significant impacts related to air quality plans would occur.

MD is pleased to provide this focused Air Quality Impact Evaluation. If you have any questions regarding this analysis, please don't hesitate to call us at (805) 426-4477.

Sincerely,
MD Acoustics, LLC



Tyler Klassen, EIT
Air Quality Specialist

Appendix A

Glossary of Terms

AQMP	Air Quality Management Plan
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CFCs	Chlorofluorocarbons
CH ₄	Methane
CNG	Compressed natural gas
CO	Carbon monoxide
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DPM	Diesel particulate matter
GHG	Greenhouse gas
HFCs	Hydrofluorocarbons
LST	Localized Significant Thresholds
MTCO ₂ e	Metric tons of carbon dioxide equivalent
MMTCO ₂ e	Million metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NO _x	Nitrogen Oxides
NO ₂	Nitrogen dioxide
N ₂ O	Nitrous oxide
O ₃	Ozone
PFCs	Perfluorocarbons
PM	Particle matter
PM ₁₀	Particles that are less than 10 micrometers in diameter
PM _{2.5}	Particles that are less than 2.5 micrometers in diameter
PMI	Point of maximum impact
PPM	Parts per million
PPB	Parts per billion
RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SF ₆	Sulfur hexafluoride
SIP	State Implementation Plan
SO _x	Sulfur Oxides
SRA	Source/Receptor Area
TAC	Toxic air contaminants
VOC	Volatile organic compounds
WRCC	Western Regional Climate Center

Appendix B
Site Plan

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- -PLEX - BUILDI G PL S

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- SCHEM TIC SITE SECTIO S
- SCHEM TIC SITE SECTIO S

- SITE CO TEXT M P
- RCHITECTUR L DET ILS

- WI DOW SCHEDULE
- WI DOW DET ILS

- L DSC PE

- CO CEPTU L L DSC PE PL
- CO CEPTU L L DSC PE E L RGEME T

- DESIG IM GERY
- CO CEPTU L W LL D FE CE

PL DET ILS
- CO CEPTU L PL TP LETTE

- CO CEPTU L L DSC PE LIGHTI G PL
- CO CEPTU L L DSC PE LIGHTI G DET ILS

- CO CEPTU L IRRIG TIO M STER PL

CIVIL

- VESTI G TE T TIVE TR CT M P

- EXISTI G SITE PL
- PRELIMI RY GR DI G PL

- PRELIMI RY UTILITY PL
- PRELIMI RY FIRE CCESS HYDR T

LOC TIO PL

SITE SUMMARY

APN:							
STREET ADDRESS:		840 SOUTH INDIAN HILL BLVD		OCCUPANCY:		R-2	
COUNTY:		LOS ANGELES COUNTY		TYPE OF CONSTRUCTION:		V-B	
CURRENT ZONING:		COMMERCIAL FREEWAY		SPRINKLER SYSTEM:		FULL NFPA 13	
PROPOSED ZONING:		RM 2.000		BUILDING HEIGHTS:		MAXIMUM:	
GROSS LOT AREA :		3.00 AC	130,462 SF	3-STORY		35'-0"	
NET LOT AREA		2.67 AC	116,305 SF	2-STORY		25'-0"	
NUMBER OF UNITS:		70 DUs		SETBACKS:		REQUIRED:	
MARKET RATE UNITS:		59 DUs		*FRONT (AMERICAN AVE) :		20' MIN	
MODERATE INCOME UNITS:		7 DUs		STREET SIDE:		15' MIN	
LOW INCOME UNITS:		4 DUs		INTERIOR SIDE:		5' MIN	
				REAR:		5' MIN	
DENSITY		±35 DU/AC	23.4 DU/AC (GROSS)	*3 STORY SET BACK ON RESIDENTIAL FACING SIDE		36'	
LOT COVERAGE:		40%					

UNIT SUMMARY

TOWNHOMES													
PLAN TYPE	DESCRIPTION	# OF UNITS	MIX	BEDROOMS	NET SF	GROSS SF (INCLUDING EXTERIOR WALLS ONLY)	TOTAL NET	TOTAL GROSS	GARAGE	PRIVATE DECKS	PRIVATE COVERED PORCH	TOTAL COVERED PORCH + DECKS	TOTAL GROSS (INCLUDING GARAGES, COVERED PORCHES, & DECKS) PER UNIT
PLAN 1	2 BEDS/ 2.5 BATHS	4 UNITS	6%	2 BEDS	1,182 SF	1,298 SF	4,728 SF	5,192 SF	464 SF	43 SF	0 SF	172 SF	1,805 SF
PLAN 1X	2 BEDS/ 2.5 BATHS	4 UNITS	6%	2 BEDS	1,155 SF	1,297 SF	4,620 SF	5,188 SF	464 SF	43 SF	0 SF	172 SF	1,804 SF
PLAN 2	3 BEDS/ 3 BATHS	22 UNITS	31%	3 BEDS	1,363 SF	1,446 SF	29,986 SF	31,812 SF	502 SF	51 SF	11 SF	1,364 SF	2,010 SF
PLAN 3	2 BEDS/ 2.5 BATHS	8 UNITS	11%	2 BEDS	1,385 SF	1,507 SF	11,080 SF	12,056 SF	508 SF	68 SF	0 SF	544 SF	2,083 SF
PLAN 4	3 BEDS/ 2.5 BATHS	4 UNITS	6%	3 BEDS	1,471 SF	1,562 SF	5,884 SF	6,248 SF	541 SF	99 SF	0 SF	396 SF	2,202 SF
PLAN 4X	3 BEDS/ 2.5 BATHS	4 UNITS	6%	3 BEDS	1,504 SF	1,590 SF	6,016 SF	6,360 SF	453 SF	99 SF	99 SF	792 SF	2,241 SF
PLAN 5	3 BEDS + OPT. BED 4/ 3 BATHS	18 UNITS	26%	4 BEDS	1,639 SF	1,762 SF	29,502 SF	31,716 SF	465 SF	73 SF	19 SF	1,656 SF	2,319 SF
PLAN 6	3 BEDS/ 2.5 BATHS	6 UNITS	9%	3 BEDS	1,393 SF	1,512 SF	8,358 SF	9,072 SF	438 SF	66 SF	0 SF	396 SF	2,016 SF
		TOTAL	70 UNITS	100%			100,174 SF	107,644 SF			5,492 SF		
				7 UNITS (ACCESSIBLE UNITS)									

BUILDING SUMMARY

BLDG #	DESCRIPTION	NET SF	GROSS SF *INCLUDES GARAGES, COVERED PORCHES, & DECKS
BLDG 1	B600 - 6- PLEX	8,790 SF	12,690 SF
BLDG 2	B600 - 6- PLEX	8,790 SF	12,690 SF
BLDG 3	B600 - 6- PLEX	8,790 SF	12,690 SF
BLDG 4	B920 - 9- PLEX	13,022 SF	19,004 SF
BLDG 5	B910 - 9- PLEX	12,673 SF	18,682 SF
BLDG 6	B900 - 9- PLEX	12,685 SF	18,758 SF
BLDG 7	B900 - 9- PLEX	12,685 SF	18,758 SF
BLDG 8	B800 - 8- PLEX	11,659 SF	16,994 SF
BLDG 9	B500 - 5- PLEX	6,925 SF	10,415 SF
BLDG 10	B300 - 3- PLEX	4,155 SF	6,249 SF
TOTAL BUILDING SF		100,174 SF	146,930 SF

OPEN SPACE SUMMARY

REQUIRED OPEN SPACE			
* (PER OUTDOOR LIVING SPACE, CH 16.013.020 DEVELOPMENT STANDARDS)			
* OUTDOOR LIVING SPACE 400 SQFT PER BEDROOM	REQ	84,800	SF
* COMMON OPEN SPACE = MIN. 50% OF OUTDOOR LIVING SPACE W/ 20' MIN. DIMENSION IN EITHER DIRECTION	REQ	42,400	SF
* PRIVATE OPEN SPACE = MIN. 25% OF OUTDOOR LIVING SPACE W/ 8' MIN. DIMENSION IN ONE DIRECTION	REQ	21,200	SF

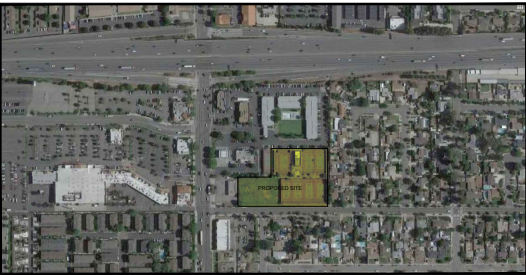
PROVIDED OPEN SPACE

*COMMON	9,385	134 SF/UNIT
PRIVATE PATIO	7,743	111 SF/UNIT
*PRIVATE (DECKS + COVERED PORCH)	5,492 SF	78 SF/UNIT
TOTAL PROVIDED:	22,620 SF	323 SF/ UNIT

PARKING SUMMARY

REQUIRED PARKING *PER STATE DENSITY BONUS						
0 TO 1 BEDS	0 UNITS	x	1.25 SPACES /DU	=	0 SPACES	
2 BEDS	16 UNITS	x	1.5 SPACES /DU	=	24 SPACES	
3 BEDS	36 UNITS	x	1.5 SPACES /DU	=	54 SPACES	
4 BEDS	18 UNITS	x	2.5 SPACES /DU	=	45 SPACES	
TOTAL REQUIRED PARKING					123 SPACES	
PROVIDED PARKING						
TOWNHOMES (GARAGE SPACES)	70 UNITS	x	2 SPACES /DU	=	140 SPACES	
		TANDEM	(60 SPACES)			
			GUEST	=	11 SPACES	
TOTAL PARKING PROVIDED					151 SPACES	
			*1 ACCESSIBLE STALL INCLUDED			
			2.2 SPACES/ UNIT			

COMMUNITY CONTEXT (1:400)



Architecture + Planning
Von Karman ve,
Suite
Irvine, C
ktgy.com

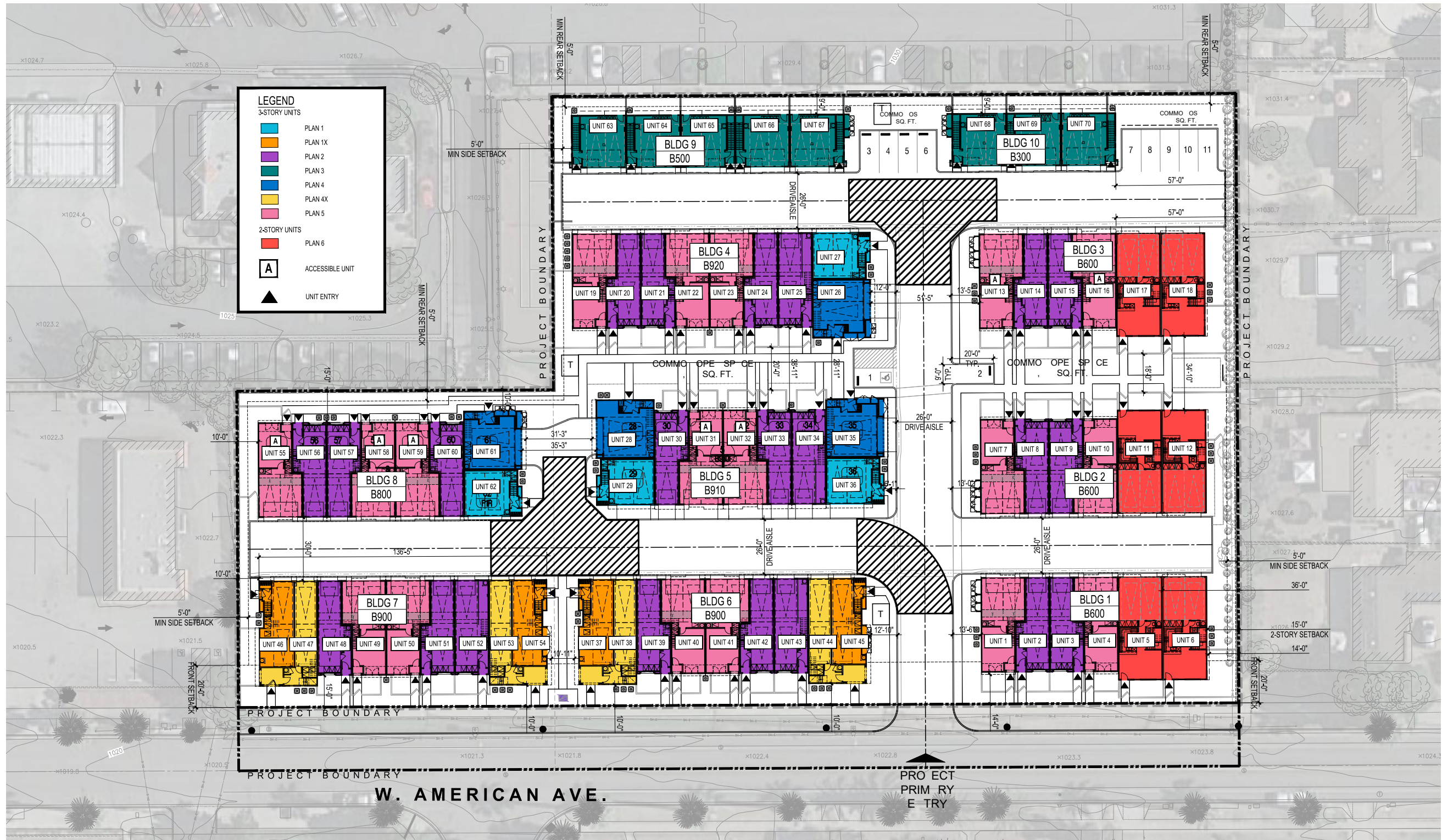


City Ventures
Michelson Drive, Suite
Irvine, C

AMERICAN AVENUE
CL REMO T, C

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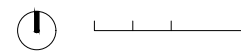
Architecture + Planning
Von Karman Ave,
Suite
Irvine, C
ktgy.com



City Ventures
Michelson Drive, Suite
Irvine, C

AMERICAN AVENUE
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SITE PL

Appendix C

CalEEMod Output

American Ave Claremont Townhomes Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	American Ave Claremont Townhomes
Construction Start Date	1/1/2025
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	2.40
Location	840 S Indian Hill Blvd, Claremont, CA 91711, USA
County	Los Angeles-South Coast
City	Claremont
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5054
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.28

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
Condo/Townhouse High Rise	65.0	Dwelling Unit	1.02	146,930	0.00	—	192	—

Parking Lot	1.66	Acre	1.66	0.00	5,000	—	—	—
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.45	11.1	15.2	0.02	0.41	0.67	1.08	0.37	0.16	0.53	—	3,069	3,069	0.13	0.07	2.97	3,096
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	62.8	23.3	18.6	0.07	0.73	4.84	5.58	0.68	1.90	2.58	—	9,805	9,805	0.50	1.16	0.45	10,163
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.59	8.18	10.5	0.02	0.30	0.61	0.91	0.28	0.15	0.43	—	2,273	2,273	0.10	0.08	0.99	2,299
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.47	1.49	1.92	< 0.005	0.05	0.11	0.17	0.05	0.03	0.08	—	376	376	0.02	0.01	0.16	381

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

2025	1.45	11.1	15.2	0.02	0.41	0.67	1.08	0.37	0.16	0.53	—	3,069	3,069	0.13	0.07	2.97	3,096
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.66	23.3	18.6	0.07	0.73	4.84	5.58	0.68	1.90	2.58	—	9,805	9,805	0.50	1.16	0.45	10,163
2026	62.8	6.12	9.10	0.01	0.25	0.24	0.49	0.23	0.06	0.29	—	1,592	1,592	0.07	0.04	0.03	1,606
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.02	8.18	10.5	0.02	0.30	0.61	0.91	0.28	0.15	0.43	—	2,273	2,273	0.10	0.08	0.99	2,299
2026	2.59	0.06	0.10	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	16.7	16.7	< 0.005	< 0.005	0.01	16.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.19	1.49	1.92	< 0.005	0.05	0.11	0.17	0.05	0.03	0.08	—	376	376	0.02	0.01	0.16	381
2026	0.47	0.01	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.77	2.77	< 0.005	< 0.005	< 0.005	2.80

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.94	1.17	14.9	0.03	0.03	2.48	2.52	0.03	0.63	0.66	30.5	3,454	3,485	3.23	0.12	10.3	3,612
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.60	1.23	10.2	0.03	0.03	2.48	2.51	0.03	0.63	0.66	30.5	3,329	3,360	3.24	0.13	1.29	3,479
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.75	1.21	12.5	0.03	0.03	2.36	2.39	0.03	0.60	0.63	30.5	3,235	3,266	3.23	0.12	4.87	3,387
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.87	0.22	2.29	< 0.005	0.01	0.43	0.44	0.01	0.11	0.11	5.05	536	541	0.54	0.02	0.81	561

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.19	0.95	11.1	0.03	0.02	2.48	2.50	0.02	0.63	0.65	—	2,749	2,749	0.12	0.10	9.30	2,792
Area	3.73	0.04	3.69	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.86	9.86	< 0.005	< 0.005	—	9.89
Energy	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	671	671	0.05	< 0.005	—	673
Water	—	—	—	—	—	—	—	—	—	—	4.64	24.6	29.2	0.48	0.01	—	44.6
Waste	—	—	—	—	—	—	—	—	—	—	25.9	0.00	25.9	2.58	0.00	—	90.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.05	1.05
Total	4.94	1.17	14.9	0.03	0.03	2.48	2.52	0.03	0.63	0.66	30.5	3,454	3,485	3.23	0.12	10.3	3,612
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.18	1.04	10.2	0.03	0.02	2.48	2.50	0.02	0.63	0.65	—	2,633	2,633	0.13	0.11	0.24	2,670
Area	3.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	671	671	0.05	< 0.005	—	673
Water	—	—	—	—	—	—	—	—	—	—	4.64	24.6	29.2	0.48	0.01	—	44.6
Waste	—	—	—	—	—	—	—	—	—	—	25.9	0.00	25.9	2.58	0.00	—	90.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.05	1.05
Total	4.60	1.23	10.2	0.03	0.03	2.48	2.51	0.03	0.63	0.66	30.5	3,329	3,360	3.24	0.13	1.29	3,479
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.11	1.00	9.93	0.02	0.02	2.36	2.37	0.02	0.60	0.61	—	2,533	2,533	0.12	0.11	3.82	2,571
Area	3.63	0.02	2.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.75	6.75	< 0.005	< 0.005	—	6.78
Energy	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	671	671	0.05	< 0.005	—	673
Water	—	—	—	—	—	—	—	—	—	—	4.64	24.6	29.2	0.48	0.01	—	44.6
Waste	—	—	—	—	—	—	—	—	—	—	25.9	0.00	25.9	2.58	0.00	—	90.4

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.05	1.05
Total	4.75	1.21	12.5	0.03	0.03	2.36	2.39	0.03	0.60	0.63	30.5	3,235	3,266	3.23	0.12	4.87	3,387
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.20	0.18	1.81	< 0.005	< 0.005	0.43	0.43	< 0.005	0.11	0.11	—	419	419	0.02	0.02	0.63	426
Area	0.66	< 0.005	0.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.12	1.12	< 0.005	< 0.005	—	1.12
Energy	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	111	111	0.01	< 0.005	—	111
Water	—	—	—	—	—	—	—	—	—	—	0.77	4.07	4.84	0.08	< 0.005	—	7.38
Waste	—	—	—	—	—	—	—	—	—	—	4.28	0.00	4.28	0.43	0.00	—	15.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17	0.17
Total	0.87	0.22	2.29	< 0.005	0.01	0.43	0.44	0.01	0.11	0.11	5.05	536	541	0.54	0.02	0.81	561

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.47	13.9	15.1	0.02	0.57	—	0.57	0.52	—	0.52	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	1.55	1.55	—	0.24	0.24	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.08	0.76	0.83	< 0.005	0.03	—	0.03	0.03	—	0.03	—	137	137	0.01	< 0.005	—	137
Demolition	—	—	—	—	—	0.09	0.09	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.14	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.6	22.6	< 0.005	< 0.005	—	22.7
Demolition	—	—	—	—	—	0.02	0.02	—	< 0.005	< 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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.74	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	164	164	0.01	0.01	0.02	166
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
Hauling	0.02	1.58	0.60	0.01	0.02	0.33	0.35	0.02	0.09	0.11	—	1,237	1,237	0.07	0.19	0.07	1,297
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.11	9.11	< 0.005	< 0.005	0.01	9.23
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
Hauling	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	67.8	67.8	< 0.005	0.01	0.07	71.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.51	1.51	< 0.005	< 0.005	< 0.005	1.53
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
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.01	11.8

3.3. Site Preparation (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	10.9	11.0	0.03	0.47	—	0.47	0.43	—	0.43	—	2,717	2,717	0.11	0.02	—	2,726
Dust From Material Movement	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.3	22.3	< 0.005	< 0.005	—	22.4
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.70	3.70	< 0.005	< 0.005	—	3.71
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.3	98.3	< 0.005	< 0.005	0.01	99.5
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
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
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

3.5. Grading (2025) - Unmitigated

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

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

Off-Road Equipment	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	2.78	2.78	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.23	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.4	40.4	< 0.005	< 0.005	—	40.5
Dust From Material Movement	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.68	6.68	< 0.005	< 0.005	—	6.70
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.59	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	131	131	0.01	< 0.005	0.01	133
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

Hauling	0.11	9.20	3.48	0.05	0.09	1.93	2.02	0.09	0.53	0.62	—	7,219	7,219	0.39	1.13	0.43	7,567
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.19	2.19	< 0.005	< 0.005	< 0.005	2.22
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
Hauling	< 0.005	0.15	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	119	119	0.01	0.02	0.12	124
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.36	0.36	< 0.005	< 0.005	< 0.005	0.37
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
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.6	19.6	< 0.005	< 0.005	0.02	20.6

3.7. 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	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	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37	—	2,201	2,201	0.09	0.02	—	2,209
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37	—	2,201	2,201	0.09	0.02	—	2,209
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.75	6.39	7.15	0.01	0.24	—	0.24	0.22	—	0.22	—	1,327	1,327	0.05	0.01	—	1,331
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.17	1.30	< 0.005	0.04	—	0.04	0.04	—	0.04	—	220	220	0.01	< 0.005	—	220
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.20	3.26	0.00	0.00	0.61	0.61	0.00	0.14	0.14	—	647	647	0.03	0.02	2.37	657
Vendor	0.01	0.25	0.12	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	220	220	0.01	0.03	0.60	230
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.22	2.76	0.00	0.00	0.61	0.61	0.00	0.14	0.14	—	613	613	0.03	0.02	0.06	621
Vendor	0.01	0.26	0.12	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	221	221	0.01	0.03	0.02	230
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.15	1.75	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	375	375	0.02	0.01	0.62	380
Vendor	< 0.005	0.16	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	0.01	0.02	0.16	139
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.32	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	62.1	62.1	< 0.005	< 0.005	0.10	62.9
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.0	22.0	< 0.005	< 0.005	0.03	23.0
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

3.9. Paving (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	6.13	8.21	0.01	0.27	—	0.27	0.25	—	0.25	—	1,244	1,244	0.05	0.01	—	1,248
Paving	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.7	31.7	< 0.005	< 0.005	—	31.8
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.24	5.24	< 0.005	< 0.005	—	5.26
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	197	197	0.01	0.01	0.02	199
Vendor	< 0.005	0.19	0.09	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	159	159	0.01	0.02	0.01	166
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	5.08	5.08	< 0.005	< 0.005	0.01	5.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.04	4.04	< 0.005	< 0.005	< 0.005	4.21
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.85
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.70
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

3.11. Paving (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23	—	1,244	1,244	0.05	0.01	—	1,248
Paving	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.87	4.87	< 0.005	< 0.005	—	4.88
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.81
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	193	193	0.01	0.01	0.02	195
Vendor	< 0.005	0.18	0.09	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	156	156	0.01	0.02	0.01	163
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.77	0.77	< 0.005	< 0.005	< 0.005	0.78
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.64
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
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

3.13. Architectural Coating (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	62.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.49	5.49	< 0.005	< 0.005	—	5.51
Architectural Coatings	2.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.91	0.91	< 0.005	< 0.005	—	0.91
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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.52	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	0.01	< 0.005	0.01	122
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.01	5.01	< 0.005	< 0.005	0.01	5.08
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.84
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
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

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

Condo/T High Rise	1.19	0.95	11.1	0.03	0.02	2.48	2.50	0.02	0.63	0.65	—	2,749	2,749	0.12	0.10	9.30	2,792
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
Total	1.19	0.95	11.1	0.03	0.02	2.48	2.50	0.02	0.63	0.65	—	2,749	2,749	0.12	0.10	9.30	2,792
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/T ownhous e High Rise	1.18	1.04	10.2	0.03	0.02	2.48	2.50	0.02	0.63	0.65	—	2,633	2,633	0.13	0.11	0.24	2,670
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
Total	1.18	1.04	10.2	0.03	0.02	2.48	2.50	0.02	0.63	0.65	—	2,633	2,633	0.13	0.11	0.24	2,670
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/T ownhous e High Rise	0.20	0.18	1.81	< 0.005	< 0.005	0.43	0.43	< 0.005	0.11	0.11	—	419	419	0.02	0.02	0.63	426
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
Total	0.20	0.18	1.81	< 0.005	< 0.005	0.43	0.43	< 0.005	0.11	0.11	—	419	419	0.02	0.02	0.63	426

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

Condo/T High Rise	—	—	—	—	—	—	—	—	—	—	—	347	347	0.02	< 0.005	—	349
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	92.3	92.3	0.01	< 0.005	—	92.7
Total	—	—	—	—	—	—	—	—	—	—	—	440	440	0.03	< 0.005	—	441
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/T ownhous e High Rise	—	—	—	—	—	—	—	—	—	—	—	347	347	0.02	< 0.005	—	349
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	92.3	92.3	0.01	< 0.005	—	92.7
Total	—	—	—	—	—	—	—	—	—	—	—	440	440	0.03	< 0.005	—	441
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/T ownhous e High Rise	—	—	—	—	—	—	—	—	—	—	—	57.5	57.5	< 0.005	< 0.005	—	57.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	15.3	15.3	< 0.005	< 0.005	—	15.3
Total	—	—	—	—	—	—	—	—	—	—	—	72.8	72.8	< 0.005	< 0.005	—	73.1

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

Condo/Townhouse High Rise	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	231	231	0.02	< 0.005	—	232
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
Total	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	231	231	0.02	< 0.005	—	232
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	231	231	0.02	< 0.005	—	232
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
Total	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	231	231	0.02	< 0.005	—	232
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.3	38.3	< 0.005	< 0.005	—	38.4
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
Total	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.3	38.3	< 0.005	< 0.005	—	38.4

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

Consum Products	3.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	0.33	0.04	3.69	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.86	9.86	< 0.005	< 0.005	—	9.89
Total	3.73	0.04	3.69	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.86	9.86	< 0.005	< 0.005	—	9.89
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	3.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	0.04	< 0.005	0.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.12	1.12	< 0.005	< 0.005	—	1.12
Total	0.66	< 0.005	0.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.12	1.12	< 0.005	< 0.005	—	1.12

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	4.64	24.0	28.7	0.48	0.01	—	44.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.54	0.54	< 0.005	< 0.005	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	4.64	24.6	29.2	0.48	0.01	—	44.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	4.64	24.0	28.7	0.48	0.01	—	44.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.54	0.54	< 0.005	< 0.005	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	4.64	24.6	29.2	0.48	0.01	—	44.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	0.77	3.98	4.75	0.08	< 0.005	—	7.29
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.09	0.09	< 0.005	< 0.005	—	0.09
Total	—	—	—	—	—	—	—	—	—	—	0.77	4.07	4.84	0.08	< 0.005	—	7.38

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	25.9	0.00	25.9	2.58	0.00	—	90.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	25.9	0.00	25.9	2.58	0.00	—	90.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	25.9	0.00	25.9	2.58	0.00	—	90.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	25.9	0.00	25.9	2.58	0.00	—	90.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	4.28	0.00	4.28	0.43	0.00	—	15.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	4.28	0.00	4.28	0.43	0.00	—	15.0

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.05	1.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.05	1.05
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.05	1.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.05	1.05
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High 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	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	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	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	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	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	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	1/1/2025	1/29/2025	5.00	20.0	—
Site Preparation	Site Preparation	1/30/2025	2/3/2025	5.00	3.00	—
Grading	Grading	2/4/2025	2/12/2025	5.00	6.00	—

Building Construction	Building Construction	2/13/2025	12/18/2025	5.00	220	—
Paving	Paving	12/19/2025	1/2/2026	5.00	10.0	—
Architectural Coating	Architectural Coating	1/3/2026	1/23/2026	5.00	15.0	—

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	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
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	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	17.9	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	104	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	46.8	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	6.95	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT

Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	5.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	9.36	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	297,533	99,178	0.00	0.00	4,339

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	31,000	—
Site Preparation	—	—	4.50	0.00	—

Grading	—	5,000	6.00	0.00	—
Paving	0.00	0.00	0.00	0.00	1.66

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
Condo/Townhouse High Rise	—	0%
Parking Lot	1.66	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	532	0.03	< 0.005
2026	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
Condo/Townhouse High Rise	354	319	266	122,692	3,501	3,160	2,632	1,214,907
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

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)
297533.25	99,178	0.00	0.00	4,339

5.10.3. Landscape Equipment

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)
Condo/Townhouse High Rise	238,279	532	0.0330	0.0040	721,945
Parking Lot	63,343	532	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)
Condo/Townhouse High Rise	2,422,797	0.00
Parking Lot	0.00	70,123

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse High Rise	48.0	—
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
Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse High 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
----------------	-----------	-------------	----------------	---------------	------------	-------------

5.16. 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
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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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	20.9	annual days of extreme heat
Extreme Precipitation	6.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.23	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	2	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	2	1	1	3
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	84.6
AQ-PM	94.3
AQ-DPM	86.8
Drinking Water	98.0
Lead Risk Housing	76.1
Pesticides	8.79
Toxic Releases	58.0

Traffic	85.1
Effect Indicators	—
CleanUp Sites	2.59
Groundwater	67.0
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	12.5
Solid Waste	2.52
Sensitive Population	—
Asthma	25.8
Cardio-vascular	36.2
Low Birth Weights	64.8
Socioeconomic Factor Indicators	—
Education	57.9
Housing	69.5
Linguistic	29.5
Poverty	64.9
Unemployment	44.4

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	38.59874246
Employed	53.24008726
Median HI	52.90645451
Education	—
Bachelor's or higher	71.35891184
High school enrollment	100

Preschool enrollment	58.10342615
Transportation	—
Auto Access	12.56255614
Active commuting	79.00680098
Social	—
2-parent households	94.13576286
Voting	18.51661748
Neighborhood	—
Alcohol availability	59.66893366
Park access	81.35506224
Retail density	73.46336456
Supermarket access	43.01296035
Tree canopy	35.75003208
Housing	—
Homeownership	42.65366354
Housing habitability	39.13768767
Low-inc homeowner severe housing cost burden	93.9304504
Low-inc renter severe housing cost burden	76.6072116
Uncrowded housing	45.28422944
Health Outcomes	—
Insured adults	87.18080328
Arthritis	0.0
Asthma ER Admissions	68.2
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	37.7
Cognitively Disabled	5.8
Physically Disabled	41.1
Heart Attack ER Admissions	53.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	80.1
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	82.0
Elderly	22.1
English Speaking	61.4
Foreign-born	19.6
Outdoor Workers	72.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	76.3
Traffic Density	89.9
Traffic Access	23.0
Other Indices	—

Hardship	51.5
Other Decision Support	—
2016 Voting	49.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	67.0
Healthy Places Index Score for Project Location (b)	51.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
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	Per site plan
Operations: Hearths	No hearths

EXHIBIT E

**PRELIMINARY HYDROLOGY STUDY
CITY OF CLAREMONT, COUNTY OF LOS ANGELES
VESTING TENTATIVE TRACT NO. 84564**

**Project Address:
840 South Indian Hill Boulevard
Claremont, CA 91711**

Prepared For:

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(949) 916-3800

Prepared: June 2024

**Preliminary Hydrology Study
For
Vesting Tentative Tract Map No. 84564**

Acknowledgement and Signature Page

This Preliminary Hydrology Study was prepared by C&V Consulting, Inc. under the supervision of Dane P. McDougall, P.E.

Dane P. McDougall, P.E. 80705
C&V Consulting, Inc.

Date

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APPENDICES

APPENDIX A Maps and Exhibits

Los Angeles County Hydrology Map
Existing Conditions Hydrology Map
Proposed Conditions Hydrology Map

APPENDIX B Hydrology Analysis

Existing Conditions HydroCalc Outputs
Proposed Conditions HydroCalc Outputs

APPENDIX C Water Quality Retention Sizing Analysis Summary

APPENDIX D Hydraulics Analysis

Preliminary Pipe Conveyance Capacity Sizing
Preliminary Parkway Drain Capacity Sizing

APPENDIX F References

Reference Plans
FEMA Flood Map

I. Purpose

The purpose of this report is to provide quantitative information to verify the design of the storm drain infrastructure and hydrologic methodology of the project site. The values and statements within the confirm the subject site is designed and planned in accordance with the Los Angeles County Hydrology Manual and the City of Claremont drainage requirements.

II. Site Description

The proposed project is located at 840 South Indian Hill Boulevard (APN: Portion of 8322-006-006), in the City of Claremont. The site is bounded by West American Avenue to the south, commercial buildings and South Indian Hill Boulevard to the west, residential building to the east, and a motel building with parking area to the north.

Per Geotechnical Investigation, prepared by Alta California Geotechnical Inc. dated July 7, 2023, groundwater was not encountered to the maximum depth of approximately 26 feet below the ground surface during subsurface evaluation. Based on state provided information, the historic high groundwater is approximately greater than 450 feet below the ground surface. The findings indicate the site is feasible for infiltration, hence, infiltration BMPs are considered for the proposed site.

According to the federal Emergency Management Agency (FEMA) FIRM rate map number 06037C1750F, effective date September 26, 2008, the site is located within flood Zone X, area of Minimal Flood Hazard.

Refer to Appendix F for additional information per FEMA flood map.

III. Existing Conditions

The site currently consists of tennis courts with a recreational building, which include landscaping and paved walking areas. The elevations within the site generally vary from approximately 1030.7' to 1021.9' with surface runoff flowing in the southwesterly direction. Drainage at the site generally sheet flows towards the south to the public right-of-way of American Avenue. The runoff continues westerly along American Avenue via street flow to entering a public storm drain inlet located adjacent to the project site. The flow conveys to the County system downstream and is discharged onto the San Antonio Creek Channel and ultimately to the Prado Basin.

The Cities of Claremont and Pomona are located within the Los Angeles Regional Water Quality Control Board's (Los Angeles Water Board) geographic area. However, parts of the Cities' storm drainage systems (also called municipal separate storm sewer systems or MS4s for short) discharge storm water and urban runoff to Reach 3 of the Santa Ana River. The Santa Ana River is within the Santa Ana Regional Water Quality Control Board's (Santa Ana Water Board) geographic area. Reach 3 of the Santa Ana River begins at Prado dam and extends upstream to the Mission Boulevard bridge. Reach 3 is also known as the Middle Santa Ana River.

Refer to Appendix A, Existing Conditions Hydrology Map for additional information.

IV. Proposed Conditions

The proposed development includes the construction of 10 buildings consisting of 70 residential units. The proposed 2.67-acre site will include private drive aisles, private garages, sidewalks, parking, and associated landscaping and open space areas. The proposed site will be accessible via one (1) driveway entrance along American Avenue.

The proposed site has been divided into one (1) subarea based on the proposed grading design as overall tributary area drainage routes towards American Avenue following existing conditions. The proposed development will include private drive aisles and parking spaces throughout. The proposed drainage will flow through private street gutters in the proposed drive aisles which convey flows towards the proposed inlet located near the entrance along American Avenue.

The onsite storm drain inlets will collect and convey flows to the proposed retention and infiltration system to promote subsurface infiltration. The infiltration system has been designed to retain and infiltrate the required Storm Water Quality Design Volume (SWQDV) for water quality treatment.

During larger storm events that exceeds the proposed retention volume, stormwater will overflow out of the retention and infiltration system to the proposed parkway drain and be conveyed to the public right-of-way of American Avenue to preserve the historical drainage pattern.

Refer to Appendix A, Proposed Conditions Hydrology Map for additional information.

A separately prepared LID plan is prepared to address the Los Angeles County storm water quality requirements.

V. Methodology

The project site's drainage was analyzed per methods provided by the Los Angeles County Hydrology Manual. The existing and proposed conditions of the site were analyzed for peak flow rate for the 25-, 50- and 100- storm events based on acreage, land cover, and time of concentration per LACDPW HydroCalc program.

VI. Design Considerations

1. The LACDPW HydroCalc Calculator Program was used to determine Tc, Peak run-off flow rate, and run-off volume for subarea based on the longest flow path and elevation difference.
2. A depth of 6.61 inches for the 50-year rainfall was determined from the Los Angeles County Hydrology Map.
3. The site is in the soil classification of “007” per Los Angeles County Hydrology Map.
4. Existing conditions for the site are determined to be a value of 56% impervious based on geospatial observation and delineation of the existing conditions hydrology map.
5. The proposed development site was assumed to be approximately 86% based on the LACDPW Hydrology Manual for “Low-Rise Apartments, Condominiums, and Townhouses” land use type.
6. No direct connections to the public storm drain are proposed. Therefore, proposed peak flow mitigation will be governed by the existing peak flows.

VII. Hydrology Analysis

A summary of the existing and proposed development conditions peak runoff values generated from the project site has been provided below.

Hydrology Summary

Project site generated runoff peak flowrates per drainage areas are shown within the Hydrology Map. All flows ultimately confluence downstream to the site right of way. Proposed conditions of the project site are designed and graded to replicate the existing conditions to preserve historical drainage patterns.

Existing Conditions	Area (acres)	Q ₂₅ (cfs)	Q ₁₀₀ (cfs)
DMA XA1	2.668	6.26	9.03

Proposed Development Conditions	Area (acres)	Q ₂₅ (cfs)	Q ₁₀₀ (cfs)
DMA A1	2.668	7.37	10.41

Refer to Appendix A and B for additional information shown in the LACDPW HydroCalc output data, as well as the existing and proposed conditions hydrology maps.

Hydrologic analysis determined that peak flow based on the proposed development are higher than existing development conditions for the design 25-, and 100- year storm event. Therefore, hydrologic mitigation is required for the proposed development to preserve exiting condition peak flow.

Retention Sizing and Water Quality Treatment Summary

An infiltration retention system is designed to retention and infiltrate the additional generated runoff volume and mitigate the peak outflow to preserve existing conditions.

Existing Conditions 24-hour storm runoff (cuft)	Proposed Conditions 24-hour storm runoff (cuft)	Generated runoff difference - 100-year storm event (cuft)	24-hour storm runoff infiltrated volume (cuft)
40,948.9	56,743.6	15,794.7	19,131.7

Refer to Appendix C for additional retention sizing information.

Refer to separately prepared LID for additional Water Quality Treatment Information.

VIII. Hydraulics Analysis

Curb Inlet/ Street Capacity Sizing

Catch Basin inlet will be sized based on the 25-year storm event to conform with LACDPW Hydrology urban flood street capacity in conformance with precise grading plan.

Additional analysis is to be provided during final engineering.

Pipe Capacity Sizing

Onsite storm drain piping capacity will be sized for the 100-year storm event conveyance. A preliminary sizing is provided in Appendix D based on open channel flow.

*A Manning's Roughness Coefficient of 0.013 has been utilized to represent the roughness coefficient of PVC and/or HDPE piping.

Additional analysis is to be provided during final engineering.

Parkway Outlet Capacity Sizing

A preliminary parkway drain capacity is sized for the 100-year storm event conveyance based open channel flow.

*A Manning's Roughness Coefficient of 0.013 has been utilized to represent the roughness coefficient.

Additional analysis is to be provided during final engineering.

100-Year Water Surface Elevation (WSE)

The elevation of the 100-year water surface is analyzed at localized low point of the site to ensure proper flood protection is provided for the proposed buildings. Building finished floors will be set at a minimum of at least 1 foot above the 100-year WSE. Private street grading provides proper overflow to downstream system to ensure flood protection for the proposed buildings.

Additional analysis is to be provided during final engineering.

IX. Conclusion

The result from this preliminary hydrology study establishes that the proposed conditions will produce a higher stormwater runoff peak flow rate than the existing condition for the design storm events; hence, the proposed development intended to retain and infiltration the runoff difference to preserve existing conditions to ensure there are no hydrologic impact on downstream drainage systems.

Retention sizing analysis demonstrates that sufficient storage is provided for the hydrologic mitigation as well as satisfying the water quality treatment volume. When the underground storage is at full capacity, the confluence of the flows will be mitigated to the proposed overflow parkway drain outlet and continue downstream following existing conditions.

In cases of storm events exceeding the design storm drain capacity, the site is graded to outlet overflow at the entrances of the site towards American Avenue. The runoff will then continue along the street flow downstream following historical drainage pattern.

X. References

1. Geotechnical Investigation. Project No. 1-0488. July 7, 2023. Alta California Geotechnical Inc.
2. Hydrology Manual, January 2006. Los Angeles County Department of Public Works (LACDPW).
3. Hydraulic Toolbox 5.0. Federal Highways Administration. Build: 21 Aug 2021
4. HydroCalc Calculator. Version 1.0.3 released 2/21/2018. Los Angeles County Department of Public Works (LACDPW)
5. Low Impact Development Standards Manual. February 2014. County of Los Angeles Department of Public Works.
6. National Flood Hazard Layer FIRMette. Federal Emergency Management Agency. Data refreshed October, 2020.

APPENDIX A

Maps and Exhibits

Los Angeles County Hydrology Map

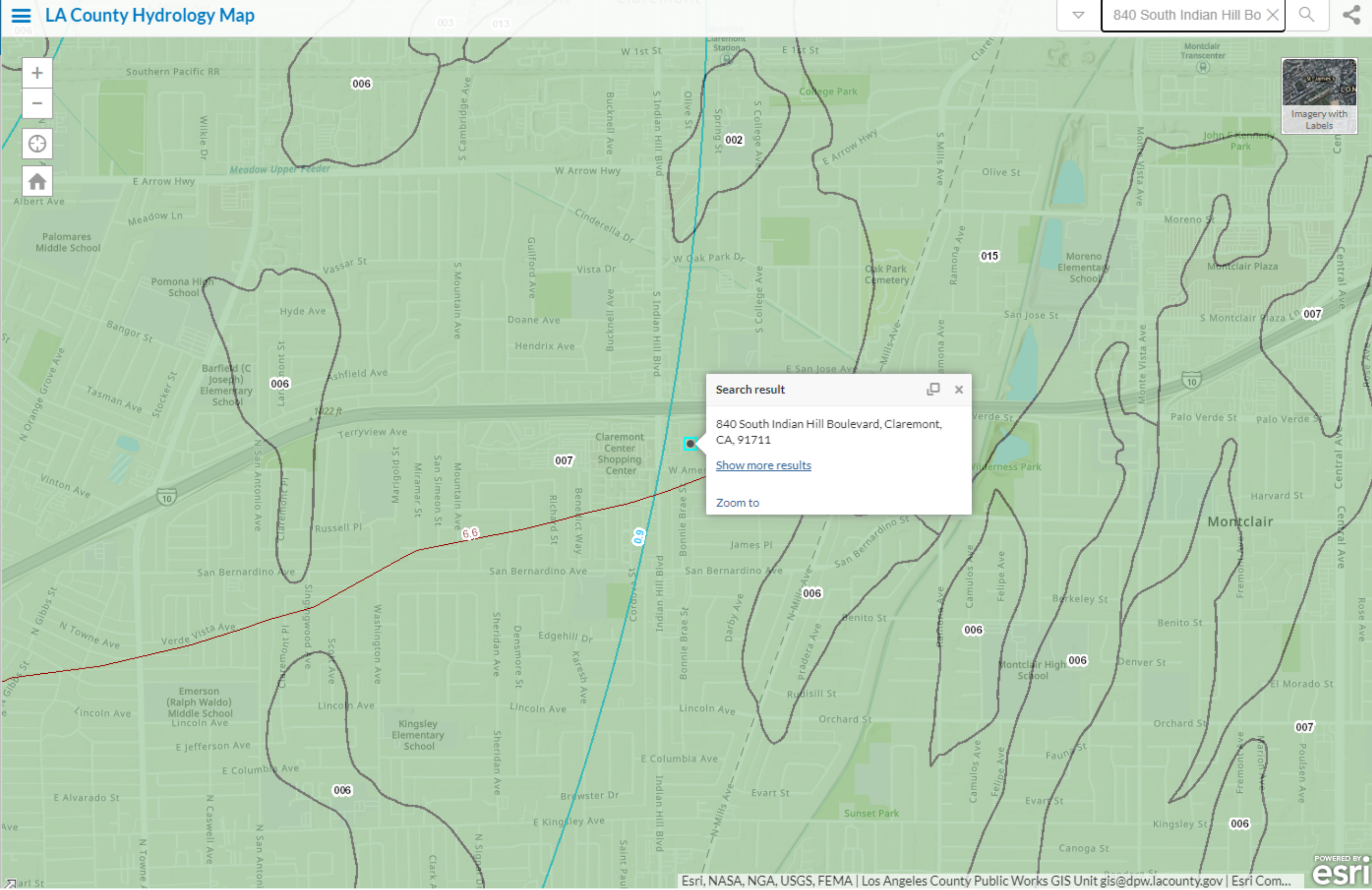
Legend

Hydrology GIS

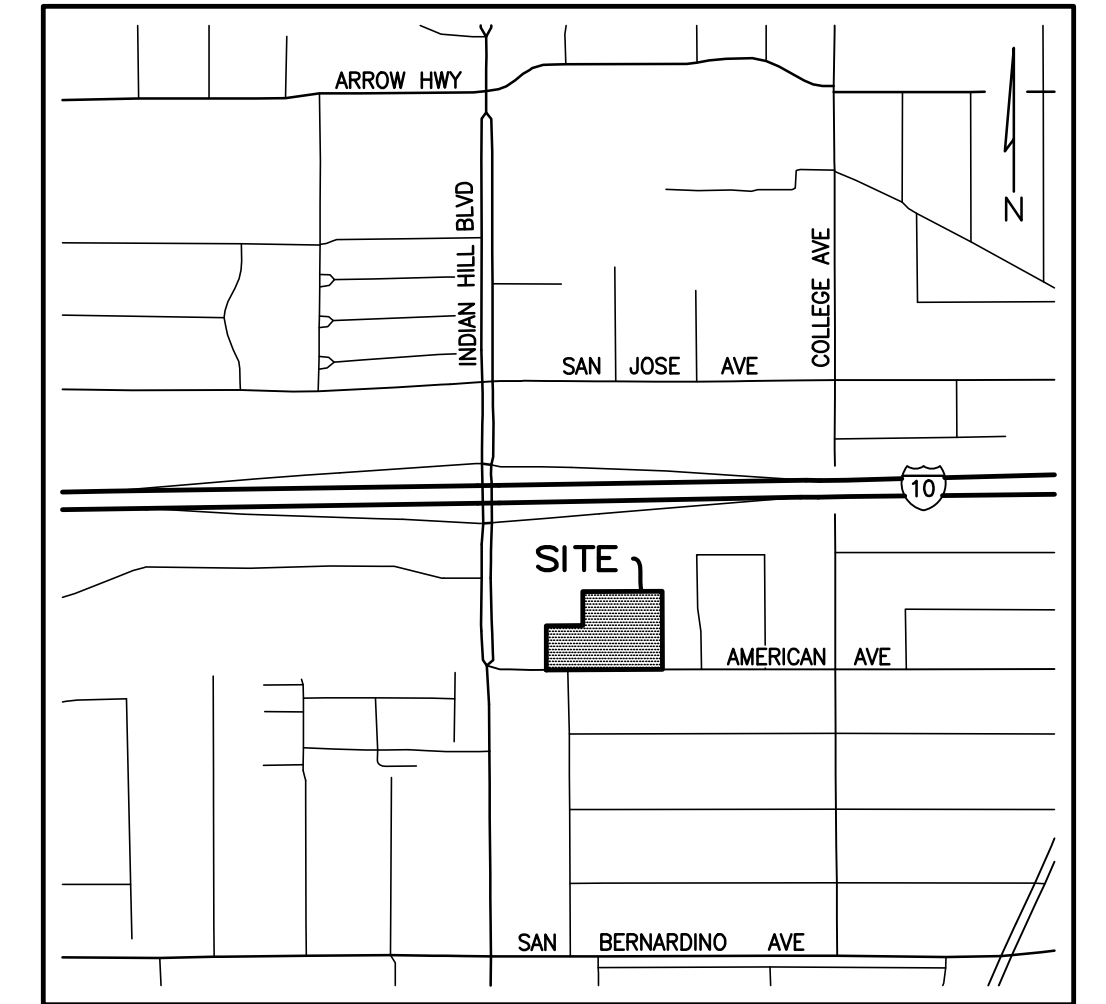
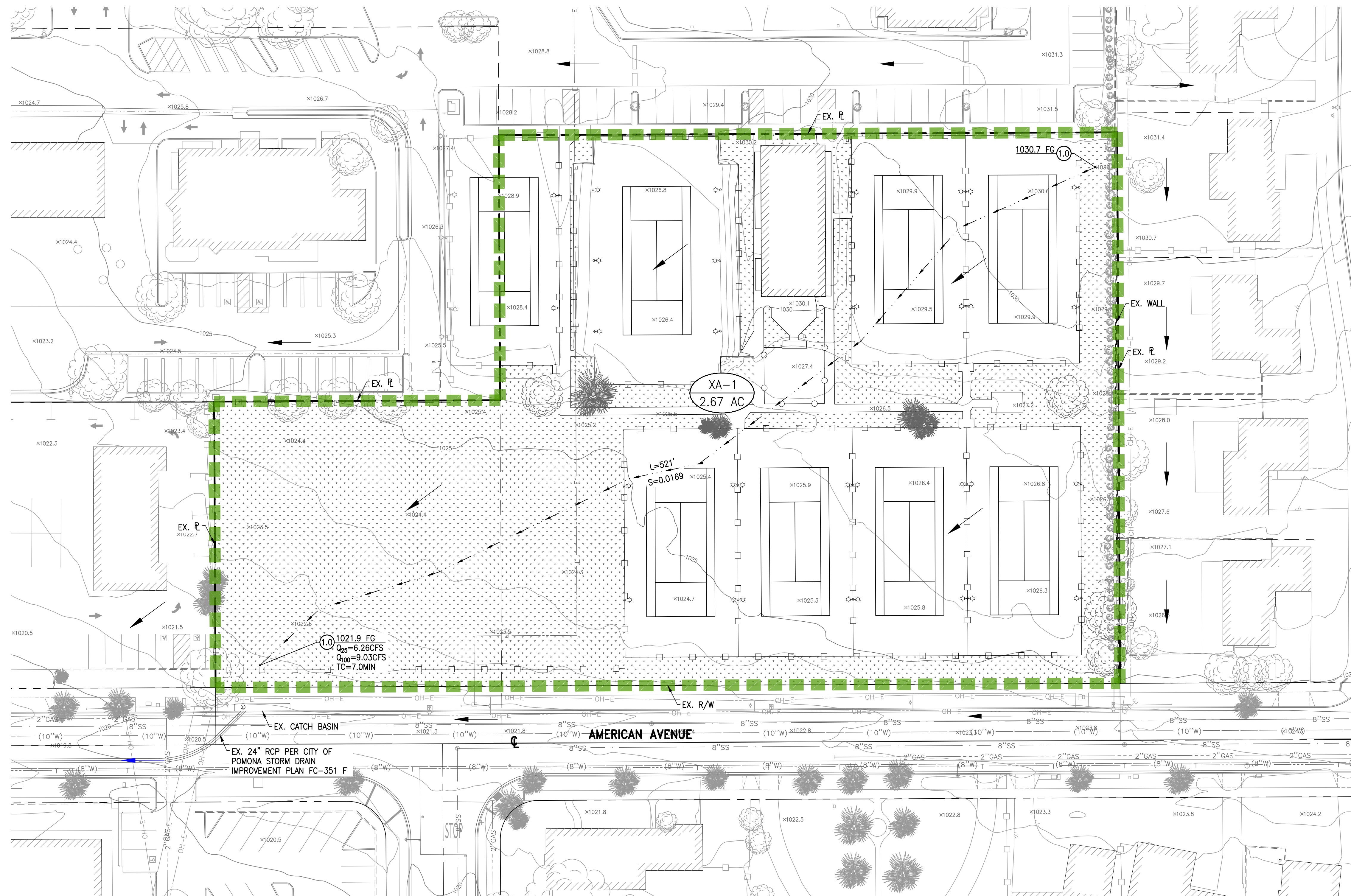
50yr Two Tenths (Rainfall)

Soils 2004

Final 85th Percentile, 24-hr Rainfall



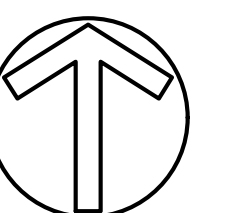
Existing Conditions Hydrology Map



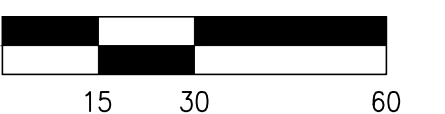
VICINITY MAP
N.T.S.

LEGEND:

- DRAINAGE MANAGEMENT AREA (DMA) BOUNDARY
- DMA SUB-AREA BOUNDARY
- SITE BOUNDARY
- EXISTING RIGHT OF WAY
- EXISTING LOT LINE
- EXISTING EASEMENT LINE
- SURFACE FLOW DIRECTION
- PIPE FLOW DIRECTION
- FLOW LINE
- PERVIOUS AREA
- INITIAL SUBAREA NODE
SPOT ELEVATION
PEAK RUNOFF IN CUBIC FEET
PER SECOND (CFS)
CONFLUENCE PEAK RUNOFF (CFS)
TIME OF CONCENTRATION IN MINUTES (MIN)
PROVIDED FOR 100-YR STORM EVENT



SCALE: 1" = 30'



PREPARED BY:



C&V
CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING

9830 IRVINE CENTER DRIVE
IRVINE, CALIFORNIA 92618
(949) 916-3800
INFO@CVC-INC.NET
WWW.CVC-INC.NET

PREPARED FOR:



CITY VENTURES
3121 MICHELSON DRIVE, SUITE 150
IRVINE, CA 90660
(949) 258-7555

CITY OF CLAREMONT
[DEPARTMENT OF PLANNING AND DEVELOPMENT]

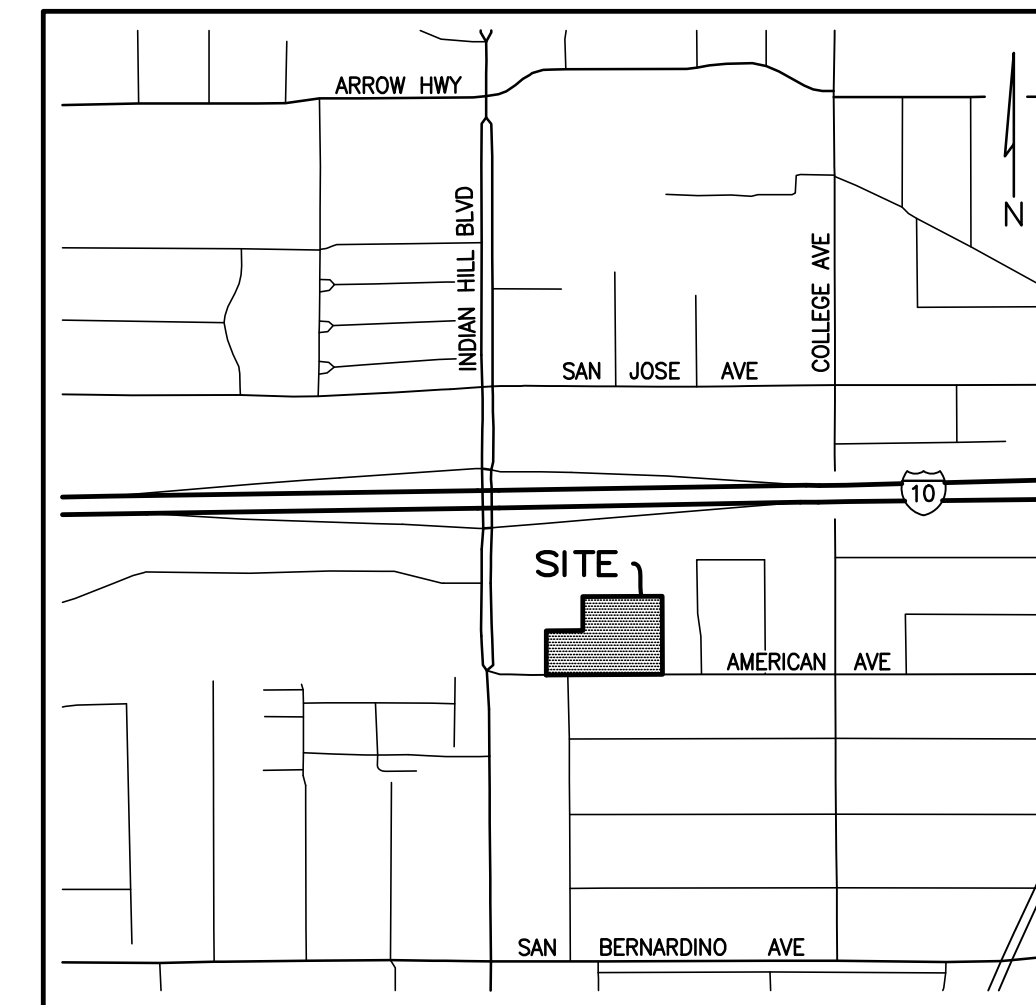
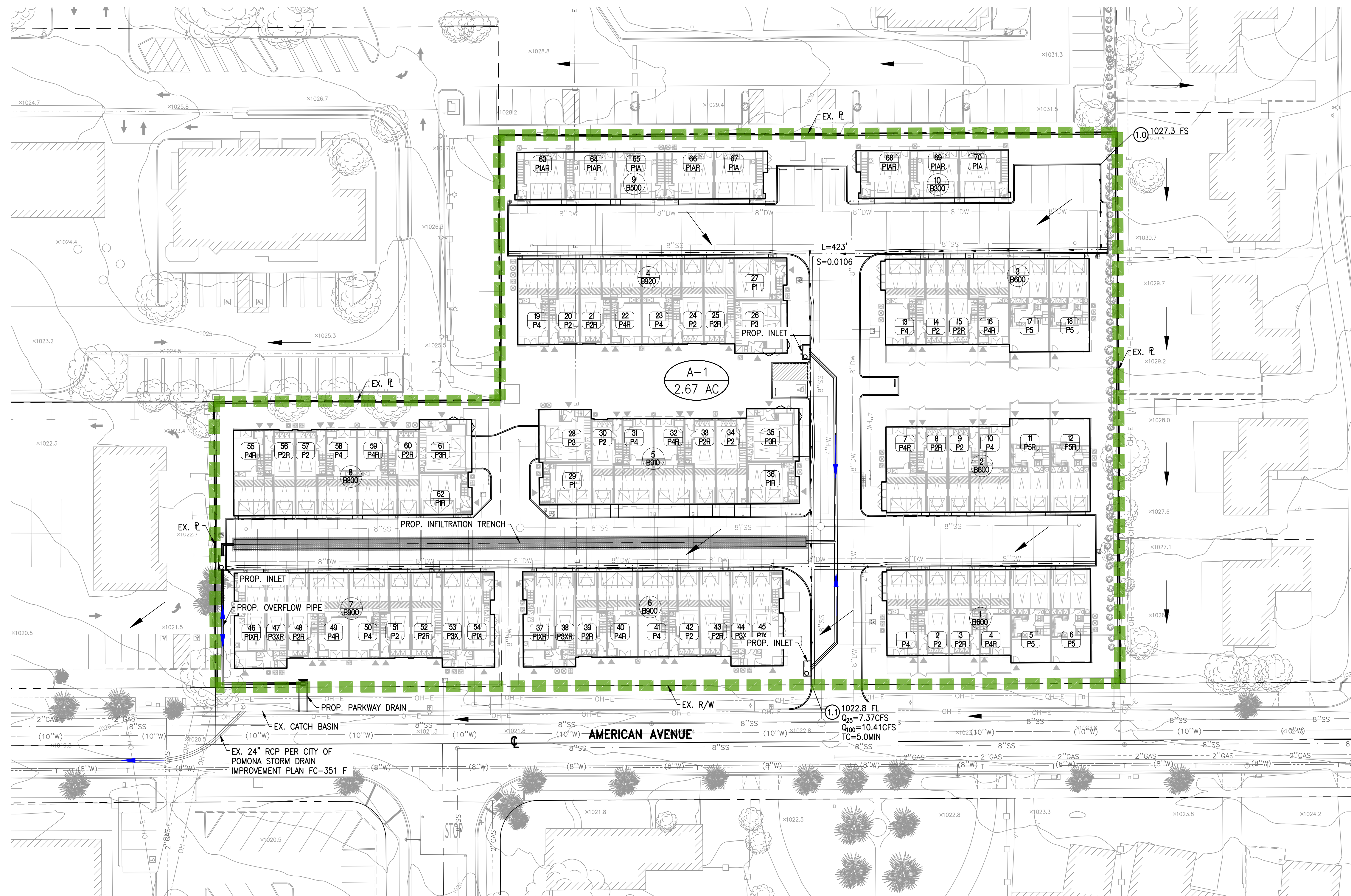
VESTING TENTATIVE TRACT MAP NO. 84564
EXISTING CONDITIONS HYDROLOGY MAP
840 SOUTH INDIAN HILL BOULEVARD,
CLAREMONT, CA 91711

PROJECT NO.
CVEN-163

SHEET
1
OF
1

FILED: 16/25/2024 1:05 PM
CLAREMONT, CALIFORNIA
PLANNING & DEVELOPMENT DEPARTMENT
DATE: 16/25/2024 1:05 PM

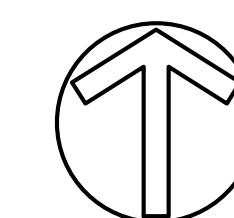
Proposed Conditions Hydrology Map



VICINITY MAP
N.T.S.

LEGEND:

- DRAINAGE MANAGEMENT AREA (DMA) BOUNDARY
- DMA SUB-AREA BOUNDARY
- SITE BOUNDARY
- EXISTING RIGHT OF WAY
- EXISTING LOT LINE
- EXISTING EASEMENT LINE
- SURFACE FLOW DIRECTION
- PIPE FLOW DIRECTION
- FLOW LINE
- PERVIOUS AREA
- INITIAL SUBAREA NODE
SPOT ELEVATION
 $Q_{100}=X$ CFS
PEAK RUNOFF IN CUBIC FEET
PER SECOND (CFS)
 $\Sigma Q_{100}=X$ CFS
CONFLUENCE PEAK RUNOFF (CFS)
TC=X MIN
TIME OF CONCENTRATION IN MINUTES (MIN)
PROVIDED FOR 100-YR STORM EVENT



SCALE: 1" = 30'
15 30 60

PREPARED BY:



9830 IRVINE CENTER DRIVE
IRVINE, CALIFORNIA 92618
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PREPARED FOR:



CITY VENTURES
3121 MICHELSON DRIVE, SUITE 150
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(949) 258-7555

CITY OF CLAREMONT
[DEPARTMENT OF PLANNING AND DEVELOPMENT]
VESTING TENTATIVE TRACT MAP NO. 84564
PROPOSED CONDITIONS HYDROLOGY MAP
840 SOUTH INDIAN HILL BOULEVARD,
CLAREMONT, CA 91711

PROJECT NO.
CVEN-163
SHEET
1
OF
1

DATE: 10/25/2024
DRAWN BY: J. MCDOUGALL
CHECKED BY: J. MCDOUGALL
APPROVED BY: J. MCDOUGALL

APPENDIX B

Hydrology Analysis

Existing Conditions HydroCalc Outputs

Peak Flow Hydrologic Analysis

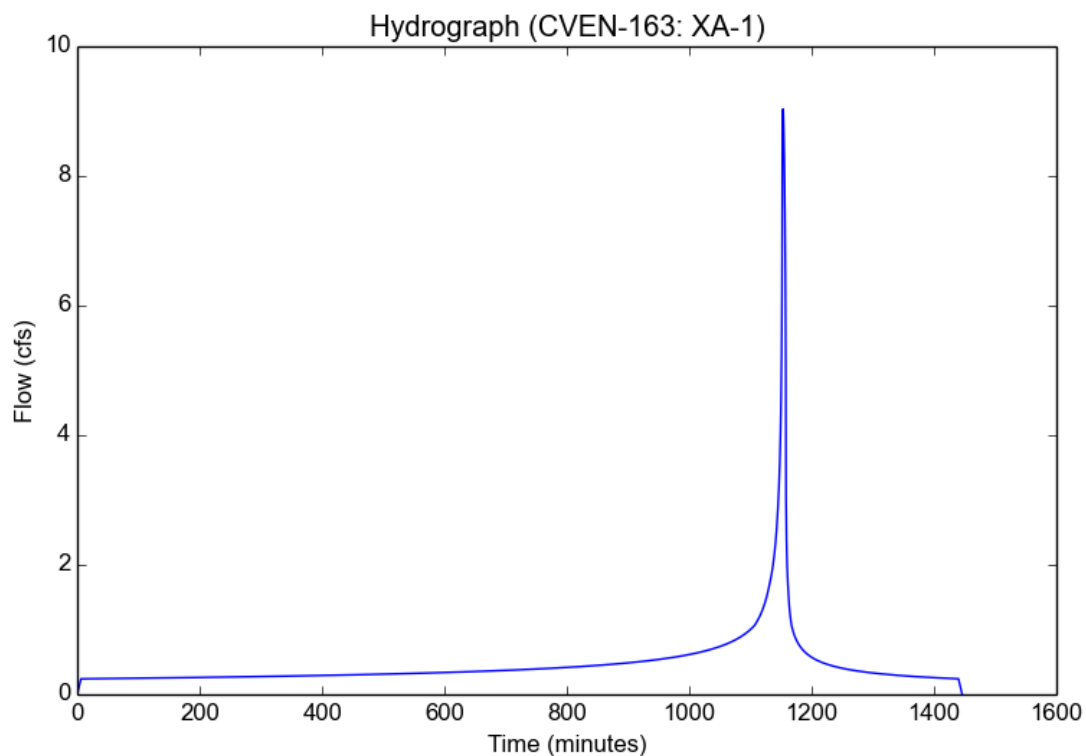
File location: P:/C/CVEN-163/Admin/Reports/Hydrology/Preliminary/Appendix B - HydroCalc/CVEN-163 Report.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	CVEN-163
Subarea ID	XA-1
Area (ac)	2.668
Flow Path Length (ft)	521.0
Flow Path Slope (vft/hft)	0.0169
50-yr Rainfall Depth (in)	6.61
Percent Impervious	0.56
Soil Type	7
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Output Results

Modeled (100-yr) Rainfall Depth (in)	7.4164
Peak Intensity (in/hr)	4.0615
Undeveloped Runoff Coefficient (Cu)	0.7493
Developed Runoff Coefficient (Cd)	0.8337
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	9.0339
Burned Peak Flow Rate (cfs)	9.0339
24-Hr Clear Runoff Volume (ac-ft)	0.9401
24-Hr Clear Runoff Volume (cu-ft)	40948.9068



Peak Flow Hydrologic Analysis

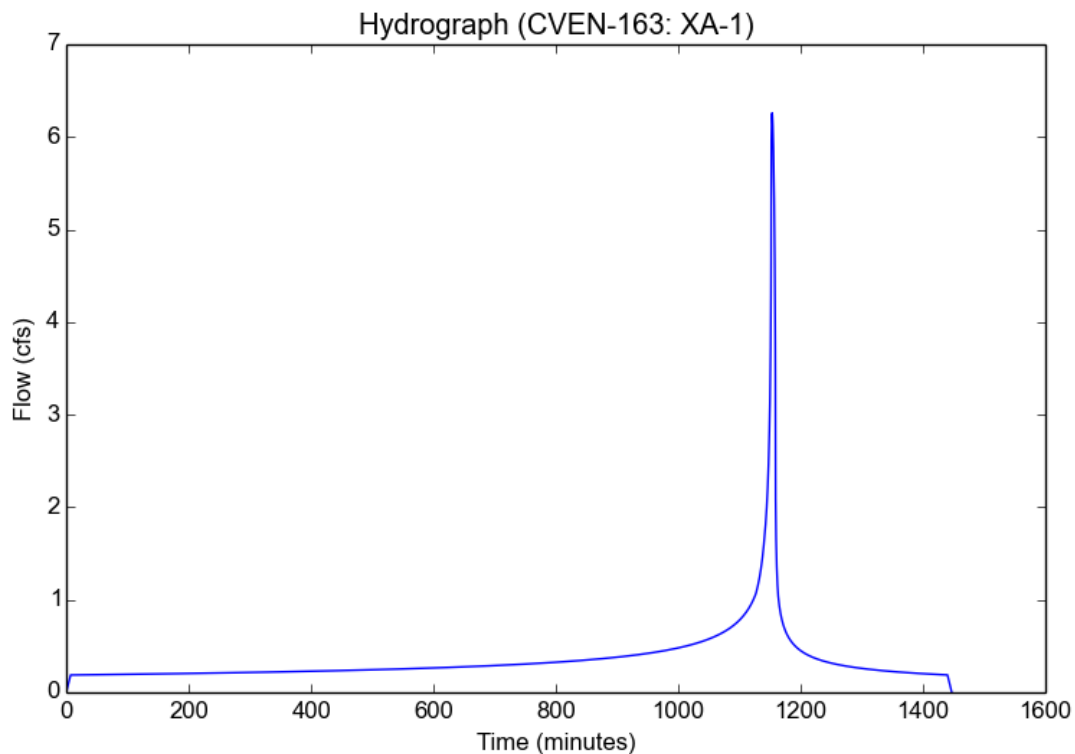
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Version: HydroCalc 1.0.3

Input Parameters

Project Name	CVEN-163
Subarea ID	XA-1
Area (ac)	2.668
Flow Path Length (ft)	521.0
Flow Path Slope (vft/hft)	0.0169
50-yr Rainfall Depth (in)	6.61
Percent Impervious	0.56
Soil Type	7
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	5.8036
Peak Intensity (in/hr)	2.9561
Undeveloped Runoff Coefficient (Cu)	0.6583
Developed Runoff Coefficient (Cd)	0.7936
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	6.2593
Burned Peak Flow Rate (cfs)	6.2593
24-Hr Clear Runoff Volume (ac-ft)	0.7266
24-Hr Clear Runoff Volume (cu-ft)	31649.2804



Proposed Conditions HydroCalc Outputs

Peak Flow Hydrologic Analysis

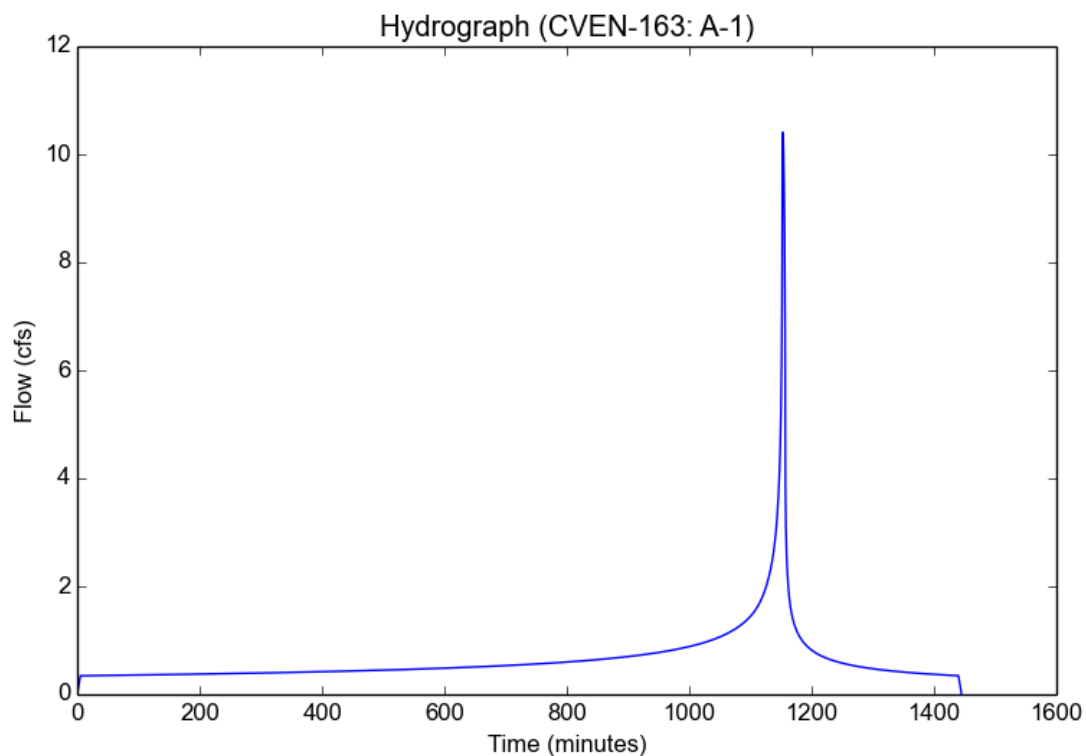
File location: P:/C/CVEN-163/Admin/Reports/Hydrology/Preliminary/Appendix B - HydroCalc/CVEN-163 Report.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	CVEN-163
Subarea ID	A-1
Area (ac)	2.668
Flow Path Length (ft)	423.0
Flow Path Slope (vft/hft)	0.0106
50-yr Rainfall Depth (in)	6.61
Percent Impervious	0.86
Soil Type	7
Design Storm Frequency	100-yr
Fire Factor	0
LID	False

Output Results

Modeled (100-yr) Rainfall Depth (in)	7.4164
Peak Intensity (in/hr)	4.4248
Undeveloped Runoff Coefficient (Cu)	0.7696
Developed Runoff Coefficient (Cd)	0.8817
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	10.4094
Burned Peak Flow Rate (cfs)	10.4094
24-Hr Clear Runoff Volume (ac-ft)	1.3027
24-Hr Clear Runoff Volume (cu-ft)	56743.6375



Peak Flow Hydrologic Analysis

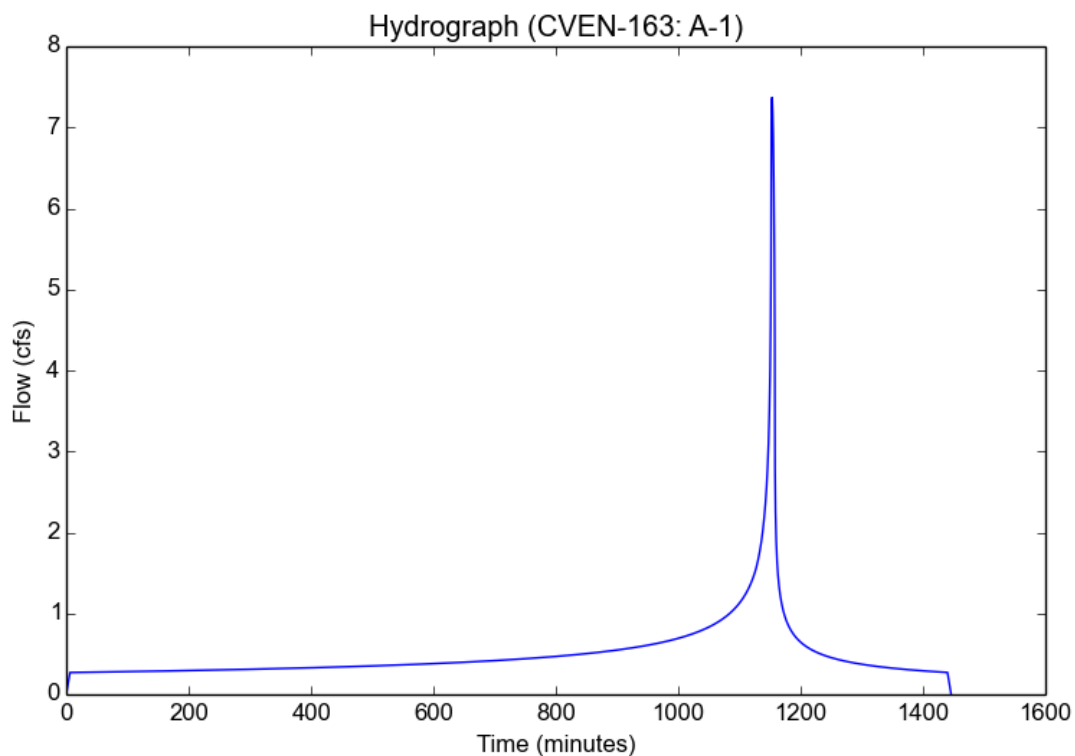
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Version: HydroCalc 1.0.3

Input Parameters

Project Name	CVEN-163
Subarea ID	A-1
Area (ac)	2.668
Flow Path Length (ft)	423.0
Flow Path Slope (vft/hft)	0.0106
50-yr Rainfall Depth (in)	6.61
Percent Impervious	0.86
Soil Type	7
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	5.8036
Peak Intensity (in/hr)	3.1782
Undeveloped Runoff Coefficient (Cu)	0.6779
Developed Runoff Coefficient (Cd)	0.8689
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	7.3679
Burned Peak Flow Rate (cfs)	7.3679
24-Hr Clear Runoff Volume (ac-ft)	1.0165
24-Hr Clear Runoff Volume (cu-ft)	44278.4413



Peak Flow Hydrologic Analysis

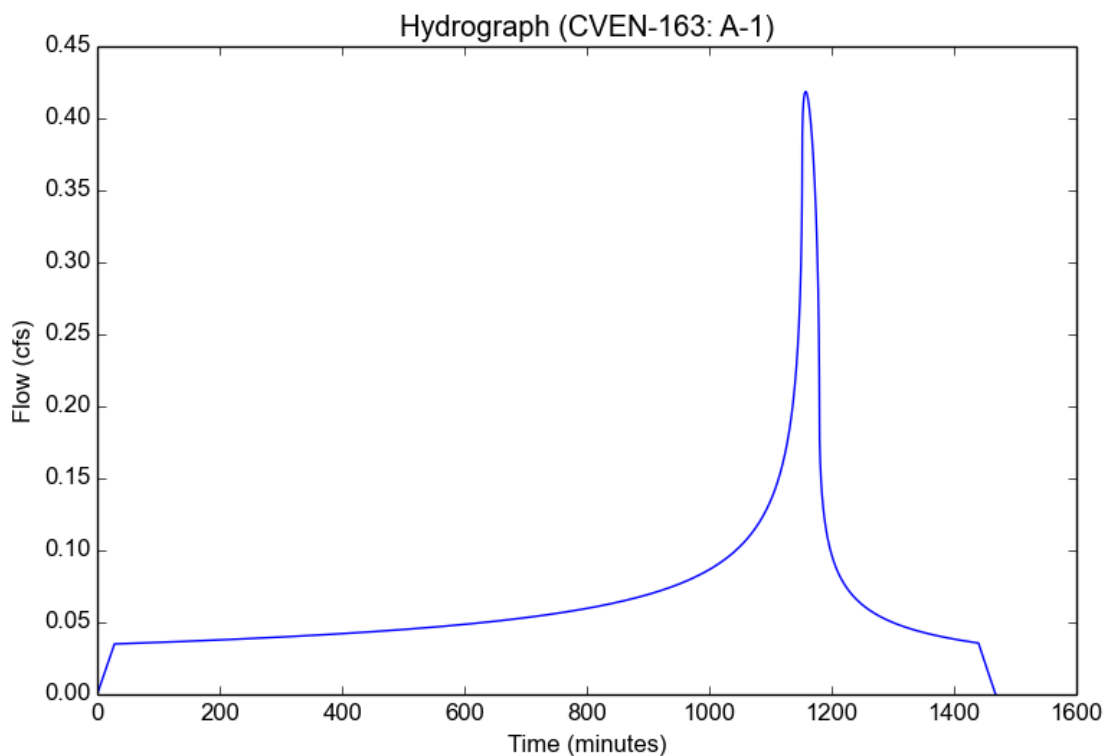
File location: P:/C/CVEN-163/Admin/Reports/Hydrology/Preliminary/Appendix B - HydroCalc/CVEN-163 Report.pdf
Version: HydroCalc 1.0.3

Input Parameters

Project Name	CVEN-163
Subarea ID	A-1
Area (ac)	2.668
Flow Path Length (ft)	423.0
Flow Path Slope (vft/hft)	0.0106
0.75-inch Rainfall Depth (in)	0.75
Percent Impervious	0.86
Soil Type	7
Design Storm Frequency	0.75 inch storm
Fire Factor	0
LID	True

Output Results

Modeled (0.75 inch storm) Rainfall Depth (in)	0.75
Peak Intensity (in/hr)	0.1991
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.788
Time of Concentration (min)	28.0
Clear Peak Flow Rate (cfs)	0.4186
Burned Peak Flow Rate (cfs)	0.4186
24-Hr Clear Runoff Volume (ac-ft)	0.1303
24-Hr Clear Runoff Volume (cu-ft)	5676.4935



Peak Flow Hydrologic Analysis

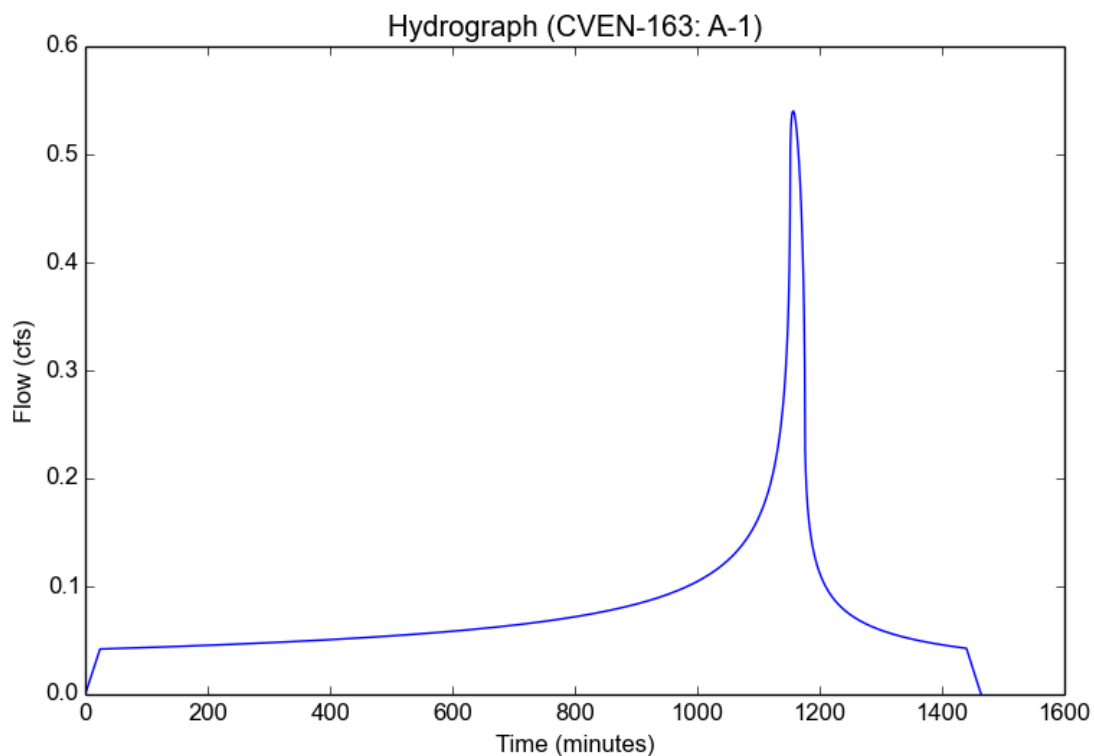
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Version: HydroCalc 1.0.3

Input Parameters

Project Name	CVEN-163
Subarea ID	A-1
Area (ac)	2.668
Flow Path Length (ft)	423.0
Flow Path Slope (vft/hft)	0.0106
85th Percentile Rainfall Depth (in)	0.9
Percent Impervious	0.86
Soil Type	7
Design Storm Frequency	85th percentile storm
Fire Factor	0
LID	True

Output Results

Modeled (85th percentile storm) Rainfall Depth (in)	0.9
Peak Intensity (in/hr)	0.2569
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.788
Time of Concentration (min)	24.0
Clear Peak Flow Rate (cfs)	0.5401
Burned Peak Flow Rate (cfs)	0.5401
24-Hr Clear Runoff Volume (ac-ft)	0.1564
24-Hr Clear Runoff Volume (cu-ft)	6811.774



APPENDIX C

Water Quality Retention Sizing Analysis Summary

INFILTRATION TRENCH VOLUME CALCULATIONS

Design Infiltration Rate:

$$\begin{aligned}DCV &= 6,811.8 \text{ cf} \\K_{sat} &= 9.05 \text{ in/hr (Per Geotechnical Report)} \\K_{design} &= 4.525 \text{ in/hr (Factor Safety of 2)}\end{aligned}$$

Infiltration Trench and Storage Volume:

$$\begin{aligned}d_l \text{ (trench length)} &= 302 \text{ ft} \\d_w \text{ (trench width)} &= 7 \text{ ft} \\d_T \text{ (depth of trench fill)} &= 7 \text{ ft} \\\text{trench fill area per linear feet} &= 29.365 \text{ ft}^2 \\n_T \text{ (porosity of trench fill)} &= 0.40 \\V_{Gravel} &= 29.365 \text{ ft}^2 \times 302 \text{ ft} \times 0.40 = 3,547.3 \text{ cf} \\\\ \text{Perforated 60" pipe length} &= 300 \text{ lf} \\V_{Pipe} &= \pi \times (2.5 \text{ ft})^2 \times 300 \text{ ft} = 5,890.5 \text{ cf} \\\\ \Sigma V &= 3,547.3 \text{ cf} + 5,890.5 \text{ cf} = 9,437.8 \text{ cf} \\&\mathbf{9,437.8 \text{ cf} > 6,811.8 \text{ cf} \checkmark}\end{aligned}$$

Infiltration Trench and Storage Volume:

$$\begin{aligned}\text{Surface Area} &= 7 \text{ ft} \times 302 \text{ ft} = 2,114 \text{ sf} \\(\text{Surface Area does not account for sides for conservativeness})\end{aligned}$$

$$\text{Existing and Proposed Conditions } Q_{100} \text{ Runoff Volume Difference} = 15,794.7 \text{ cf}$$

$$\begin{aligned}V_{24hr} &= \left(\frac{1}{12}\right) \left(4.525 \frac{\text{in}}{\text{hr}}\right) (2,114 \text{ sf})(24 \text{ hrs}) = 19,131.7 \text{ cf} \\&\mathbf{19,131.7 \text{ cf} > 15,794.7 \text{ cf} \checkmark}\end{aligned}$$

SUMMARY:

DMA	Design Capture Volume (DCV)	Underground Trench with Perforated Pipe Storage Volume	Q100 24-hr Runoff Volume Difference	24-hour Infiltrated Volume
DMA-A	6,811.8 cf	9,437.8 cf	15,794.7 cf	19,131.7 cf

APPENDIX D

Hydraulics Analysis

(Additional analysis to be provided during final engineering)

Preliminary Pipe Conveyance Capacity Sizing

Channel Report

Q25 - Preliminary Pipe Conveyance Sizing

Circular

Diameter (ft) = 1.50

Invert Elev (ft) = 100.00

Slope (%) = 0.50

N-Value = 0.013

Calculations

Compute by: Known Q

Known Q (cfs) = 7.37

Highlighted

Depth (ft) = 1.22

Q (cfs) = 7.370

Area (sqft) = 1.54

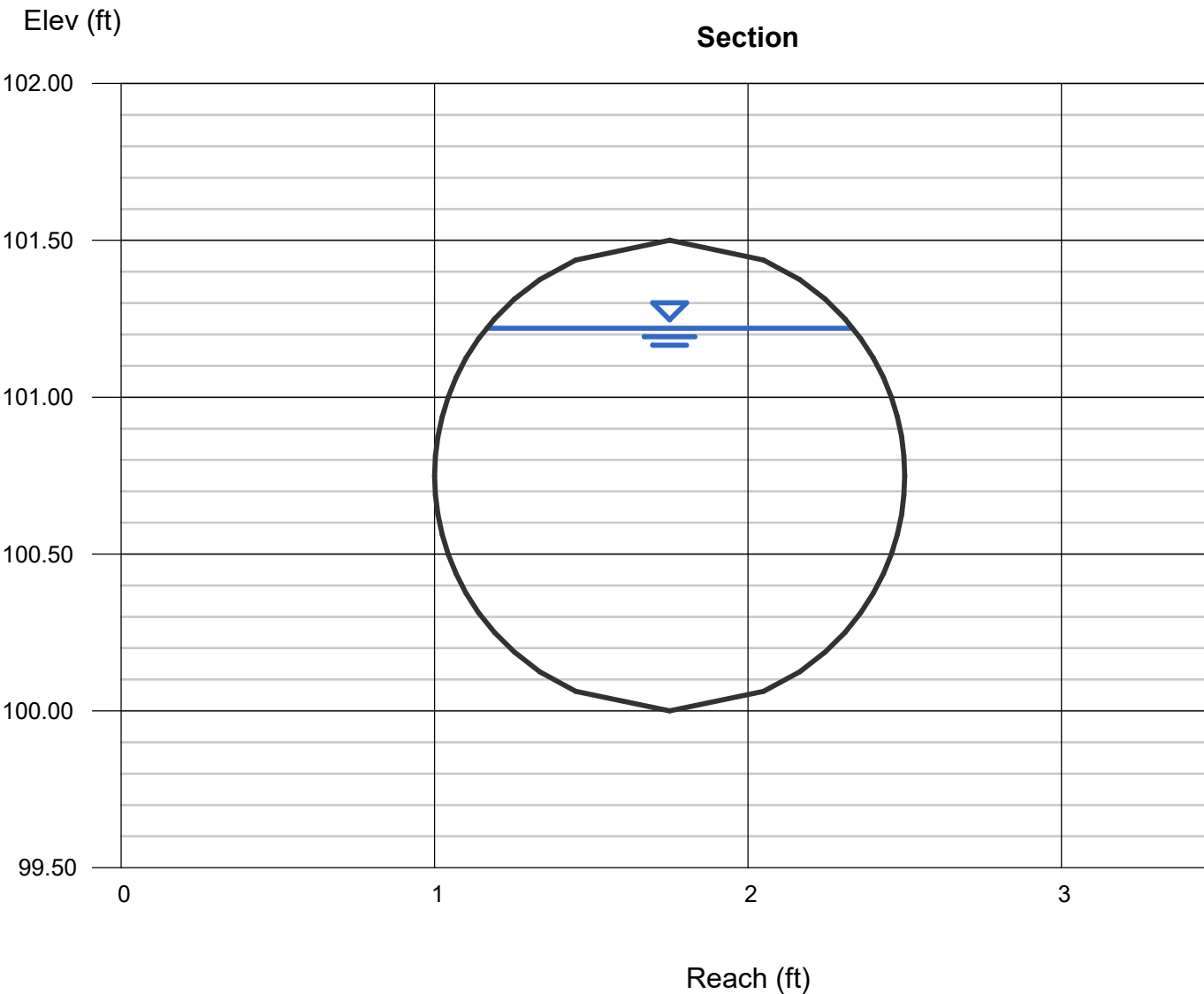
Velocity (ft/s) = 4.78

Wetted Perim (ft) = 3.38

Crit Depth, Yc (ft) = 1.05

Top Width (ft) = 1.17

EGL (ft) = 1.58

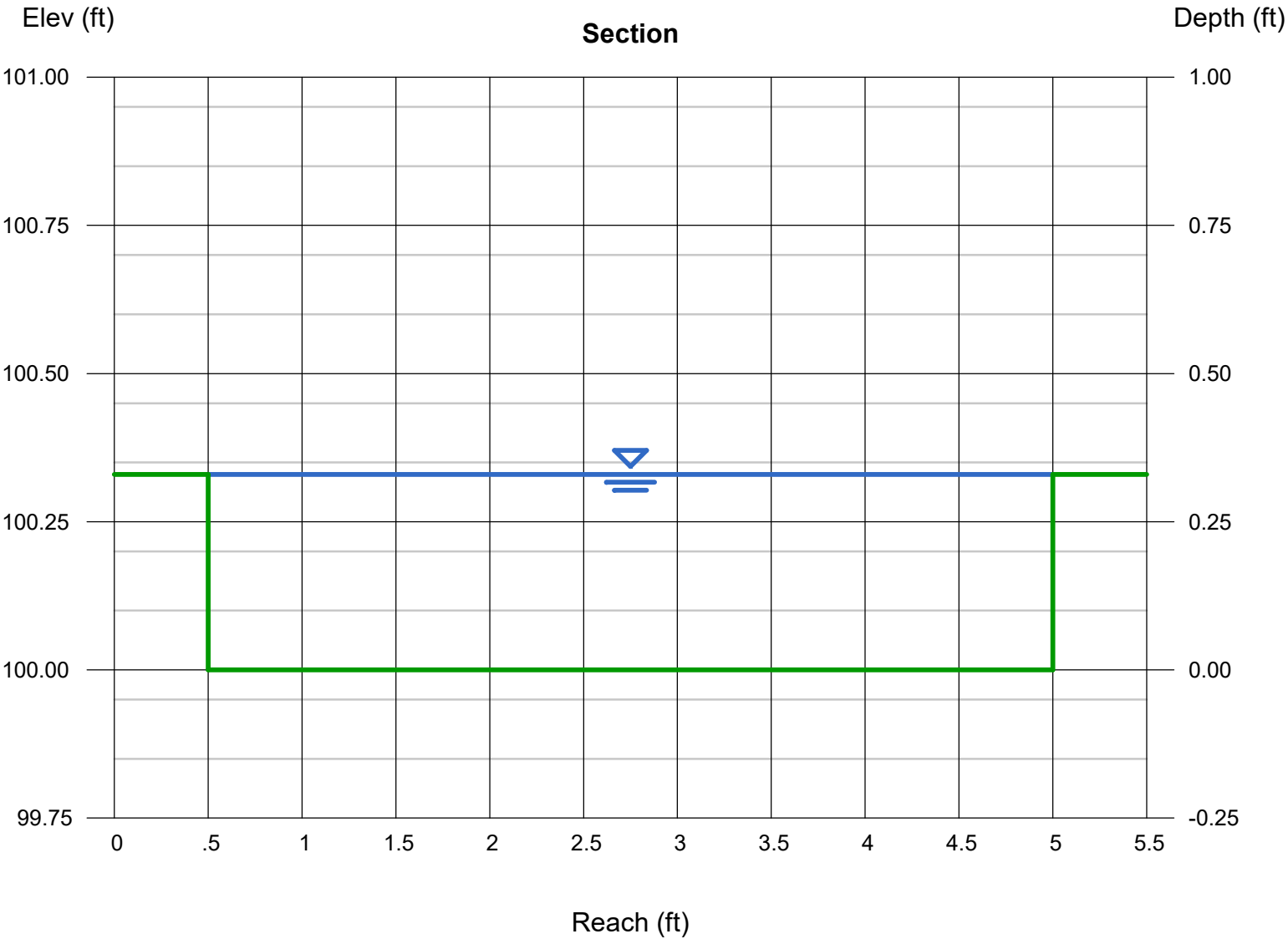


Preliminary Parkway Drain Capacity Sizing

Channel Report

Preliminary Parkway Drain Outlet

Rectangular		Highlighted	
Bottom Width (ft)	= 4.50	Depth (ft)	= 0.33
Total Depth (ft)	= 0.33	Q (cfs)	= 10.41
		Area (sqft)	= 1.49
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 7.01
Slope (%)	= 2.00	Wetted Perim (ft)	= 5.16
N-Value	= 0.013	Crit Depth, Yc (ft)	= 0.33
		Top Width (ft)	= 4.50
		EGL (ft)	= 1.09
Calculations			
Compute by:	Known Q		
Known Q (cfs)	= 10.41		



APPENDIX F

References

Reference Plans

STANDARD GRADING NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF POMONA ORDINANCE NO. 3444, AND THE LATEST STATE CODES AS MANDATED TO BE ENFORCED BY THE CITY, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, PLUS ANY SUPPLEMENTS. A BOND IS REQUIRED PER SECTION 3311 OF THE UNIFORM BUILDING CODE.
- AN APPROVED SET OF PLANS SHALL BE ON THE JOB SITE AT ALL TIMES.
- NO WORK SHALL BE STARTED WITHOUT FIRST NOTIFYING THE BUILDING DIVISION AT (909) 620-2422.
- ADEQUATE BARRICADES, LIGHTS, FLAG MEN, SIGNS AND OTHER SAFETY DEVICES SHALL BE PROVIDED AS SPECIFIED BY THE TRAFFIC MANUAL PUBLISHED BY THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION.
- EXISTING CITY STREETS SHALL BE KEPT CLEAN OF ALL MATERIALS RESULTING FROM THE GRADING OPERATIONS. THE STREET RIGHT-OF-WAY SHALL BE CLEANED UP DAILY AND AS NECESSARY TO MAINTAIN PEDESTRIAN AND VEHICULAR PASSAGE OVER THE PUBLIC RIGHT-OF-WAY AT ALL TIMES.
- THE PERMITTEE OR HIS AGENT SHALL NOTIFY THE BUILDING OFFICIAL AT LEAST 24 HOURS BEFORE THE GRADING OPERATION IS READY FOR EACH OF THE FOLLOWING:
 - PRE-GRADE MEETING: WHEN THE PERMITTEE IS READY TO BEGIN WORK AND BEFORE ANY GRADING OR BRUSHING IS STARTED. THE FOLLOWING PEOPLE MUST BE PRESENT: OWNER, GRADING CONTRACTOR, DESIGN CIVIL ENGINEER, SOILS ENGINEER, GEOLOGIST, BUILDING OFFICIAL OR THEIR REPRESENTATIVE.
 - TOE INSPECTION: AFTER THE NATURAL GROUND IS EXPOSED AND PREPARED TO RECEIVE FILL AND BEFORE ANY FILL IS PLACED.
 - EXCAVATION INSPECTION: AFTER THE EXCAVATION IS STARTED AND BEFORE THE DEPTH OF EXCAVATION EXCEEDS 10 FEET.
 - FILL INSPECTION: AFTER THE AREA TO RECEIVE FILL HAS BEEN PREPARED AND INSPECTED BY THE SOILS ENGINEER.
 - DRAINAGE DEVICE INSPECTION: AFTER FORMS, STEEL AND PIPE ARE IN PLACE, AND BEFORE ANY CONCRETE IS POURED.
 - ROUGH GRADING: WHEN ALL ROUGH GRADING HAS BEEN COMPLETED.
 - FINAL INSPECTION: WHEN ALL WORK INCLUDING INSTALLATION OF ALL DRAINAGE STRUCTURES AND OTHER PROTECTIVE DEVICES HAS BEEN COMPLETED AND THE "AS-GRADED" PLAN AND REQUIRED REPORTS HAVE BEEN SUBMITTED AND APPROVED, THE PERMITTEE SHALL WAIT FOR APPROVAL BY THE INSPECTOR BEFORE PROCEEDING WITH THE WORK.
- SUFFICIENT TESTS OF SOIL PROPERTIES, INCLUDING SOIL TYPES AND SHEAR STRENGTH SHALL BE MADE DURING GRADING OPERATIONS TO VERIFY COMPLIANCE WITH DESIGN CRITERIA. THE RESULTS OF SUCH TESTING SHALL BE FURNISHED TO THE BUILDING OFFICIAL UPON COMPLETION OF GRADING OPERATIONS OR WHEN NECESSITATED BY FIELD CONDITIONS UPON REQUEST OF THE BUILDING OFFICIAL.
- THE GRADING CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT VERIFYING THAT WORK DONE UNDER HIS DIRECTION WAS PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS AND REQUIREMENTS OF CHAPTER 33 OF THE UNIFORM BUILDING CODE OR DESCRIBING ALL VARIANCES FROM THE APPROVED PLANS AND REQUIREMENTS OF THE CODE.
- THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE PERMITEE.
- DUST SHALL BE CONTROLLED BY WATERING.
- SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE FROM BEGINNING TO COMPLETION OF GRADING OPERATIONS.
- ALL GRADING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROVED GEOTECHNICAL REPORT BY LEIGHTON CONSULTING, INC., DATED MARCH 22, 2011, LEIGHTON CONSULTING, INC., PROJECT NO. 609452-005.
- THE CONTRACTOR SHALL INCORPORATE EROSION CONTROL MEASURES TO BE USED DURING AND AFTER CONSTRUCTION. SEPARATE PLANS FOR DRAINAGE AND EROSION CONTROL MEASURES TO BE USED DURING AND AFTER CONSTRUCTION ARE TO BE IN COMPLIANCE WITH ALL APPLICABLE STORM WATER POLLUTION REQUIREMENTS.
- PRIOR TO PLACING COMPACTED FILL, THE SURFACE SHALL BE STRIPPED OF VEGETATION AND THE SURFACE SCARIFIED TO A DEPTH OF 12 INCHES OR AS SPECIFIED BY THE SOILS ENGINEER AND APPROVED BY THE BUILDING OFFICIAL, BROUGHT TO OPTIMUM MOISTURE CONTENT, RECOMPACTED TO 90% MAXIMUM DENSITY AND INSPECTED BY THE GRADING INSPECTOR AND THE SOIL TESTING AGENCY.
- FILLS SHALL BE COMPACTED THROUGHOUT TO 90% OF MAXIMUM DENSITY AS DETERMINED BY UNIFORM BUILDING CODE NO. 3313, LATEST EDITION ADOPTED BY THE CITY, AND CERTIFIED BY THE SOILS ENGINEER. NOT LESS THAN ONE FIELD DENSITY TEST WILL BE MADE FOR EACH 2 FEET VERTICAL LIFT OF FILL, NOR LESS THAN ONE SUCH TEST FOR EACH 1,000 CUBIC YARDS OF MATERIAL PLACED. AT LEAST ONE-HALF OR THE REQUIRED TEST SHALL BE MADE AT THE LOCATION OF THE FINAL FILL SLOPE.
- NO ROCK OR SIMILAR MATERIAL GREATER THAN 12 INCHES IN DIMENSION WILL BE PLACED IN THE FILL UNLESS RECOMMENDATIONS FOR SUCH PLACEMENT HAVE BEEN SUBMITTED BY THE SOILS ENGINEER IN ADVANCE AND APPROVED BY THE BUILDING OFFICIAL.
- NO FILL SHALL BE PLACED UNTIL STRIPPING OF VEGETATION, REMOVAL OF UNSUITABLE SOILS AND INSTALLATION OF SUB DRAINS (IF REQUIRED) HAVE BEEN BEEN INSPECTED AND APPROVED BY THE SOILS ENGINEER AND THE SITE INSPECTOR.
- CONTINUOUS INSPECTION BY THE SOILS ENGINEER OR THE RESPONSIBLE REPRESENTATIVE WILL BE PROVIDED DURING ALL FILL PLACEMENT AND COMPACTION OPERATIONS.
- ALL EXISTING FILL SHALL BE APPROVED BY THE SOILS ENGINEER AND THE SITE INSPECTOR OR HIS REPRESENTATIVE BEFORE ANY ADDITIONAL FILLS ARE ADDED.
- ALL TRENCH BACKFILLS SHALL BE TESTED AND CERTIFIED BY THE SOILS ENGINEER.
- ALL CONCRETE STRUCTURES THAT COME IN CONTACT WITH THE ON-SITE SOILS SHALL BE CONSTRUCTED WITH TYPE 5 (SIX) SACK CEMENT UNLESS SULFATE CONTENT TESTS CONDUCTED BY THE SOILS ENGINEER SHOW IT TO BE UNNECESSARY.
- THE SOILS ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION DURING THE PREPARATION OF NATURAL GROUND AND PLACEMENT OF COMPACTION TO VERIFY THAT SUCH WORK IS BEING PERFORMED IN ACCORDANCE WITH THE CONDITIONS OF THE APPROVED PLAN AND THE REQUIREMENTS OF THE UNIFORM BUILDING CODE, SECTION 3317.3, LATEST EDITION ADOPTED BY THE CITY. REVISED RECOMMENDATIONS RELATING TO CONDITIONS DIFFERING FROM THE APPROVED SOILS ENGINEERING REPORT SHALL BE SUBMITTED TO THE PERMITTEE, THE BUILDING OFFICIAL AND THE CIVIL ENGINEER.
- THE ENGINEERING GEOLOGIST SHALL PROVIDE A PROFESSIONAL INSPECTION OF THE BEDROCK EXCAVATION TO DETERMINE IF CONDITIONS ENCOUNTERED ARE IN ACCORDANCE WITH THE APPROVED REPORTS, THE PLANS, SPECIFICATIONS AND CODE WITHIN THEIR PURVIEW, IN ACCORDANCE WITH THE UNIFORM BUILDING CODE SECTION 3317.4, LATEST EDITION ADOPTED BY THE CITY.
- THE PERMITTEE SHALL BE RESPONSIBLE FOR THE WORK TO BE PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND IN CONFORMANCE WITH THE PROVISIONS OF THE UNIFORM BUILDING CODE SECTION 3317.5, AND THE PERMITTEE SHALL ENGAGE CONSULTANTS, IF REQUIRED, TO PROVIDE PROFESSIONAL INSPECTIONS ON A TIMELY BASIS. THE PERMITTEE SHALL ACT AS COORDINATOR BETWEEN THE CONSULTANTS, THE CONTRACTOR AND THE BUILDING OFFICIAL. IN THE EVENT OF CHANGED CONDITIONS, THE PERMITTEE SHALL BE RESPONSIBLE FOR INFORMING THE BUILDING OFFICIAL OF SUCH CHANGE AND SHALL PROVIDE REVISED PLANS FOR APPROVAL.

CATCH BASIN STENCIL DETAIL

ALL CATCH BASINS AND INLETS THAT DISCHARGE INTO AN EXISTING OR PROPOSED STORM DRAIN MUST BE STENCILED TO DISCOURAGE ILLEGAL DUMPING OF POLLUTANTS. THIS STENCIL SHALL HAVE A MINIMUM DIAMETER OF 30 INCHES.



CITY OF POMONA
INDIAN HILL BOULEVARD
STORM DRAIN IMPROVEMENTS

PROJECT NO. 208-67908

CONSTRUCTION GENERAL NOTES FOR WORK
WITHIN THE PUBLIC RIGHT OF WAY

- ALL WORK WITHIN STREET-RIGHT OF WAY SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION AND TO THE CITY OF POMONA STANDARD DRAWINGS.
- BEFORE COMMENCING ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, A PERMIT SHALL BE OBTAINED FROM THE CITY OF POMONA DEPARTMENT OF PUBLIC WORKS.
- THE CONTRACTOR SHALL TELEPHONE THE CITY OF POMONA PUBLIC WORKS DEPT. AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION.
- ALL UNDERGROUND FACILITIES SHALL BE INSTALLED PRIOR TO SURFACING OF STREET.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ARRANGE FOR AND COORDINATE THE RELOCATION OF ANY EXISTING UTILITIES DEEMED NECESSARY BY THE PROPOSED IMPROVEMENTS.
- ALL STATIONING REFERS TO STORM DRAIN CENTERLINE UNLESS OTHERWISE INDICATED.
- ALL TRAFFIC REGULATOR SIGNS TO BE RELOCATED IF ANY, SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE CITY ENGINEER.
- TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH SECTION 7-10 OF THE STANDARD SPECIFICATIONS.
- PEDESTRIANS AND BICYCLE ACCESS IS TO BE MAINTAINED AT ALL TIMES DURING AND AFTER CONSTRUCTION.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES OF STRUCTURES AS SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITIES OR STRUCTURES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE FOLLOWING COMPANIES ARE KNOWN TO OR MAY HAVE FACILITIES WITHIN PROJECT LIMITS:

WATER COMPANY
CITY OF POMONA
505 S. GAREY AVENUE
POMONA, CA 91769

ELECTRIC COMPANY
SOUTHERN CALIFORNIA EDISON COMPANY
800 W. CIENEGA AVENUE
SAN DIMAS, CALIFORNIA 91773

GAS COMPANY
SOUTHERN CALIFORNIA GAS COMPANY
9400 OKDALE AVENUE
CHATSWORTH, CALIFORNIA 91311

TELEPHONE COMPANY
VERIZON CALIFORNIA
1400 E. PHILLIPS BOULEVARD
POMONA, CALIFORNIA 91766

CABLE TV
TIME WARNER CABLE
1041 EAST ROUTE 66
GLENORA, CALIFORNIA 91740

SEWER
CITY OF POMONA
505 S. GAREY AVENUE
POMONA, CA 91769

- EXISTING P.C.C. TO BE REMOVED SHALL BE SAW-CUT.
- CONTRACTOR SHALL TEMPORARILY AND PERMANENTLY ADJUST ALL STRUCTURES, MANHOLES, VALVE BOXES, COVERS AND SIMILAR AS DIRECTED BY CITY INSPECTOR AS PART OF RCP ITEMS (D, E, F, G) FOR DRAIN & PAVING WORK.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

STD. PLAN	TITLE
300-3	CURB OPENING CATCH BASIN
313-3	LOCAL DEPRESSION AT CATCH BASIN
320-2	MANHOLE PIPE TO PIPE MAIN LINE ID 36" OR LARGER
331-3	JUNCTION STRUCTURE - PIPE TO PIPE
380-4	CONCRETE COLLAR FOR RCP

SPECIAL NOTES:

- THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USE OF THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE REQUESTED IN WRITING AND MUST BE APPROVED BY THE ENGINEER OF RECORD.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN HEREON AT THE JOB SITE PRIOR TO ANY CONSTRUCTION. ANDREASEN ENGINEERING, INC. SHALL BE NOTIFIED OF ANY DISCREPANCIES. REVISIONS TO THE PLAN SHALL BE APPROVED BY THE ENGINEER IN WRITING PRIOR TO IMPLEMENTATION. BEGINNING OF CONSTRUCTION MEANS ACCEPTANCE OF CONDITIONS.
- EXCEPT IN AN EMERGENCY, EVERY PERSON PLANNING TO CONDUCT ANY EXCAVATION SHALL CONTACT UNDERGROUND SERVICE ALERT AT LEAST TWO (2) WORKING DAYS AT 1 800-227-2600.
- ALL AGENCY REQUIREMENTS SET FORTH ON ANY PERMITS REQUIRED FOR CONSTRUCTION OF THIS PROJECT WHETHER REFERENCED HEREIN OR NOT, SHALL BE COMPLIED WITH AS IF THEY WERE PART OF THESE PLANS AND SPECIFICATIONS. ANDREASEN ENGINEERING, INC. WILL NOT BE RESPONSIBLE FOR CONTRACTORS NON-COMPLIANCE.

EXISTING UNDERGROUND STRUCTURES

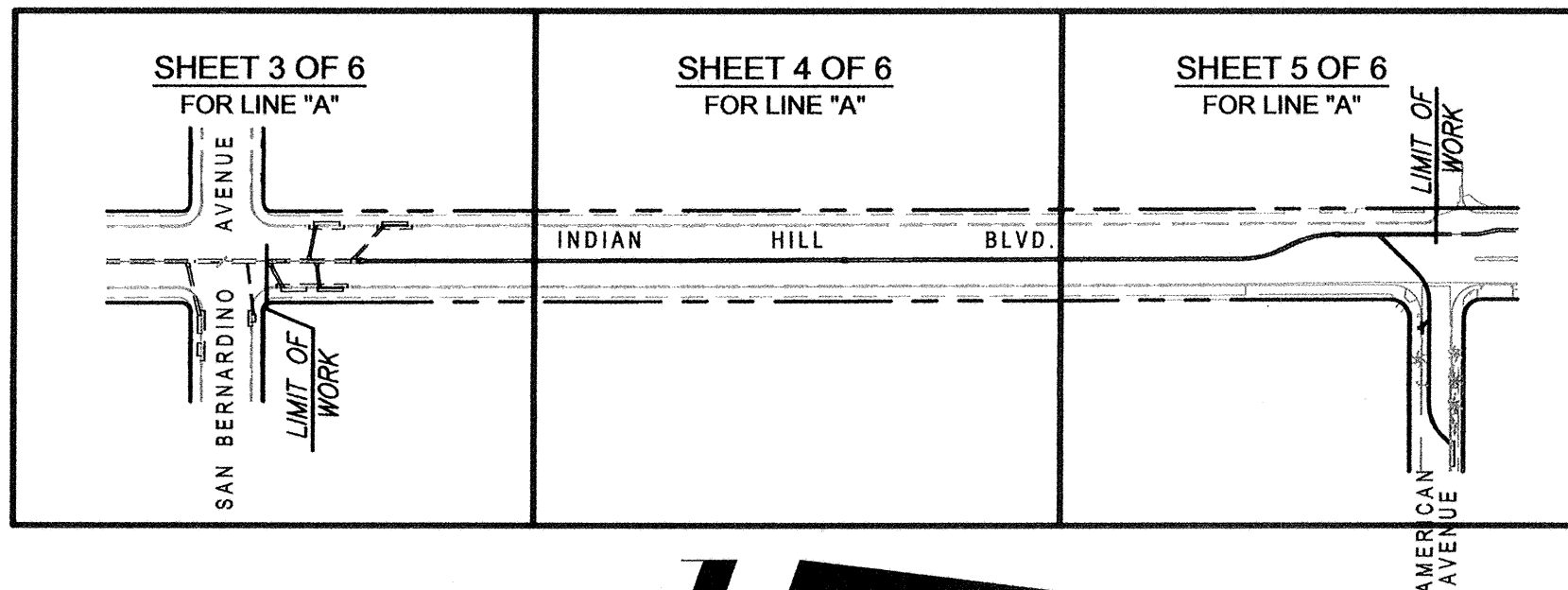
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK. CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UNDERGROUND UTILITY PIPES, CONDUITS, OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS.

HOLD HARMLESS AND INDEMNIFICATION CLAUSE

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER, THE CITY OF CLAREMONT, AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE CITY OF CLAREMONT, OR THE ENGINEER.

INDEX TO PROJECT DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL NOTES, WATER QUALITY NOTES, HYDRAULIC ELEMENTS
3	PLAN AND PROFILE STATION 47+79.90 TO STATION 50+70.00 LINE C
4	PLAN AND PROFILE STATION 50+70.00 TO STATION 55+60.00 LINE C
5	PLAN AND PROFILE STATION 55+60.00 TO STATION 59+65.15 LINE C
6	PLAN AND PROFILE STATION 1+00.00 TO STATION 3+61.05 LATERAL "A" AND CONNECTOR PIPE NO. 1



KEY MAP

SCALE: 1"=200'

ALL IMPROVEMENTS SHOWN IN RIGHT-OF-WAY REQUIRE APPROVALS AND PERMITS FROM THE ENGINEERING DIVISION OF PUBLIC WORKS DEPARTMENT OF THE CITY OF POMONA.

CITY OF CLAREMONT BENCH MARK NO. 215

INDIAN HILL BLVD. & AMERICAN AVE. 18 FT. SOUTHERLY & 63' EASTERLY OF CENTERLINE INTERSECTION PK NAIL/LEAD IN SOUTHERLY CURB OF AMERICAN AVE.

ADJUSTED 1965

ELEVATION 1019.07

PREPARED BY:
ANDREASEN ENGINEERING, INC.
CIVIL ENGINEERING • LAND SURVEYING • MUNICIPAL ENGINEERING
580 NORTH PARK AVENUE, POMONA, CALIFORNIA 91768
(909)623-1595 • FAX # (909)620-0016

Under the Supervision Of:

Stephen Ventura R.C.E. 32437

DATE

2/27/13

NO DESIGN OR DRAFTING MODIFICATIONS SHALL BE MADE TO THIS PLAN (PAPER AND/OR ELECTRONIC) WITHOUT EXPRESS WRITTEN PERMISSION IN WRITING BY THE UNDERSIGNED CIVIL ENGINEER. IF DESIGN OR DRAFTING CHANGES ARE MADE TO THIS PLAN WITHOUT EXPRESS WRITTEN PERMISSION IT WILL BE CONSIDERED A VIOLATION OF THE PROFESSIONAL ENGINEERS ACT (BUSINESS AND PROFESSIONS CODE 6700-6799), AND SAID VIOLATION MAY BE PROSECUTED TO THE FULL EXTENT OF THE LAW.

REGISTERED PROFESSIONAL ENGINEER
STEPHEN VENTURA
RCE 32437
Exp. 12-31-14
CIVIL
STATE OF CALIFORNIA

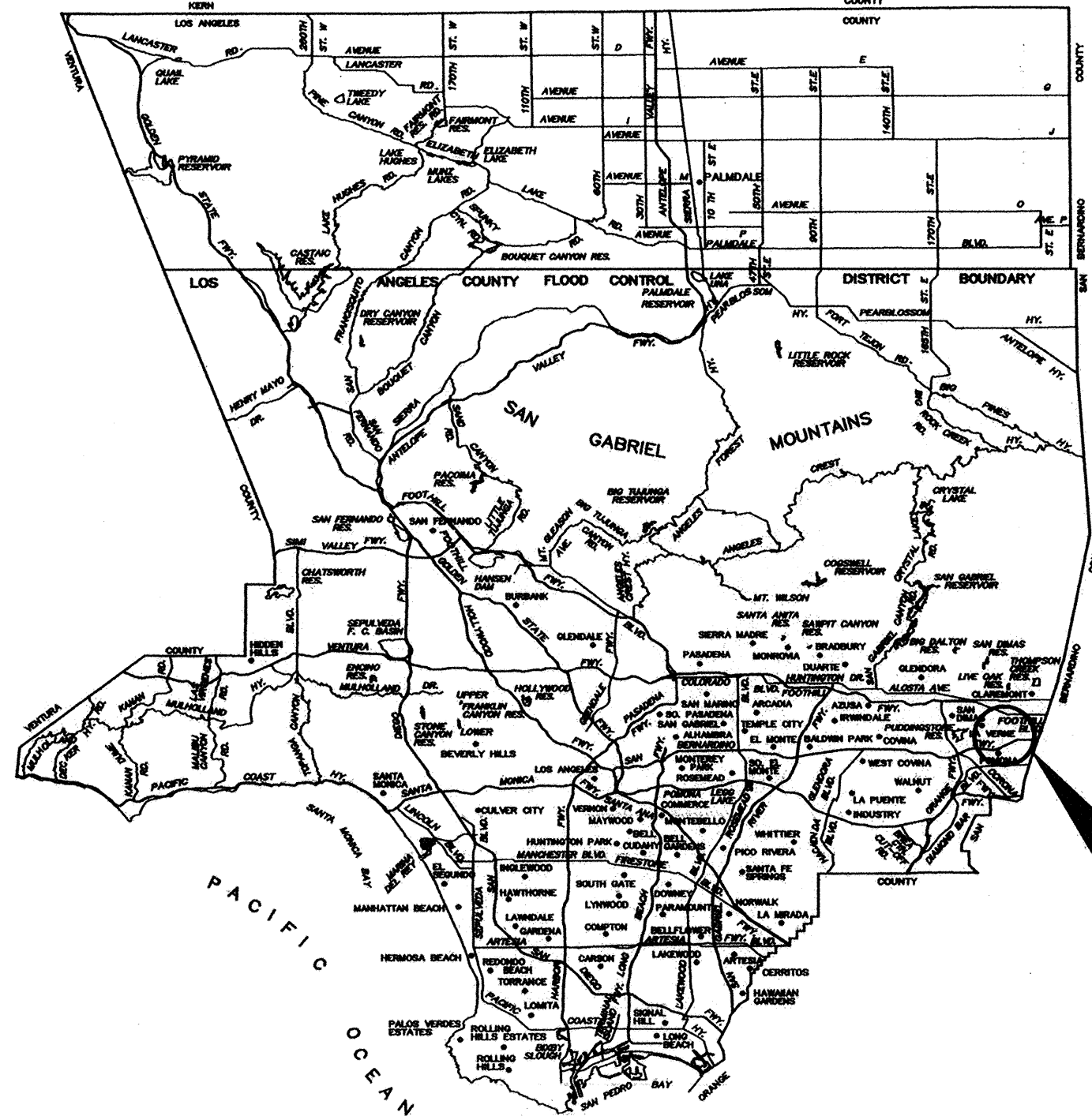
REVISIONS

AS SHOWN

5-1373

5-6-13

DATE



PROJECT SITE
T.G. 601-D5 & D6

LOCATION MAP



VICINITY MAP

NOT TO SCALE

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
CONNECTION PERMIT NO. PCFL T201203018

DATE: February 27, 2013

ACCEPTED

BY: [Signature]
P.W. DIRECTOR

DATE: 3/1/13

RECOMMENDED

BY: [Signature]
DEP. PUB. WKS. DIR. / CITY ENG.

DATE: 3/7/13

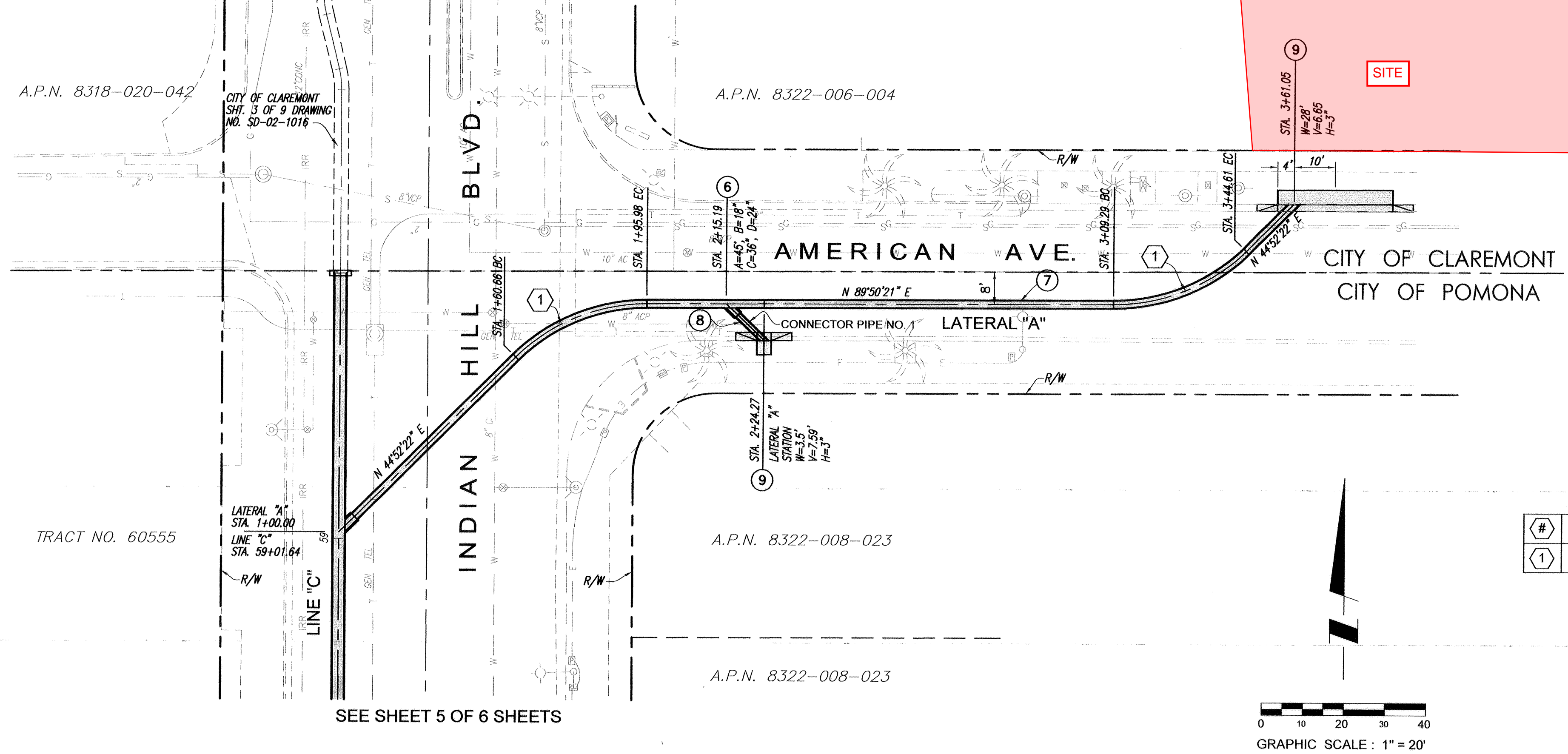
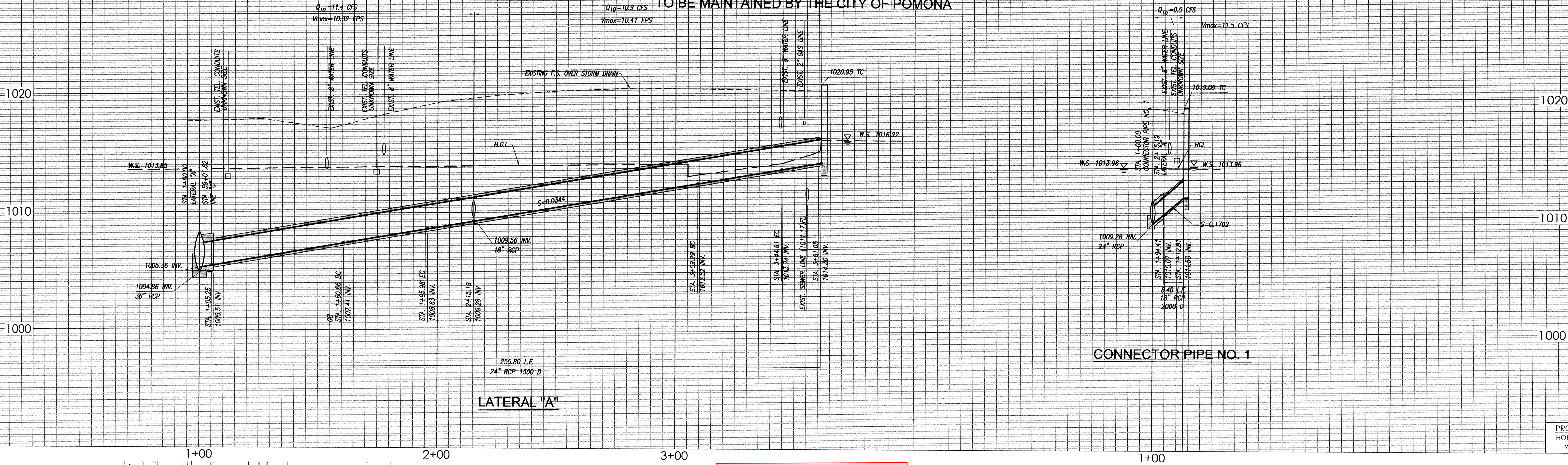
CITY OF POMONA
PUBLIC WORKS DEPARTMENT/ENGINEERING DIVISION

STORM DRAIN IMPROVEMENTS

TITLE SHEET
for
INDIAN HILL BOULEVARD

SCALE	DESIGNED:	PVT. ENGR.	SHT. 1
AS SHOWN	DRAWN:	PVT. ENGR.	OF
	CHECKED:		6
	REVIEWED:		SHTS
	REVIEWED (CONST.)		

NOT TO BE MAINTAINED BY LACDPW/LACFGD
TO BE MAINTAINED BY THE CITY OF POMONA



CONSTRUCTION NOTES:

- 6. CONSTRUCT JUNCTION STRUCTURE PIPE TO PIPE PER S.P.P.W.C. STD. PLAN 331-3 SEE A, B, C & D ON PLAN
- 7. INSTALL 24" RCP 1500 D; AND REMOVE AND REPLACE SPANDRALS, CROSS GUTTER ALL CURB RAMPS/CURB & GUTTER PER CITY STD'S AT AMERICAN/INDIAN HILL (EAST LEG OF INTERSECTION) *
- 8. INSTALL 18" RCP 2000 D; *
- 9. CONSTRUCT "CURB OPENING CATCH BASIN" PER S.P.P.W.C. STD. PLAN 300-3, V, H, & W SHOWN ON PLAN; AND CONSTRUCT "LOCAL DEPRESSION AT CATCH BASIN" PER S.P.P.W.C. STD. PLAN 313-3, CASE "E"

CURVE DATA				
#	△	RADIUS	LENGTH	TANGENT
1	△	6721'21"	45.00'	35.32'

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
CONNECTION PERMIT NO. PCFL T201203018

DATE: February 27, 2013

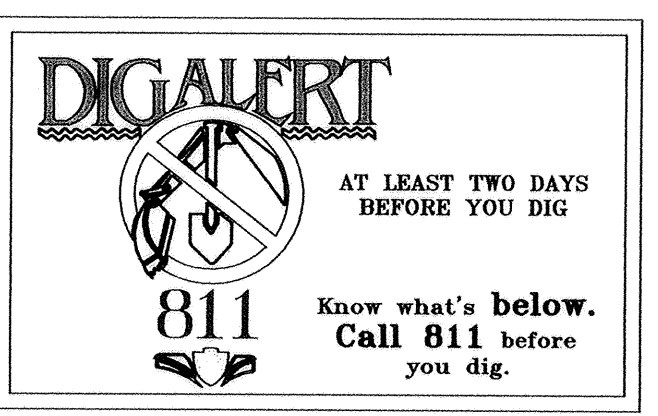
ACCEPTED
BY: **SEE SHT. 1** DATE: **3/11/13**
P.W. DIRECTOR/CITY ENGINEER RCE NO. 45607

RECOMMENDED
BY: _____ DATE: _____
DEP. PUB. WKS. DIR. / CITY ENG.

CITY OF POMONA
PUBLIC WORKS DEPARTMENT/ENGINEERING DIVISION

STORM DRAIN IMPROVEMENTS
PLAN AND PROFILE
for
INDIAN HILL BOULEVARD

SCALE: _____
DESIGNED: _____
DRAWN: _____
CHECKED: _____
REVIEWED: _____
AS SHOWN
PVT. ENGR. _____
PVT. ENGR. _____
PVT. ENGR. _____
SHT. **6**
OF
6 SHEETS



PREPARED BY:
ANDREASEN ENGINEERING, INC.
CIVIL ENGINEERING • LAND SURVEYING • MUNICIPAL ENGINEERING
580 NORTH PARK AVENUE, POMONA, CALIFORNIA 91768
(909)623-1595 • FAX # (909)620-0016
Under The Supervision Of:
Stephen Ventura R.C.E. 32437
DATE: **2/27/13**
NO DESIGN OR DRAFTING MODIFICATIONS SHALL BE MADE TO THIS PLAN (PAPER AND/OR ELECTRONIC) WITHOUT EXPRESS WRITTEN PERMISSION IN WRITING BY THE UNDERSIGNED CIVIL ENGINEER. IF DESIGN OR DRAFTING CHANGES ARE MADE TO THIS PLAN WITHOUT EXPRESS WRITTEN PERMISSION IT WILL BE CONSIDERED A VIOLATION OF THE PROFESSIONAL ENGINEERS ACT (BUSINESS AND PROFESSIONS CODE 6700-6799), AND SAID VIOLATION MAY BE PROSECUTED TO THE FULL EXTENT OF THE LAW.

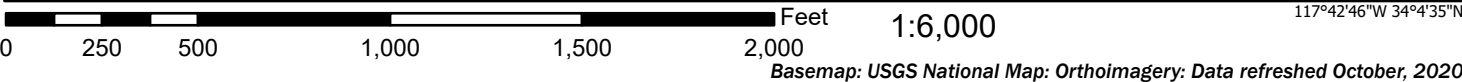
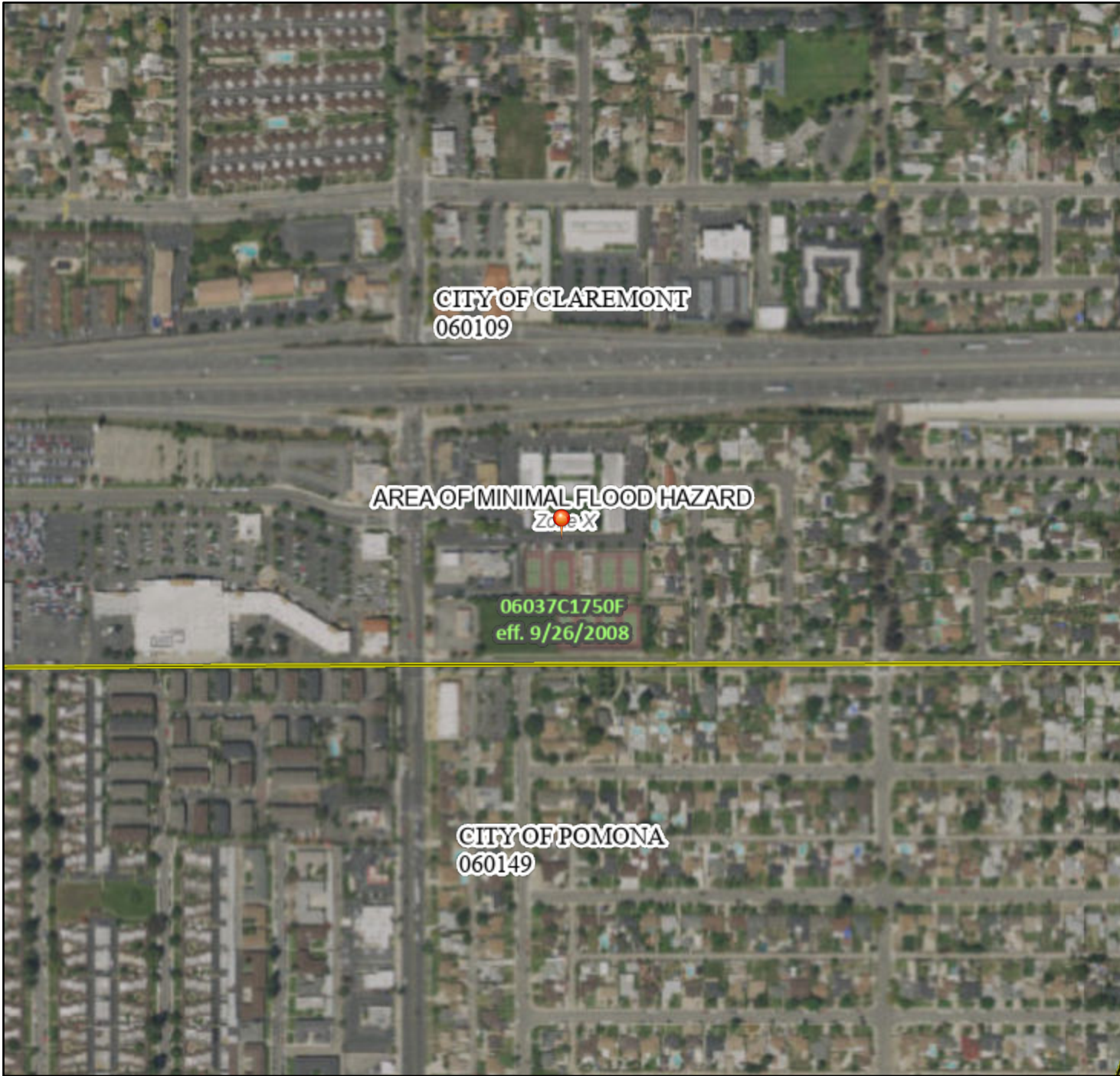
REVISIONS		DATE
△	Bidding AM	5-13-13

FEMA Flood Map

National Flood Hazard Layer FIRMette



117°43'23"W 34°5'5"N



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 Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
MAP PANELS		No Digital Data Available
		Unmapped



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 4/21/2022 at 5:59 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.

EXHIBIT F



Will Serve Letter

4/21/2022

Patrick Chien
City Ventures
3121 Michelson Dr., Suite 150
Irvine, CA 92612

Project Name: WSL - 840 S. Indian Blvd Claremont, CA 91711
LOCATION: 840 S. Indian Blvd Claremont, CA 91711

Re: May Serve Letter by Charter Communications or an affiliate authorized to provide service ("Charter")

Thank you for your interest in receiving Charter service. The purpose of this letter is to confirm that the Property is within an area that Charter may lawfully serve. However, it is not a commitment to provide service to the Property. Prior to any determination as to whether service can or will be provided to the Property, Charter will conduct a survey of the Property and will need the following information from you:

- Exact site address and legal description
- Is this an existing building or new construction?
- Site plans, blue prints, plat maps or any similar data
- The location of any existing utilities or utility easements
- _____

Please forward this information to the construction manager listed below. Upon receipt, a Charter representative will be assigned to you to work through the process. Ultimately, a mutually acceptable service agreement for the Property will be required and your cooperation in the process is appreciated.

Construction Manager Contact:

Dianna Netherlain
SoCal Central Specialist, Business Development
3430 E Miraloma Ave
Anaheim CA 92806
714-414-1454
dianna.netherlain@charter.com

Sincerely,

Dianna Netherlain

Appendix B



As your Southern California Edison (SCE) Design Representative for this project, I am committed to providing you with excellent customer service. The following information is intended to help explain SCE's planning and permitting process for the electric infrastructure needed to serve your Project.

Depending on the scope of work necessary to serve your project (electric facility installation, removal, relocation, rearrangement and/or replacement), it may be necessary for you to submit an Advanced Engineering Fee. This Fee will be applied to certain expenses associated with preliminary design and engineering work required to estimate the cost for SCE to perform the electric work associated with your project. Please note: Depending on factors such as resource constraints, construction or relocation of SCE facilities requirements, the need for environmental review, and so forth, delays in meeting your projected completion date may occur. To help minimize the potential for delays it is imperative that you provide all requested information as early as possible.

If the project results in the need for SCE to perform work on SCE electrical facilities that operate at between 50 and 200 kilovolts (kV), please be advised these facilities are subject to the California Public Utilities Commission's (CPUC's) General Order 131-D (GO 131-D) Permit to Construct (PTC) requirements. For the CPUC PTC review, the CPUC acts as the lead agency under the California Environmental Quality Act (CEQA). Depending on the scope of SCE's work, certain exemptions to the PTC requirements may be available. If no exemptions are available, the PTC application preparation and environmental approval process could take a minimum of 24 - 48 months.

If you anticipate that your project will require work to be performed on SCE electrical facilities operated at between 50 kV and 200 kV, please inform me at your earliest possible convenience for further assistance to determine the potential G.O.131-D permitting requirements and/or permitting exemption(s).

In order for SCE to determine the required electrical utility work necessary to support your project, and to determine any permitting requirements and costs associated with constructing these facilities, project plans and a completed Customer Project Information Sheet will need to be submitted.

If you have any additional questions, please feel free to call me at

Sincerely,

SCE Design Representative



Southern California Gas Company
1981 West Lugonia Avenue
Redlands, CA 92374
Mailing Address:
PO Box 3003
Redlands, CA 92373-0306

5/25/2022

CITY VENTURES HOMEBUILDING, LLC
PATRICK CHIEN
3121 MICHELSON DR., SUITE 150
IRVINE, CA 92612

RE: Will Serve Letter Request for Job I.D.#41-2022-05-00104
Location: AREA AT 840 S INDIAN HILL BLVD, CITY OF CLAREMONT

Dear *PATRICK CHIEN*:

Thank you for inquiring about the availability of natural gas service for your project. We are pleased to inform you that Southern California Gas Company (SoCalGas) has facilities in the area where the above named project is being proposed. The service would be in accordance with SoCalGas' policies and extension rules on file with the California Public Utilities Commission (Commission) at the time contractual arrangements are made.

This letter should not be considered a contractual commitment to serve the proposed project, and is only provided for informational purposes only. The availability of natural gas service is based upon natural gas supply conditions and is subject to changes in law or regulation. As a public utility, SoCalGas is under the jurisdiction of the Commission and certain federal regulatory agencies, and gas service will be provided in accordance with the rules and regulations in effect at the time service is provided. Natural gas service is also subject to environmental regulations, which could affect the construction of a main or service line extension (for example, if hazardous wastes were encountered in the process of installing the line). Applicable regulations will be determined once a contract with SoCalGas is executed.

If you need assistance choosing the appropriate gas equipment for your project, or would like to discuss the most effective applications of energy efficiency techniques, please contact our area Service Center at 800-427-2200.

Thank you again for choosing clean, reliable, and safe natural gas, your best energy value.

Sincerely,

Randolph Darnell

Randolph Darnell
Technical GIS Supervisor

RD/SV
enc.