

Jennifer Guetschow

From: John Ahler <jlahler93@gmail.com>
Sent: Monday, August 1, 2022 8:18 AM
To: Jennifer Guetschow
Subject: [EXT]Sending again just in case.

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SLO Planning Commission
c/o Jennifer Guetschow; jguetschow@co.slo.ca.us

I am writing to express my concern regarding the Proposed Dana Reserve Project, a development project that will develop 288 acres in the Unincorporated County Community of Nipomo.

After reading the Draft Environmental Impact Report (DEIR), the Unmitigatable Significant Class 1 issue which concerns me most is (circle item/highlight or write in your greatest concern):

- Housing (imbalanced housing vs job creation, which also increases traffic)
- Transportation (increase traffic, impacts on many roads throughout Nipomo)
- Air Quality
- Greenhouse Gas Emission
- Land Planning (multiple elements of the project are out of alignment with the south county area plan, including how this land was intended to be developed vs the present project)
 - Biological impacts (3,948 oak trees to be removed, federally endangered species to be removed, special habitats to be removed)
 - Write in other issues of concern (i.e Water, public services) not determined to be a class 1 issue in the EIR

Water & public service

* AGAIN, Nipomo is bringing \$ to the county of SLO, but \$ is not coming back to the Nipomo community
The limited social and economic benefits of the Dana Reserve Project will not outweigh the many significant impacts of the project. As a citizen of Nipomo, I ask that this project be denied until revised to such an extent that the impacts of the development are greatly decreased. We owe it to Nipomo to present a project that does not significantly decrease the quality of life for existing residents and retains the natural beauty of the land given to Captain Dana in 1837.

DATE: 7-31-22 SIGNED: Gaura R. Adler
email: jlahler93@gmail.com

*copy this letter into your word processing program.

Highlight or circle your concern from list.

Date/Sign/add email.

Copy and paste into your email program.

send to jguetschow@co.slo.ca.us

OR

mail to: Department of Planning and Building

ATTN: Dana Reserve/Jennifer Guetschow

976 Osos Street, Room 300

San Luis Obispo, CA 93408

MUST BE RECEIVED BY AUGUST 1

Sent from my iPhone



August 1, 2022

Transmitted via email: jguetschow@co.slo.ca.us

Jennifer Guetschow
County of San Luis Obispo
Department of Planning and Building
976 Osos St, Ste 200
San Luis Obispo, CA 93401

RE: Dana Reserve Specific Plan Draft Environmental Impact Report

Dear Jennifer,

Thank you for the opportunity to provide comments on the Dana Reserve Specific Plan Draft Environmental Impact Report, SCH No. 202160558, SWCA Project Number 64873, dated June 2022.

Attached you will find the applicants comments on pages 1-24. We have attached the applicant's comments arranged in tabular format referencing the DEIR Chapter Number, Chapter Title, section number, page, or paragraph for each comment. Our comments are purposely brief to focus on specific facts, errors, inconsistencies, or issues we identified. We are available to explain each of the comments that are not self-explanatory. We are available to further review and clarify with you (and/or SWCA) any comment or issue we have identified.

Please don't hesitate to contact us with any questions you or SWCA may have about our comments.

Sincerely,

Matt Ottoson, Senior Planner
RRM Design Group

Nick Tompkins
Dana Reserve LLC

cc: Victor Montgomery, RRM Design Group
Laurie Tamura, Urban Planning Consultants
Matt Ottoson, RRM Design Group
Robert Camacho, RRM Design group

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DANA RESERVE
DRAFT EIR

Comment Letter
August 1, 2022

General Comments

There are a number of instances in which the author of the EIR concludes that there is a potential inconsistency between the proposed project and various policies contained in the County's General Plan; however, the analysis that the EIR author has employed is inconsistent with how such a policy consistency analysis should be undertaken. While Applicant provides specific comments to these points below, Applicant provides these general comments on this issue to avoid excessive duplication given the overlapping issues that apply throughout the EIR.

As a legal matter, General Plan policies are not to be considered in isolation but rather must be understood in the context of the General Plan as a whole. As the courts have explained, General Plan policies seemingly in tension with one another (e.g., pro-development and anti-development policies) should be reconciled and harmonized to the extent reasonably possible (*No Oil, Inc. v. City of Los Angeles* (1987) 196 Cal.App.3d 223, 244.) The EIR author does not appear to apply this principle, but rather frequently interprets specific General Plan policies in complete isolation from other relevant policies.

The author of the EIR also fails to account for the principle that a proposed project is only inconsistent with the governing general plan if the project "conflicts with a general plan policy that is fundamental, mandatory, and clear." (*Families Unafraid to Uphold Rural El Dorado County v. El Dorado County Bd. of Supervisors* (1998) 62 Cal.App.4th 1332, 1341-1342, italics added; see also *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 782 ["[a] project is inconsistent if it conflicts with a general plan policy that is fundamental, mandatory, and clear".]) Perfect conformity with every general plan policy is neither achievable nor required. (*Ibid.*)

Executive Summary

ES-1	Para 3	Please add to the description Dana Ridge is 388 acres.
Impact Table		<p>Throughout this letter the Applicant has provided comments on MM's and other items that will require corresponding changes in this table as they are updated. Applicant has not restated those comments here so as to reduce potential redundancies in this letter.</p> <p>There are several instances in the EIR where the impact identified in the heading does not match associated Table. For example, Hydrology/Water Quality-page 4.10-29-HYD impact 6 Table note noted as Class II but Class III in rest of table. Please verify that everything is consistent and update as necessary.</p>

Chapter 2: Project Description		
2-3	Para 2	To the south is residential-suburban but also commercial uses along the Frontage Road.
2-8	Item 7 Figure 2-5	Item 7 improvement is not shown on Figure 2-5; it should be.
2-18	Para 4	Along Collector A will also “provide access and infrastructure connections as well as public facilities such as a park and ride and a potential fire stations, as described below”. Please add this information to this paragraph.
2-20 2-22 2-23	Table 2-2 Sec. 2.5.3.11 Table 2-5	Density was revised for DR-SF2 to 11-13 du/ac (correspondence to County on 01/14/22). Revise Table DR-SF2 Allowable Density to 11-13 du/ac
2-22	Table 2.4	Add footnote 4 stating that there will be a transit center, park and ride, and fire station in the RR parcel for Collector A.
2-26	Para 2	Provide updated information from the 2020 census.
2-29	Table 2.9	To make sure that alternative fuel stations, such as hydrogen and EV charging are allowed, please add “Alternative Fueling Installations” as permitted use in the Commercial Zones. Alternative fuels will be important for TDM and GHG reduction Mitigation Measure.
2-30	Sec 2.5.3.1.3	Missing Table 2-10 Rec and OS Development Standards from Specific Plan. Should insert in this section.
2-40	Cherokee Place	Please find attached an exhibit that illustrate the Cherokee Road improvements at the Collector A and B intersections.

Chapter 3: Environmental Setting		
3-1	Para 4	There is no reference to the US Census 2020. The population of Nipomo should be added in this section.
3-2	Para 1	This property has had documented use primarily for cattle grazing as well as periodic, seasonal dry farming for feed. Every section that refers to the agricultural use of this property should note this historic use of the property.
3-2	Para 3	Please add the Dana Ridge acreage: 388 acres
3-7	Para 1	The cumulative lists need a total for the build out. 300-unit housing units and ADUs and commercial sq. ft. The total build out should be at the end of the list.

4.1: Aesthetics		
4.1-5	Para 1	Please add grazing and cultivation dry farming for feed as noted above.
4.1-13-18	Goal 2 Policy VR 2.1 Policy VR 2.2	See General Comment above. The policies that refer to the rural character of the site should note that the DRSP is immediately adjacent and surrounded by development and was planned growth in the SCAP and in the Sphere of Influence for NCSD. This is not rural property and these findings of inconsistency need to be amended.
4.1-26	AES/mm 3-1	The existing So Cal Gas easement is 20 feet wide. Applicant agrees to an additional 30 feet for planting trees for a total of 50 feet for a landscaping buffer. Revise this Mitigation Measure and correct throughout the document and EIR.
4.1-27	AES/mm 3.2	This MM only adds up to 50% of the trees in various sizes we suggest that the MM be revised. "Any replacement trees planted within the 'on-site' property boundary along US Highway 101 shall be of varying sizes. Such replacement trees shall include the following container sizes - <u>45% in 15-gallon, 45% in 24-inch box, and 10% in 48-inch box trees.</u> These trees are part of the Applicant proposed 1,500 oak trees to be planted in the DRSP. These trees will be monitored for seven years for maintenance and any trees that do not survive will be replaced.
4.1-29	AES/mm 7.1	This EIR has already done the visual assessment for this project. The only areas of visual impact are those buildings along US Highway 101 and they have already been analyzed in this EIR. This is a redundant MM and should be deleted.

4.3: Air Quality		
4.3-15	Policy AQ-1.2	<p>See General Comment above.</p> <p>Policy AQ-1.2 does not, as the EIR author seems to assume, dictate the conclusion that any significant VMT impact under CEQA necessarily translates into a policy violation. Rather, the policy itself only states broadly that the County should “[r]equire projects subject to discretionary review to minimize additional vehicle travel.” With mitigation, the project satisfies this very general obligation. In addition, as noted in other sections, the VMT is only 5% over the threshold, and GHG emissions and air pollutants associated with VMT will reduce over time as more electric vehicles are purchased.</p>
4.3.20	Infill 8	<p>See General Comment above.</p> <p>The project should be considered consistent with this policy (Infill 8). Although the policy states that the County should support mixed use and infill development, the policy does <i>not</i> provide that development that cannot be characterized as infill development is <i>disallowed</i>. The proposed project is with the SCAP and Nipomo SOI, and thus is clearly contemplated for development by the SLO County General Plan. Please revise this discussion as the Nipomo URL will be expanded when this project is approved and then will be considered infill.</p>
4.3-20-23	Policy 11-24	<p>See General Comment above.</p> <p>Please add in each of these discussions that this property is planned for development in the SCAP and is in the Nipomo SOI and adjacent to the current service line.</p>

4.3: Air Quality		
4.3-25	L-3	<p>See General Comment above.</p> <p>Land Use Planning Strategy L-3 does not use mandatory language. Rather it states that “[w]ithin cities and unincorporated communities, the gap between the availability of jobs and housing <i>should</i> be narrowed and <i>should</i> not be allowed to expand.” “Should” is not the same as “shall.” In general, a proposed project is only inconsistent with the governing general plan if the project “conflicts with a general plan policy that is fundamental, mandatory, and clear” (<i>Families Unafraid to Uphold Rural El Dorado County v. El Dorado County Bd. of Supervisors</i> (1998) 62 Cal.App.4th 1332, 1341-1342, italics added; see also <i>Endangered Habitats League, Inc. v. County of Orange</i> (2005) 131 Cal.App.4th 777, 782 [“[a] project is inconsistent if it conflicts with a general plan policy that is fundamental, mandatory, and clear”].) Perfect conformity with every general plan policy is neither achievable nor required. (<i>Ibid.</i>)</p> <p>Here, moreover, Land Use Planning Strategy L-3 should be construed in a <i>regional</i> context and in light of recent state legislation declaring a statewide housing crisis. (See, e.g., Gov. Code, § 65589.5, subd. (a).) The current finding of potential inconsistency does not address the <i>regional</i> need for housing in the existing employment centers in the City of SLO. This project will provide a variety of housing for these existing employees that are needed now. Please add this regional perspective in this section.</p>
4.3-34-35	AQ/mm-3.3	<p>7. Remove this MM – the transit center and park and ride has been designed to meet relevant standards for the DRSP.</p> <p>19. Delete “valet” bike parking as the project does not have any entertainment venues.</p>

4.4: Biological Resources		
4.4-9	Para 2	This paragraph states that there are 18 plants potentially on this site but table 4.4-3 only lists 17 plants. Add <i>Dienandra paniculata</i> that was not detected onsite. Please correct.
4.4-40 - 4.4-48	Table 4.4-6 (Preliminary Policy Consistency Evaluation)	<p>See General Comment above.</p> <p>The table finds the proposed project to be “potentially inconsistent” with a number of goals and policies from the General Plan (For example Goal BR-1, Policies BR-1.2, 1.4, 1.9, and 2.6, Goal BR-3 and Policies BR-3.1, BR-3.2, and BR-3.30). The interpretations here are inflexible and would appear to make any kind of development very difficult.</p> <p>The General Plan, through the South County Area Plan for example, treats the project area as one in which development is appropriate. Yet various policies are interpreted in this table in a way that would negate this prior County policy determination. The policies addressed in the table must be interpreted in light of the fact that the Board of Supervisors has already determined that relatively dense development of the site is appropriate.</p> <p>Policies that include vague or flexible language (e.g., “minimize” impacts) should not be interpreted as though they set stringent quantitative standards that absolutely must be satisfied. Nor should compensatory mitigation be precluded as a method of achieving consistency.</p> <p>In some instances, the analysis suggests that the reliance on conservation required under CEQA (Pub. Resources Code, § 21083.4, subd. (b)(2)) conflicts with more protective General Plan policies and yet the General Plan specifically incorporates the CEQA approach (see Implementation Strategy BR 3.3.1).</p> <p>Many of the “potentially inconsistent” conclusions appear to be based on impacts to species that are not formally listed under the California Endangered Species Act (CESA) or the Endangered Species Act (ESA) but rather are only “listed” by the California Native Plant Society (CNPS), a nongovernmental organization (the only listed species of concern is the Pismo Clarkia). Thus, impacts on CNPS-listed species are being invoked in order</p>

4.4: Biological Resources		
<p>4.4-40 - 4.4-48 - (continued from previous page)</p>	<p>Table 4.4-6 (Preliminary Policy Consistency Evaluation) - (continued from previous page)</p>	<p>to render development difficult or impossible based on a very stringent reading of the goals and policies at issue.</p> <p>The “no net loss” requirement in Policy BR-1.4 is applied to oak woodlands even though there is a separate policy – BR-3.3 – that applies specifically to oak woodlands. Associated with the latter policy is an implementation measure that specifically incorporates the CEQA approach, which allows for preservation as mitigation.</p> <p>Importantly, nothing in the law requires the County to give so much weight to potential impacts on species “listed” by the CNPS (see <i>Sierra Club v. Gilroy City Council</i> (1990) 222 Cal.App.3d 30, 44-48 [CEQA Guidelines section 15380 did not require the respondent lead agency to make a “specific finding or determination as to whether” a particular species “was ‘rare’ or ‘endangered’”]; see also <i>id.</i> at pp. 41-42 [CEQA does not “requir[e] public agencies to deny approval of any project where the perpetuation of rare or endangered species on the site cannot be guaranteed”]).</p> <p>The project Applicant does not believe that, in adopting the various policies addressed in Table 4.4-6, the Board of Supervisors intended to greatly ratchet back the development potential of sites such as the project site due to impacts on species that do not rise to the level of being formally listed as endangered or threatened under either CESA or ESA. Rather, the author of the table seems to be subjectively giving undue weight to impacts to CNPS-listed species – so much weight as to make any substantial development on the project site seemingly problematic.</p>
<p>4.4-40 4.4-42 4.4-45</p>	<p>Goal BR-1 Policy BR-1.4 Goal BR-3 Policy BR-3.1 Policy BR-3.2</p>	<p>The second paragraph in the discussion makes no mention of the project description that includes ~1,500 oak trees that will be retained on the project site ~1,500 oak trees that will be planted throughout the site ~10,000 to 14,000 oaks trees at the Dana Ridge site And the Applicant proposed native garden onsite. Please revise these discussions and add this information.</p>

4.4: Biological Resources		
4.4-41	Policy BR 1.2	This policy should be deleted as it does not apply to this project. The biological report did not describe the DRSP habitats as “essential” as this term applies to linkages between blocks of intact habitat, “particularly as corridors for wildlife” (CDFW 2022). The Cal. Essential Habitat Connectivity Project does not identify Dana Reserve.
4.4-42 4.4-46 4.4-47	Policy BR 1.4 Policy BR 1.9 Policy BR 2.6 Policy BR 3.3 Policy OS 1.1 Policy OS 2.1 Policy Obj. 6.4	Please revise all these discussions: “The Applicant proposes a 4.27-acre native garden to be planted on site to restore the Burton Mesa Chaparral and other plants with scattered oak trees. The Applicant will preserve this open space for these plants.” Since these plants are already on this site it only makes sense for the County to encourage and support a restoration project on this site for the benefit of the plants and the community like the Nipomo Native Gardens. See attached memo and plans previously submitted to the County, which are incorporated by reference.
4.4-43	Goal BR 2	Please revise this discussion as follows: “Populations of Pismo Clarkia, a state-listed rare plant, will be protected on site through a conservation easement. An approved Incidental Take Permit from the CDFW will include mitigation measures to replace a small patch of plants removed for construction of Collector B. Other mapped patches and adjacent suitable habitat will be conserved on site to allow for expansion of the plant population as part of the incidental take permit process.”
4.4-43	Policy BR 2.1 Policy BR 2.2	Please revise this discussion as follows: Mitigation Measures require the project Applicant and/or NCS D to obtain all necessary wetland/waterway permit approvals from USACOE, CDFW, RWQCB prior to issuance of grading permits for off-site infrastructure improvements. Grading in the area where the Pismo Clarkia is located will require an ITP permit under Fish and Game Code 2081(b) from CDFW before starting.

4.4: Biological Resources		
4.4-46	Policy BR 3.5 Policy BR 4.1 Policy BR 4.2 Policy BR 4.7 Policy BR 5.1 Policy BR 5.2 Policy 3	Please revise to state "Applicant and/or NCS D" will conduct a wetland delineation
4.4-47		
4.4-63	BIO/mm-5.1	<p>The first sentence in this MM needs to be deleted. The discussion above states that these off-site eucalypti are marginal for aggregating monarch butterflies. We suggest the MM be rewritten as follows:</p> <p>"Monarch Butterfly Preconstruction Survey. Preconstruction surveys of potential monarch butterfly overwintering habitat on site or adjacent to the site shall be conducted by a qualified monarch butterfly biologist beginning October 1st and continue through February. If site disturbance is proposed within 200 feet of potential monarch butterfly overwintering locations during the aggregation season (October 1 through February) surveys shall be conducted from the Dana Reserve and/or public roads for three mornings at least one week before planned disturbance. If clustering monarch butterflies are observed, site disturbance and construction activity within 200 feet of monarch butterfly overwintering habitat shall be prohibited while monarch butterflies are in an overwintering aggregation. A 200-ft buffer shall be installed with T-posts and rope, labeled as Environmentally Sensitive Habitat every 75 to 100 feet. If monarch butterflies are observed in overwintering aggregation, monitoring shall be conducted during daily active construction visits to document numbers and assure that no disturbance of the aggregation is caused by construction."</p>
4.4-64, -65	BIO/mm-6.1	<p>Bullet 4 is not necessary.</p> <p>Bullet 7 should be explicit that a qualified biologist must hold a Scientific Collecting Permit per Title 14 California Code of Regulations § 650 to handle Species of Special Concern (SSC).</p> <p>Residual Impacts: Remove reference to BIO/mm-14.1, BIO/mm-15.1, and BIO/mm18.2 as they do not apply to this impact.</p>

4.4: Biological Resources		
4.4-66,-67	BIO/mm-8.1	In both Implement MM and Residual Impacts: Remove reference to BIO/mm-14.1, BIO/mm-15.1, and BIO/mm18.2 as they do not apply to this impact.
4.4-67,-68	BIO/mm-9.1	In both Implement MM and Residual Impacts: Remove reference to BIO/mm-14.1, BIO/mm-15.1, and BIO/mm18.2 as they do not apply to this impact. In the second paragraph of this mitigation measure delete “and avoidance is not feasible” —Avoidance is not possible within the DRSP property, and it is safer for the badger and workers to have the badger relocated.
4.4-69	BIO/mm-10	The improvements for the Frontage Road extension will not impact any identified species so delete refence to BIO /mm2.1 through BIO/mm-2.3, BIO/mm3.1. BIO/mm-4.1 and 4.2 in both the first section and Residual Section.
4.4-70	BIO/mm-11	This MM only applies to animals, not plants, so delete refence to BIO /mm2.1 through BIO/mm-2.3, BIO/mm3.1. BIO/mm-4.1 and 4.2 in both the first section and Residual Section.
4.4-71	BIO/mm-12.1 Line 6	Since this mitigation measure is focused on a section of water pipeline installation near Nipomo Creek, we suggest that this mitigation measure clearly state that the “suitable habitat located up stream in Nipomo Creek outside of the construction Zone(s).”
4.4-93	BIO/mm-19.1	Recommend changing the third line to say “certified arborist” instead of qualified arborist. To be consistent with other mitigation measures in this EIR, the following should be added to this mitigation measure. “Impacted oak trees shall be monitored for 5 years and if found to be in declined, shall be replaced at a 4 to 1 ratio. A draft replacement plan with specific receiver site such as parks in the Nipomo area shall be approved by the County of San Luis Obispo prior to threatening within the CRZ of any oak tree.”

4.5: Cultural Resources		
4.5-21	CLRmm-3.1	Please add the following text to this MM: <u>“...retained by the Applicant or utility district/company”</u>

4.6: Energy		
4.6-10	Princ. 1, Policy 5	3CE - might not be an option in the future? But it should be noted that PG&E also needs to have a green portfolio for electricity generation and can serve this project as well as 3CE.
4.6-12		Not 11-acre public park, reword to 10-acre park and 1-acre equestrian staging area. This edit should be done through the document.

4.7: Geology and Soils		
4.7.31-32	GEO/mm 8.1 GEO/mm 8.2 GEO/mm 8.3	<p>The discussion in this impact section states that there is low paleontological potential for this site. It is excessive to have to hire a paleontologist to write monitoring and mitigation plans, WEAP's, and handling plans when the EIR states that there is low potential of any finds. Observing grading and construction adds additional unnecessary costs.</p> <p>These MMs should be deleted or be revised to state "if discovery during grading is found..."</p> <p>If the staff believes that they need something for this low impact, we will agree that the WEAP could be prepared for the construction phase of this project.</p>

4.8: Greenhouse Gas Emissions		
4.8-3 4.6-6 4.8-7 4.8-8 4.8-12	Para 2 Para 4 Para 5 Para 5 Para 1	Each of these sections should state that the 1990 level of GHG was 530 MM tons. California has successfully reduced GHG levels to 419 MM tons in 2020 level. This is over a 20% reduction since 1990 levels. These GHG levels will continue to fall as the state reduces reliance on fossil fuel for electricity and transportation (see page 4.8-25 last sentence).
4.8-12	Para 2	The Dana Reserve incorporates all the RTP/SCS standards into this project. This should be noted in this paragraph.
4.8-13	Policy AQ 1.2	This statement should clearly state that the VMT only exceed the threshold by 4.8% and 9%. These are minor exceedances.

4.8: Greenhouse Gas Emissions		
4.8-14 4.8-15 4.8-15 4.8-15 4.8-15	Policy E 1.1 Policy E 3.1 Policy E 3.2 Policy E 4.1 Policy E 4.4 Policy E 5.4	Please note that the nonresidential uses are still planned to be served by natural gas. There will be a natural gas service line installed along Collector A. This natural gas will serve the commercial and school buildings which only cover 17% of the overall project site.
4.8.-19 4.8-20 4.8-21	Infill 8 Infill 11 Infill 12 Livable 12 Livable 13 Livable 14 Livable 15 Trans 18 Trans 19 VMT 20-24	See General Comment above. As noted earlier, the project should be considered consistent with Policy Infill 8, which, though supporting mixed use and infill development, does <i>not</i> disallow development that cannot be characterized as infill. This project is consistent with the SCAP and the NCSO SOI is an identified area for infill development. When the Nipomo URL and the NCSO annexation is expanded to include this property then it will be considered infill. Revise this statement here and note in these other sections of the EIR.
4.8-27	GHG/mm-1.1	#8. High reflective roofing material should only be installed on flat roofs as these reflective roofs could cause significant aesthetic impacts if required in residential areas with houses with sloped roofs or along US highway 101. Please revise this MM. Add measures to reduce GHG: #10 All residential structures will include PV, consistent with state requirements. #11 EV stations will be provided in the multifamily units, commercial, school and hotel, consistent with state requirements.

4.10: Hydrology and Water Quality		
4.10-1	Para1 Opening sentence	Eliminate the word "adverse".
4.10-1	Para 3 Line 6	Revise to note that the other northern parcel, which is APN 091-301-030 for point of reference, has existing agricultural structures and unpaved ranch roads.
4.10-5	Para 2 Line 4	"Municipal mix" is also referred to as "blended " water.

4.10: Hydrology and Water Quality		
4.10-15	Policy WR 1.9	Eliminate the words “service area”. It should just state annex to NCSD. This should be changed throughout the EIR.
4.10-25	Groundwater recharge	Add the following in a new paragraph, “The project will be entirely served by NCSD water. Effluent generated within this project will be transported to the NCSD’s Southland Wastewater Treatment facility, treated, and made available for recharge to the groundwater of the management area, thereby increasing return flows of water available for recharge. Up to 50% of the water used in this project can return to the groundwater basin.”

4.11: Land Use and Planning		
4.11.7	Para 4	The Dana Reserve Specific plan has incorporated all these features and is consistent with the RTP/SCS.
4.11.8	Policy AQ 1.1	See earlier comment regarding General Plan policies. This project is consistent with this policy. Please correct the other discussions in the rest of the EIR related to this policy.
4.11.22	Infill 8	See earlier Comment regarding General Plan policies. For reasons discussed earlier, this project is consistent with this policy. Please correct the other discussions in the rest of the EIR related to this policy.
4.11-36	LUP Impact 3 (Class 1)	This site is vacant. There is no job/housing balance “within the project area”. This should not be a Class I impact.
4.11-31 4.11-38	Goals Policies	See earlier Comment regarding General Plan policies. This section restates Goals, Policies, and Objectives that were deemed to be Potential Inconsistent throughout this EIR. Any policy discussions that are updated elsewhere pursuant to specific comments need to be update here as well.
4.11-40	Para 5 Line 4	Delete reference to maintenance of the bus stop on North Thompson Avenue. There is no nexus for this requirement for a regional off-site improvement. Delete this elsewhere in the EIR.

4.11: Land Use and Planning		
4.11.41	Para 2 Table	Please correct the first sentence and the rest of the paragraph and the table as the request for this project is to adjust the Nipomo URL and Annexation to the Nipomo NCSD. This project cannot be approved without these adjustments. The project will be consistent with the SCS and other policies for infill once these boundaries are adjusted. Please make this correction throughout the EIR.

4.13: Noise		
4.13-18	Para 4	<p>We request that in this paragraph you state that the site design of this project places all the commercial buildings along the freeway and these buildings will serve as sound buffers for the neighborhoods 1, 2, and 3.</p> <p>It should be noted that the Applicant Preferred Alternative moves Neighbor 10 (PSHH PARCEL) out of these noise contours so is an environmentally superior alternative addressing noise impacts as well as a superior environmental justice alternative.</p>
4.13-19	N/mm-1.2	1. Noise studies for neighborhoods 1, 2, and 3. This MM should clearly state that the commercial buildings should serve as an adequate buffer for these neighborhoods.
4.13-19	N/mm-1.2	<p>2. Noise studies are not required if the listed equipment is installed on the east side (facing 101) of the proposed buildings.</p> <p>Please add this statement to this MM.</p>

4.14: Population and Housing		
4.14-1 4.14	Para 4	<p>Correct "decrease" should be "increase".</p> <p>Throughout this section and the rest of the EIR please resolve the discrepancy between 272 and 273 new jobs. The whole document should state 273 new jobs.</p>
4.14-15	Para 2&3	Please explain in this section that the Growth Management Ordinance will not apply to the DRSP. It is a stand-alone planning document.
4.14-6	Para 3	Change reference to Table 4.14-12 to Table 4.14-13 in this paragraph.

4.14: Population and Housing		
4.14-18	Princ. 2, policy 2	See earlier discussion regarding General Plan policies. This determination needs to be rewritten to state. Potentially Consistent: Upon the approval of the adjustment of the Nipomo URL and the annexation to the NCSD, the DRSP with residential and commercial uses will be consistent with this policy.
4.14-25	Para 1	This paragraph is not consistent with the population numbers in the Recreation section, Table 14.15-9 states that the 2030 population will be 24,326. Correct this paragraph.
4.14-26	Para 2	The DRSP is in response to the South County Area plan, which required a Specific Plan for the Canada Ranch. The housing needs in the County are severe and this project addresses the range of needed housing in this area.
4.14-28	Para 1	This paragraph should also address the need to plan for the RHNA housing numbers that are assigned to the County every 8 years. This site was designated for development and housing as the Canada planning area in the South County Area Plan. This is not unplanned growth and should not be a class I impact.

4.15 Public Services		
4.15-7	Para 4	This section of the document should rely on the final 2020 Census numbers.
4.15-12 4.15-14 4.15-15	Policy 2.2 Public Facilities #1 Public Facilities #2,3	See earlier discussion regarding General Plan policies. All these policies state that funding has not been secured for long-term maintenance of the neighborhood park. Before this project is approved by the Board of Supervisors, this funding source will need to be resolved. All the policies statements need to be changed to state that that “upon approval of the DRSP with future funding sources for this park this project is consistent with these policies” .
4.15-14	Princ. 1, Policy 2 Strategy 4	This determination needs to be rewritten in that no development will be approved or built unless this project is within the Nipomo URL and annexed to the NCSD service area. With this annexation action the project will be consistent with this policy and strategy.

4.15 Public Services		
4.15-17	Para 4 Line 4	This statement needs to be revised. The capital plan for the fire service includes the property at Black Lake for a future station, but it is not in the best location for service this section of Nipomo. CalFire has requested that a fire station be located on this site and funds to be allocated to this new station.
4.15-18	PS/mm-1	This mitigation measure is only for the dedication of the improved land for the fire station. Also, this project will pay it developer fees. The construction of the building and the future operation will be the responsibility of the County.
4.15-19	Figure Table	This section should include the concept figure of the fire station location for reference to all these mitigation measures. See attached site plan.
4.15-21 4.15-26	Table 4.15-5 Table 4.15-9	This table is not consistent with Table 4.15-9. Population projections in 2030 for Nipomo in this table is 19,812 but in Table 4.15-9 the 2018 population is 29,040 and then in 2030 it is 24,326. Both tables need to be corrected.
4.15-27 4.15-31	Para 1 Line 16 Para 2 Line 13	Correct this sentence in both sections. Quimby Fees are capital funds for land purchase for new park land. These funds cannot be used for long-term maintenance of the public park.

4.16 Recreation		
4.16-9 4.16-10 4.16-15 4.16-16 4.16-16 4.16-17	Policy 2.2-7 Objective B Policy 6.4 Policy 6.9 Policy 6.10 So. Co. Inland Plan	See earlier discussion regarding General Plan policies. All these policies state that funding has not been secured for long-term maintenance of the neighborhood park. Before this project is approved by the Board of Supervisors, this funding source will need to be resolved. All the policies statements need to be changed to state that “upon approval of the DRSP future funding sources for the park this project is consistent with these policies” .
4.16-14	Policy 4.2	Policy 4.2 does not apply to project – remove.

4.17 Transportation		
4.17-1	Para 3, line 10	...provided in the "tis" TIS. Make correction.
4.17-2	Figure 4.17-1	Camino Caballo is not shown on the 4.17-1 map. Should also include Hetrick Ave all the way to Pomeroy and Cory Way (emergency access).
4.17-3	Para 4 Para 5	Cherokee Place - public right-of-way comprised of (2) 25-foot-wide centered along the northern property line of the DRSP. Currently there is a 20-foot wide dirt road existing in the northern 25-foot section on the adjacent properties. Hetrick Avenue right-of-way does go all the way to Pomeroy so need to correct the last sentence in this description. Should include Cory Way for emergency and trail access.
4.17-9		These should be another bullet stating that the fee update included improvements to Hetrick Avenue. However, these improvements will not be needed now that Collector B will be installed through the Dana Reserve project. The AB 1600 developer fees for Hetrick should be credited to Collector B.
4.17-10	Policy AQ 1.2	This finding should state that: "Buildout of the DRSP would result in an increase of residential VMT (4.8% over the VMT threshold) and employee VMT (9.5% over the VMT threshold) even with implementation of Mitigation Measure <u>TR/mm-3.1</u>". TR/mm 2 should be corrected to TR/mm-3.1
4.17-11	Policy 7	TR/mm- 2 should be TR/mm-3.1
4.17-12	Policy 9	"....include fair-sharing contribution for needed transportation improvements" – This phrase should be deleted as this project is providing two transit centers with dedicated land and infrastructure or at least state so in this finding.
4.17-13	Policy 2	TR/mm-2 change to TR/mm-3.1
4.17-15 4.17-18	Circ Objective a. Goal #3	TR/mm-2 change to TR/mm-3.1 The TDM strategies are for the whole project not individual neighborhoods. Restate this finding.
4.17-16 4.17-19 4.17-20 4.17-22	Circ Objective d. Public Transit #2 Park and Ride #1 Pol. Obj. 1.2	TR/mm-2 change to TR/mm-3.1

4.17 Transportation		
4.17-35	Para 3 Para 7	Collector B is between Hetrick and Sandydale Dr. Add this clarification to the first sentence; Improvements at the intersection of Cherokee Place/Collector A and B will be limited to installation of a County standard driveway apron, ADA path of travel along the back of the driveway, and a 20 foot wide by 20 foot wide paved driveway to transition back to the existing dirt access road.
4.17-36		And another bullet that lists improvements for Hetrick and now are being part by the new proposed Collector B.
4.17-37	Para 1	Last sentence needs to be deleted. There is no nexus to the extension of Class II bike trail on Thompson Avenue/County Bikeway Goal 1-6 4-17-32-33
4.17-37	Para 2	Delete the last phrase. Dana Reserve is providing two transit stops with the project. There is no nexus of this project impacting the existing bus stop located along N. Thompson Avenue. Therefore, there is no reason for this project to be responsible for the maintenance of this bus stop.
4.17-39	Para 3	This paragraph should include discussion of new transit route on Frontage Road to connect with the new transit stop in the center of the commercial village and the transit center at Willow Road and Collector A. These new facilities will be part of the overall TDM and will help reduce VMT.
4.17-42	TR/mm 3.1	This TDM will be done for the project as a whole, not individual future projects. Delete the second sentence in the MM.
4.17-45	TR Impact 7	No mention for future fire station on Collector A.

4.19: Utilities/Service Systems		
4.19-3	First bullet	Replace "basin" with "management area".
4.19.3	Para 2	"The NCSD service area is located within the NMMA. The NMMA Technical Group is the court-assigned entity responsible for assessment of groundwater within the NMMA and the basin management area ."

4.19: Utilities/Service Systems		
4.19-3	Last Para	The following statement, “Through groundwater supply, the NCS D has self-allocated 2,533 AFY” should be revised to state, “Based on the average pumping volumes over the five-year period of 2009-13 it has been determined that the historic average maximum pumping volume is 2,533 AFY”.
4.19-4	Last Para	Delete the first sentence and replace with the following: The 2,167 AFY is of the NCS D allocation of the total 3,000 AFY of NSWP and accounts for the sale of 833 AFY to GSWC and the Woodlands Mutual Water District.
4.19-36	USS Impact 3	The impact statement incorrectly suggests that there may not be adequate water supplies for the project, but this suggestion is contradicted by the analysis that follows. More specifically, the information following this misleading impact statement cites the WSA and the NCS D UWMP, which clearly state that there is sufficient water to serve the DRSP. This impact statement should be rewritten to avoid the misleading suggestion that water supplies may not be adequate.
4.19-37 4.19-38	Para 1 Last Para	Not 11 acres public park, reword to 10-acre public park and 1-acre equestrian staging area.
4.19-37 4.19-41	Table 4.19-19 Table 4.19-21	This table is out of date and only reflects 1270 units. It should be updated to 1,289, as reflected in the DRSP December 2021.
4.19-39	USS/mm 3.1	This MM is redundant. The annexation to the district will include a contract assuring water for the whole project and there is no need to have each neighborhood receive a new “can and will serve letter”. Delete this MM.
4.19-48	Para 1	Cumulative - Delete reference to additional service letters for each project.

4.20: Wildfire		
4-20.16	Para 2 Line 10	Please delete the words “fire water storage”. This project will be served by NCS D and will not have any on-site water storage tanks.

Chapter 5: Alternative Analysis		
5.17	Para 2	Traffic impacts the region of Tefft Street will continue to increase without the Frontage Road connection as other areas of Nipomo develop. Please note this in this paragraph.
5.17	Para 4	As noted in the NCS D reports there are many needed infrastructure improvements that the existing residents of Nipomo will have to pay for if DRSP is not approved. Also, the residents would have to pay increased water bills for the water NCS D is contracted to take. This would be a huge negative impact on the community of Nipomo and should be noted in this paragraph.
5.18	Para 1 Line 10	Collector B would connect "Pomeroy" to Willow Road.
5.20	Para 3 Line 9-11	This sentence should be deleted and replaced with this sentence "The DRSP is the Guiding Document for this area with provisions for development and architectural design". The only aesthetic impacts are those along US Highway 101.
5.31	Para 1	<p>This paragraph needs to include the following sentence. "This Alternative will not provide land donated for the day center, affordable housing, Cuesta College, transit center, and the fire station."</p> <p>Also this Alternative is described as having 60.8 acres of commercial land available for development of commercial and light industrial uses. At typical development intensity assuming 30% land coverage by buildings there could be approximately 795,000sf of building area. This would be in addition to residential use potentially as high as 535 MF residential units. Using the same job generation rate as the project would result in Alt. 2 providing 1088 jobs or 816 more than the project but with fewer housing units. The evaluation assumes VMT would be reduced through less commuting from the project site but offers no analysis to demonstrate this. What if the jobs are taken by residents of other nearby communities such as Santa Maria and commuting miles, which would therefore result in an increase in a "reverse commute" into the site? Then AQ, VMT and GHG would increase relative to the project. The table 5.3 needs to be revised to reflect these increased impacts.</p>

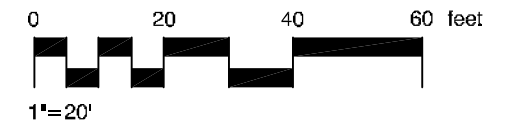
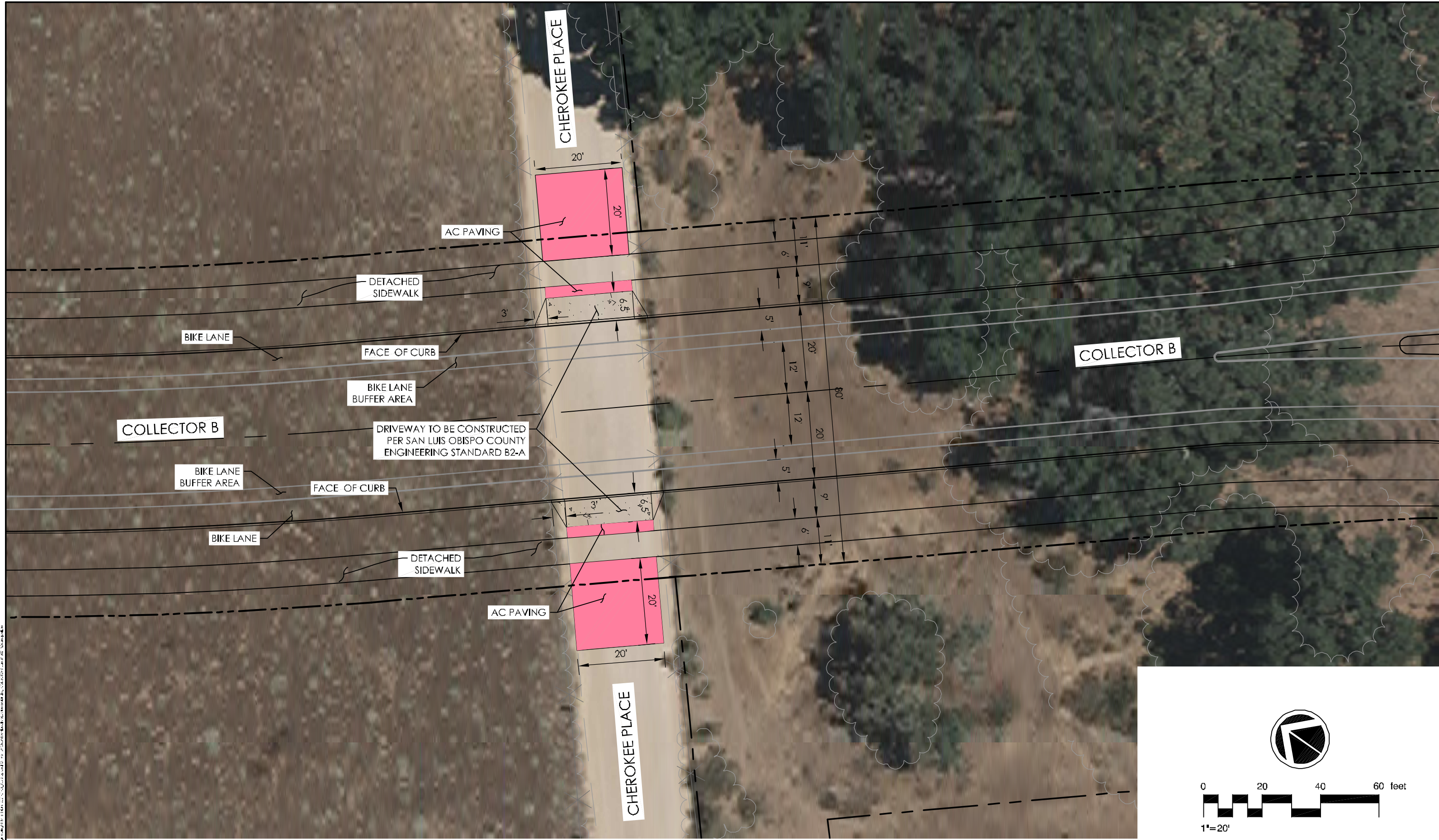
Chapter 5: Alternative Analysis		
5.37	Para 3	As noted in the NCS D reports there are many needed infrastructure improvements that the existing residents of Nipomo will have to pay for if DRSP is not approved. Also, the residents would have to pay increase water bills for the water NCS D is contracted to take. This would be a huge negative impact on the community of Nipomo and should be noted in this paragraph. This paragraph needs to include the actual water use for this mix of uses.
5-38	Para 2	This paragraph should also note that Alternative 2 would not include affordable housing, day care, Cuesta College, transit center, and fire station. Also, would not meet the infrastructure polices required to be annexed to NCS D.
5-43	Para 6	Add an additional line that states: “This Alternative will not provide any affordable housing units or workforce housing as the large lots will be designed for upper income level households. This Alternative would have negative impacts from an environmental justice perspective compared to the proposed project because it does not provide wide variety and diverse housing.”
5-46	Para 3	This analysis states that this Alternative would have the same impacts on biology as the original project. However, there is no way to know how this Alternative would avoid oak trees and other plants as there is no requirement for dedication of open space except for the 49.8 acres. The 195.3 acres would be owned by private landowners that could do what they want within their rural estate lots including raising animals, vineyards, orchards, and private farms. This is a major increase in the impact on the biological resources on the site when compared to the proposed project.
5-48,-49	GHG	The VMT per capita would increase since there will not be any neighborhood serving commercial uses or jobs on the project. Just because there are fewer housing units does not justify a conclusion that there will be less GHG. In fact, there will be higher per capita GHG impacts with larger homes, and more travel for daily needs. This would likely result in an increase in impacts to GHG on a per capita basis.

Chapter 5: Alternative Analysis		
5-50	Para 3	This Alternative has potentially greater inconsistencies than the proposed project with many of the Goals and Policies of the General Plan, including the Land Use Element, the SCAP and, most importantly, the Housing Element. Just because an Alternative has fewer lots does not make it a superior alternative. In fact, it is substantially worse because of the many more inconsistencies this Alternative has with County policies.
5-52	Para 3	This section needs to be clear that there is substantial uncertainty as to whether the proposed trail amenities could be developed or maintained. The proposed project anticipates that these trail amenities would be open to the public but maintained by the HOA in the DRSP. With so few proposed homes in this Alternative, there is no way that the HOA would be able to carry the cost of seven miles of trails. Therefore, either the trails will not be built, or the County would have to take responsibility for the long-term maintenance of these trails. This is an increase in impacts for recreation.
5-53	Para 1, 2	<p>This section states that Alternative 3 would include the trails systems proposed in the DRSP. As noted above, please note that most, if not all, of the proposed trail will not be installed because the County will have to maintain them.</p> <p>Please change the first sentence in paragraph 2:</p> <p><u>“Since the number of units would range from 78 to 390 residential “estate” dwellings...”</u></p> <p>The VMT rates on a per capita basis will be higher with this Alternative because there is no commercial in the area to provide for daily needs. This Alternative has an increase impact on VMT and traffic impacts.</p>
5-54	Para 1	This section needs to calculate the water use for this Alternative. It will be important to include the water use for these large homes and lots for irrigation. Most lots over 20,000 sq ft use between .5 and 1.0 AFY, and it is unclear where this water would come from without sufficient demand and infrastructure to permit annexation into NCSD’s service area, as well as due to limitations on groundwater pumping.

Chapter 5: Alternative Analysis		
5-55	Alternative 4	<p>This description needs to include about 15 acres for private roads. This road acreage would reduce land for housing or open space. This Alternative is also short for park land by 2 acres.</p> <p>This Alternative relies on access from Hetrick for many units and this access was not reviewed in the EIR or supported by the number of landowners along this road. In Table 5-3 this Alternative would have increased in impacts on Recreation and Transportation.</p>
5-79	Para 2	<p>Alternative 3 does not include commercial development. The third sentence needs to be corrected as Alternative 3 has fewer units than Alternative 2.</p> <p>Line 6 and 7. As discussed above most of these impact increase on a per capita basis with this alternative and the land use and housing impact are increased by only providing for estate lots.</p> <p>Overall, Alternative 3 cannot be considered an environmentally superior alternative and is not a superior project based on environmental justice concerns.</p>
	Para 3	<p>Line 2: most of the trails will not be developed because of the long-term maintenance costs.</p> <p>Line 4: Alternative 3 does not provide for a diversity of housing types.</p> <p>Line 6-7: does not save water on large houses and larger lots, this reduced project would not be annexed to the NCSD.</p> <p>Please delete these items in the second sentence and add them to the third sentence.</p> <p>Line 13: this sentence is incorrect as this Alternative will not help meet the diversity of housing prices and rents required to meet the County RHNA allocation.</p> <p>The two conclusion sentences are incorrect as Alternative 3 has more increase impacts and more inconsistency with the and DRSP.</p>

Chapter 6: Other CEQA Consideration		
6.2	Para 2	<p>Also include Pomeroy as another assess to this site.</p> <p>Section 6.1.3 How is preparation of a required Specific Plan for an area designated as a location for future growth a precedent setting Action? The language requiring the Specific Plan prior to development identifies commercial uses as an objective of the Specific Plan – how can these types of uses when proposed in the required DRSP be considered precedent setting?</p>
6.3	Para 1	<p>Why is this a Class 1? The discussion above indicates that this will be an infill project with annexation to NCSD and Nipomo URL.</p> <p>This project is consistent with SCAP, RHNA, and many other policies.</p> <p>Please remove this Class 1 impact.</p>





COLLECTOR B AND CHEROKEE PLACE

Dana Reserve - Tract No. 3159

County of San Luis Obispo

January 28, 2021



Job No: 09998-02-LP19



James G. Moose
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Sent by Email

March 23, 2022

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Re: Dana Reserve Project: proposed Burton Mesa Chaparral Mitigation

Dear Mr. Singewald and Ms. Guetschow:

On behalf of NKT Development, LLC, applicant for the proposed Dana Reserve Specific Plan (the Project), I am writing to address the legal adequacy and sufficiency of the applicant's proposed mitigation for the Project's impacts on Burton Mesa Chaparral habitat. This mitigation proposal is set forth in the Biological Report for Dana Reserve, Nipomo, San Luis Obispo County (September 2021) (Biological Report), on pages 103 and 104 and is summarized below. Additional biological justification for the measure is described in the enclosed March 23, 2022, Memorandum from LynneDee Althouse of Althouse & Meade, Inc., to Jim Moose (Althouse Memorandum). Also enclosed is a set of graphic images of the onsite mitigation plan for the Project, created by the PleinAire Design Group.

In the pages that follow, I explain the following: (i) that the County of San Luis Obispo (County), in formulating mitigation for this habitat type, is required to account for the degraded quality on the habitat as it currently exists on the Project site, and is periodically modified for the worse through historic and ongoing agricultural practices; (ii) that mitigation under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) is constrained by constitutional principles that set upper limits on what can be imposed on applicants (namely, that mitigation can be no more than what is “roughly proportional” to the impacts at issue); (iii) that CEQA tools for mitigating biological resource impacts include compensatory strategies such as conservation, enhancement, restoration, and recreation; and (iv) that here a “no net loss of habitat *quality*” performance standard using these strategies is the most logical and appropriate way for addressing mitigation for the degraded habitat in question.

ANALYSIS

A. The Applicant’s proposed mitigation strategy

As is explained in the Biological Report, “approximately 36 acres of the 295.3-acre Project site (12 percent) is degraded Burton Mesa chaparral, with less than two percent cover of representative species. This habitat has been subjected to periodic mowing, mulching, grubbing, and brush-raking¹ as part of the historical ongoing agricultural operation since at least the 1930s and is currently in poor condition, with low cover of constituent species. The proposed development will remove 35 acres (97 percent) and preserve 1 acre (3 percent) of this habitat onsite.” (Biological Report, p. 102.) “Onsite mitigation opportunities are limited, and a fire regime to sustain diverse characteristic species within maritime chaparral is not practical in a suburban setting[.]”

¹ A brush rake is a device with fixed metal blades placed on the front or rear of a tractor for the purposes of facilitating the removal of larger stem plants from the soil in order to clear out brush and other unwanted plants. The brush rake typically leaves surface grasses undisturbed.

(*Ibid.*) The total onsite area covered by characteristic shrub and herbaceous species is less than three percent of the mapped habitat boundary. Rare taxa such as sand mesa manzanita have been routinely mowed and grubbed out for the last 90 or more years (see photos in Appendix F of Biological Report). During botanical surveys in 2018 and 2019, shrubs were generally less than two feet tall and less than three feet in diameter.

The applicant proposes to mitigate for loss of this degraded Burton Mesa Chaparral habitat through a mitigation measure that would achieve a performance standard of *no net loss of habitat quality*. The measure would achieve this standard through a combination of conserving, enhancing, restoring, and/or re-creating from 8.8 acres up to 70 acres of Burton Mesa chaparral at the following mitigation ratios:

- conserve currently unprotected Burton Mesa Chaparral habitat in excellent condition at a 1.5:1 ratio;
- enhance protected Burton Mesa Chaparral habitat currently in moderate to poor condition at a 2:1 ratio;
- restore damaged protected Burton Mesa Chaparral habitat at a 0.5:1 ratio; and/or
- recreate high-quality Burton Mesa Chaparral at a 0.25:1 ratio in appropriate habitat that has been completely disturbed (e.g., abandoned farmland).

Under this proposed approach, for example, the applicant could do any of the following: (i) conserve unprotected Burton Mesa chaparral habitat in excellent condition at a 1.5:1 ratio, for a total of 52 acres; (ii) enhance protected Burton Mesa chaparral currently in moderate to poor condition at a 2:1 ratio, for a total of 70 acres; (iii) restore damaged protected Burton Mesa chaparral habitat at a 0.5:1 ratio, for a total of 14 acres; or (iv) recreate high-quality Burton Mesa chaparral at a 0.25:1 ratio, for a total of 8.8 acres. Other outcomes would also be possible, depending on how conservation, enhancement, restoration, and recreation strategies are pursued and combined. Under any scenario, however, the final outcome would have to avoid any net loss of habitat quality.

As indicated above, the mitigation measure does *not* assume that mitigation for each acre of *degraded* habitat necessarily requires the conservation, enhancement, restoration, and/or recreation of one or more acres of *high-quality* habitat. Rather, the performance standard that the mitigation seeks to achieve is no net loss of habitat *quality*, using existing on-site conditions as the baseline for measurement. This outcome could be achieved through four possible strategies, together or in combination. The outcome could be achieved by conserving currently unprotected excellent habitat acreage at a ratio of 1.5 to 1 or by enhancing protected habitat acreage in moderate or poor condition at a ratio of 2 to 1. Both of these options employ ratios of greater than 1 to 1.

The same outcome – no net loss of habitat *quality* – could also be achieved, however, by restoring and/or re-creating high-quality habitat at acreage ratios of lower than 1 to 1. Restoration of damaged habitat can achieve this outcome at a ratio of 0.5 to 1, while the recreation of high-quality habitat in completely disturbed areas can achieve the outcome with a ratio of only 0.25 to 1.²

² The Althouse Memorandum, on pages 6 and 7, summarizes the effects of the four different approaches as follows:

Chaparral habitat, as opposed to individual plants, may be mitigated by conservation of intact habitat, enhancement of weedy or lightly damaged protected habitat, restoration of degraded habitat, or re-creation of high-quality habitat. Depending on the approach taken, a ratio of 1 to 1 or higher may not be biologically necessary, given the low function and values of existing habitat being mitigated.

When ***conserving*** excellent but currently unprotected high-quality habitat as mitigation for the loss of degraded habitat, a 1.5 to 1 ratio will avoid loss of overall habitat quality because conservation with management for the benefit of unique habitat functions will offset the loss of highly degraded habitat. A ratio of more than 1:1 is needed because conservation does not produce new habitat, though it does provide legal protection for high-quality habitat against the possibility of future loss or degradation from lawful activities. The conserved habitat will also be managed to ensure that its high quality will be maintained.

When ***enhancing*** moderate to poor quality protected habitat as mitigation for the loss of degraded habitat, a 2 to 1 ratio will avoid loss of overall habitat quality because unique habitat functions that support chaparral dwellers is substantially improved by reducing invasive species cover, and/or reducing access that causes disturbance that otherwise

This flexible approach, which includes ratios of less than 1 to 1 for habitat restoration and recreation, is both permissible and fully sufficient under CEQA and the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.). In contrast, an approach that required the conservation of a full acre of high-quality habitat for every lost on-site acre with any habitat on it, regardless of its existing quality or physical extent, would be excessive. Such an approach would not be “roughly proportional” to the impacts being mitigated, but instead would require the applicant to create a substantial environmental benefit in the form of a large net increase in protected high-quality habitat. Such an outcome would be inconsistent with constitutional limitations imposed on lead agencies when such agencies formulate mitigation measures under CEQA.

These constitutional limitations, as well as the judicial precedents that explain them, are set forth in the CEQA Guidelines as follows:

Mitigation measures must be consistent with all applicable constitutional requirements, including the following:

diminishes chaparral habitat functions and values. The 2 to 1 ratio accounts for the fact that the habitat is already protected, though it is in poor to moderate condition.

When ***restoring*** damaged protected habitat as mitigation for the loss of degraded habitat, a 0.5 to 1 ratio will avoid any loss of overall habitat quality because weed removal in concert with replanting and routine maintenance for the benefit of habitat functions significantly improves habitat functions and values from a degraded or damaged condition. A ratio of less than 1 to 1 is sufficient because restoration of damaged protected habitat will substantially improve the condition of such habitat. An acre of restored habitat will have substantially more biological value than an acre of degraded habitat. A half-acre of restored habitat would function at least as well, if not better than an acre of degraded habitat.

When ***recreating*** high quality habitat on completely disturbed land such as abandoned farmland, a 0.25 to 1 ratio will avoid any loss of overall habitat quality because conversion from completely degraded conditions to a highly functioning habitat transforms the land from zero chaparral habitat value to high quality chaparral habitat. A ratio of less than 1 to 1 is sufficient because recreating high quality habitat where none currently exists will result in the creation of all new habitat where it had been eliminated. A quarter-acre of recreated habitat will have significantly more value than no habitat at all.

(A) There must be an essential nexus (i.e. connection) between the mitigation measure and a legitimate governmental interest. *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987); and

(B) The mitigation measure must be “roughly proportional” to the impacts of the project. *Dolan v. City of Tigard*, 512 U.S. 374 (1994). Where the mitigation measure is an *ad hoc* exaction, it must be “roughly proportional” to the impacts of the project. *Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854.

(Cal. Code Regs., tit. 14, div. 6, ch. 3 [CEQA Guidelines], § 15126.4, subd. (a)(4).)

I will discuss in detail below the specific facts and principles forth in the cases cited here – *Nollan*, *Dolan*, and *Ehrlich*. I will then discuss CEQA case law on mitigation measures for biological resource impacts. But first I will lay out principles relevant to the “baseline” that the County must use first in assessing the Project’s impacts and then in formulating mitigation to address those impacts.

B. The starting point for impact analysis in an EIR is existing conditions at the time of issuance of a Notice of Preparation; and, in assessing those existing conditions, lead agencies should account for historic fluctuations in land conditions.

“An EIR must include a description of the physical environmental conditions in the vicinity of the project. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.” (CEQA Guidelines, § 15125, subd. (a).) “The purpose of this requirement is to give the public and decision makers the most accurate and understandable picture practically possible of the project’s likely near-term and long-term impacts.” (*Ibid.*) “Generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation [NOP] is published, ..., from both a local and regional perspective.” (*Id.*, subd. (a)(1).)

Where such existing conditions reflect the environmental effects of past economic activities, such effects are appropriately reflected in the baseline, and need not, and generally cannot, be conceptually rolled back to try to capture a hypothetical more pristine prior condition. (See, e.g., *Citizens for East Shore Parks v. State Lands Com.* (2011) 202 Cal.App.4th 549, 558-562 [the EIR for the renewal of a lease for operating a marine terminal properly assumed ongoing terminal operations as the environmental baseline].)

This obligation to address existing conditions, whatever they are, applies even where (as is *not* the case here) the past activities in question may have been unlawful (See, e.g., *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1451-1453 [the baseline for an EIR for a proposed quarry project properly included floodplain conditions that had been altered in manner than United State Fish and Wildlife Service contended had been in violation of the Clean Water Act]; *Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1278-1281 [in considering with to grant a use permit for an existing airport that had been built and operated illegally, the lead agency properly used a baseline that reflected the existence of the airport]; and *Eureka Citizens for Responsible Government v. City of Eureka* (2007) 147 Cal.App.4th 357, 370-371 [an EIR for an illegally built playground properly assumed the playground as part of the baseline].)

The principle that CEQA takes the environment as it finds it – even if it is in a highly degraded condition – is illustrated by the outcome in *North Coast Rivers Alliance v. Westlands Water Dist.* (2014) 227 Cal.App.4th 832. There, the petitioners challenged the use of a Class 1 categorical exemption for a two-year interim water contract between the United States Bureau of Reclamation, on the one hand, and Westlands Water District and “its related distribution districts,” on the other. The interim contract continued water deliveries in substantially the same form and amounts that the water districts had been receiving since the 1960s, prior to the effective date of CEQA (1970).

The petitioners argued that these historic deliveries had contributed to substantial environmental degradation in the Sacramento-San Joaquin Delta, from which the water supplies were exported. Petitioners pointed to “evidence that [Central Valley Project] pumping in the Delta in conjunction with that of the state water project contributes to factors that jeopardize or threaten the continued existence of the delta smelt and certain salmon species, the numbers of which are steadily declining; and also that the continued use of irrigation water in the area of Westlands Water District is causing groundwater and soil to be increasingly degraded over time to the point that agricultural land must be retired.” (227 Cal.App.4th at p. 876.) In response, however, the court reasoned that, “[a]lthough the matters raised by petitioners are genuine concerns, the evidence was inadequate to show that the particular project under consideration (i.e., the 2012 interim renewal contracts) had a potential to bring about a substantial adverse change to the environment.” (*Id.* at pp. 873–874.) “[T]he particular activities challenged by petitioners—i.e., the large volume of CVP water distributed to Water Districts and used for irrigation purposes on lands within Water Districts’ boundaries—were clearly part of the existing environmental baseline for Water Districts’ ongoing operations.” (*Id.* at p. 874.)³

Another important legal principle in this context is that, in assessing what constitute “existing conditions,” a lead agency can and should account for any historic fluctuations in the physical conditions on a project site resulting from cyclical land management practices. The case law regarding this principle, discussed below, is relevant here due to the normal cycles of agricultural management on the Project site, which

³ See also *CREED-21 v. City of San Diego* (2015) 234 Cal.App.4th 488, 504-507 (physical work done on an eroding slope without CEQA compliance under the statutory exemption for actions to prevent emergencies was part of the environmental baseline for subsequent discretionary permits subject to CEQA); and *World Business Academy v. California State Lands Commission* (2018) 24 Cal.App.5th 476, 500-501 (upholding the application of the Class 1 exemption to the extension of a lease for the Diablo Canyon nuclear power plant, noting that the environmental risks associated with nuclear power were part of the environmental baseline).

involves periodic mowing, mulching, grubbing, and brush-raking of the already degraded Burton Mesa Chaparral habitat and the intentional uprooting of the plants that contribute to such habitat.

These agricultural practices, which have been occurring for many decades, are intended to create better, grassier grazing conditions for cattle. These practices are totally lawful in the absence of any discretionary land use controls imposed by the County, as the practices do not occur on land, or involve species, that implicate federal or state environmental statutes such as the Endangered Species Act (ESA) (16 U.S.C. § 1531 et seq.), Section 404 of the Clean Water Act (33 USC §1344), the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.), or Fish and Game Code provisions governing the substantial obstruction of the bed, channel, or bank of any river, stream or lake (Fish & G. Code, § 1602). These activities would also occur going forward should the County ultimately choose not to allow development on the Project site.

As the Althouse Memorandum explains (see pp. 1-3), none of the plant species on the Project site that are characteristic of Burton Mesa Chaparral are formally listed as endangered, threatened, or rare under either ESA or CESA. Notably, unlisted plants identified under the Rare Plant Ranking System of the California Native Plant Society are not legally protected per se, though they are often treated by lead agency biologists as being *de facto* “endangered,” “threatened,” or “rare” for purposes of CEQA. (See CEQA Guidelines, § 15380 [unlisted species can be treated as endangered, threatened, or rare in CEQA documents even in the absence of formal listing].) Such plants, then, are only protected under CEQA, which does not apply to agricultural activities that require no permits from any local or state authority. (See *Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 44-48 [section 15380 did not require the respondent lead agency to make a “specific finding or determination as to whether” a particular species “was ‘rare’ or ‘endangered’”]; see also *id.* at pp. 41-42 [CEQA does not “requir[e] public agencies to

deny approval of any project where the perpetuation of rare or endangered species on the site cannot be guaranteed”].)

The legal principle that a lead agency may consider fluctuating past conditions in attempting to ascertain existing conditions is set forth in detail in the California Supreme Court’s seminal decision in *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310 (*Communities for a Better Environment*). The principle has also been explored in Court of Appeal decisions issued subsequent to that Supreme Court decision.

In *Communities for a Better Environment*, the high court set aside a Mitigated Negative Declaration (MND) adopted by an air quality management district for a proposal by an oil company, ConocoPhillips, to modify its air permits for an existing petroleum refinery in order to meet new regulations involving motor vehicle diesel fuel. The project proposed, among other things, a substantial increase in the operation of an existing cogeneration plant and four boilers. The cogeneration plant and boilers were subject to prior permits that authorized a maximum rate of heat production for each piece of equipment. In actual practice, however, these maximum permitted rates had never been reached. In adopting an MND, the air district acknowledged that the increased operation of steam generation equipment would cause additional nitrogen oxide emissions beyond historic and existing levels, but did not consider these increases to be attributable to the project for CEQA purposes because the increases did not exceed the maximum rate of emissions authorized under the existing permits. Instead, the district treated the additional nitrogen oxide emissions arising from the increased plant operations to be within previously permitted levels as part of the baseline. (*Id.* at pp. 316–319.)

The Supreme Court determined that the air district erred by measuring the air pollutant emissions of the proposed project against hypothetical emissions at full operation under existing permits. (*Id.* at p. 322.) The court held that the district should

have compared the project to the existing physical conditions, not hypothetical conditions allowed under the existing permit. (*Id.* at p. 321.) In this case, the air district’s baseline was premised on simultaneous operation of all boilers at their maximum permitted capacity, which was not a realistic description of existing conditions based on the record. This was an “illusory” comparison of the project against what could happen, rather than against what was actually happening. (*Id.* at p. 322.)

The air district and Conoco Phillips argued that daily fluctuations in refinery operations made it difficult to use annual averages to arrive at an accurate baseline. Although the court rejected the notion that such difficulties justified the use of permitted but unrealized levels of air pollution as the baseline, the court was cognizant of the need to account for fluctuations in some fashion and thus did not impose a rigid rule regarding how to estimate baseline conditions. “Neither CEQA nor the Guidelines mandates a uniform, inflexible rule for determination of the existing conditions baseline. Rather, an agency enjoys the discretion to decide, in the first instance, exactly how the existing physical conditions without the project can most realistically be measured, subject to review, as with all CEQA factual determinations, for support by substantial evidence.” (*Id.* at p. 328.) The court more fully explained the need for flexibility in ascertaining “existing conditions” as follows:

the date for establishing baseline cannot be a rigid one. Environmental conditions may vary from year to year and in some cases it is necessary to consider conditions over a range of time periods.” [Citation.] In some circumstances, peak impacts or recurring periods of resource scarcity may be as important environmentally as average conditions. Where environmental conditions are expected to change quickly during the period of environmental review for reasons other than the proposed project, project effects might reasonably be compared to predicted conditions at the expected date of approval, rather than to conditions at the time analysis is begun. [Citation.] A temporary lull or spike in operations that happens to occur at the time environmental review for a new project begins should not depress or elevate the baseline; overreliance on short-term activity averages

might encourage companies to temporarily increase operations artificially, simply in order to establish a higher baseline.

(*Id.* at pp. 327–328.)

Two cases decided in the aftermath of *Communities for a Better Environment* illustrate how these legal principles should be applied in practice.

In *North County Advocates v. City of Carlsbad* (2015) 241 Cal.App.4th 94 (*North County Advocates*), the Court of Appeal upheld the use of a shopping center’s historical full occupancy as a proper baseline for the EIR’s analysis. The case involved a proposal to renovate a former Robinsons-May store and other small portions of a shopping center. The EIR’s baseline for traffic impacts treated the Robinsons-May store as fully occupied, even though the store had been vacated years earlier and had been only periodically occupied since then. (*Id.* at p. 96.) The court held that substantial evidence supported the respondent city’s determination of the traffic baseline because it was based on “*recent historical use*” and was consistent with the property owner’s right to fully occupy the Robinsons-May space without further discretionary approvals. (*Id.* at pp. 105–106.) The court reasoned as follows:

[U]nlike *Communities for a Better Environment*, the City’s selection of a traffic baseline that assumed full occupancy of the Robinsons-May space was not merely hypothetical because it was not based *solely* on Westfield’s entitlement to reoccupy the Robinsons-May building “at anytime without discretionary action,” but was also based on the actual historical operation of the space at full occupancy for more than 30 years up until 2006. * * * [T]he Robinsons-May space was less occupied from 2007 through 2009 (two retail users occupied part of it from August 2006 through December 2007, and two others occupied part of it from August through November in 2008 and in 2009). We view this fluctuating occupancy—which is “the nature of a shopping center”—as akin to the varying oil refinery operations in *Communities for a Better Environment* that led the Supreme Court to recognize that agencies have discretion “to consider conditions over a range of time periods’ ” to account for a “temporary lull or spike in operations....”

(241 Cal.App.4th at pp. 105-106 [italics original; footnote omitted].)

In *San Francisco Baykeeper, Inc. v. California State Lands Commission* (2015) 242 Cal.App.4th 202 (*Baykeeper*), another Court of Appeal reached a similar result. That case involved a challenge to the California State Lands Commission's renewal of a lease allowing the continued dredge mining of sand from lands under the San Francisco Bay. (*Id.* at p. 210.) The draft EIR defined the baseline as the volume of sand mined from the lease parcels in 2007, the year the NOP for the EIR was published. Following the close of public comment on the draft EIR, however, the commission determined that changes to the project required recirculation of the draft EIR. Rather than using the year 2007 as a baseline, the revised draft EIR used the *average annual volume* of sand mined in the proposed project area per year from 2002 to 2007. (*Id.* at p. 212.) The petitioner argued that the revised draft EIR's baseline was inadequate because it did not reflect the fact that sand mining levels dropped substantially after 2007. The Court of Appeal concluded, though, that substantial evidence supported the commission's use of the five-year average baseline. (*Id.* at pp. 218–219.) For instance, the final EIR's responses to comments explained that “inclusion of the unusually low mining volumes in years after NOP publication during the economic downturn ... would distort the baseline by understating the overall levels of mining in years prior to the expiration of the previous lease and commencement of EIR preparation.” (*Id.* at p. 219.) This conclusion was supported by statistical information in the record, including data from the California Geological Survey showing that California's economic downturn during 2007 contributed to a significant decrease in both the production and value of construction aggregate, including sand. (*Id.* at p. 218.) The court therefore upheld the revised EIR's use of a five-year average baseline.

In late 2018, the California Natural Resources Agency updated CEQA Guidelines section 15125, subdivision (a)(1), to reflect the principles and cases described above. The pertinent language in that provision now provides that “[w]here existing conditions

change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence.”

In light of *Communities for a Better Environment*, *North County Advocates*, and *Baykeeper*, as well as the current language of CEQA Guidelines section 15125, subdivision (a)(1), the County, in identifying “existing conditions” on the Dana Reserve Project site, should take full account of the physical conditions that exist there immediately following agricultural practices that destroy the plants that are characteristic of Burton Mesa Chaparral. These “high impact” baseline conditions are analogous to both the fully occupied shopping center in *North County Advocates*, which reflected higher traffic levels than would occur in the absence of full occupation, and the high historic levels of sand mining in *Baykeeper*, which represented a more degraded baseline than the lower levels of mining that occurred after 2007 in that case.

Taken together, all of the legal precedents described above leave no doubt that, in assessing the significance of impacts to Burton Mesa Chaparral habitat on the Project site, the County must take full account of the degraded, low-quality character of that habitat, including its conditions immediately after periodic agricultural practices that uproot and destroy the plants associated with Burton Mesa Chaparral habitat. As noted above, these practices would continue if the County Board of Supervisors should choose to deny any development on the Project site.

As explained in detail below, moreover, the County, in formulating mitigation measures for impacts to such degraded habitat, may require no more from the applicant than is roughly proportional to the nature and extent of such impacts.

C. Nollan, Dolan, and Ehrlich

As indicated earlier, CEQA Guidelines section 15126.4, subdivision (a)(1)(4), expressly incorporates principles set forth in three leading cases from the United States Supreme Court and the California Supreme Court on the constitutional limitations on agencies' authority to extract various kinds of conditions on private project applicants during permitting processes. The facts of all three of these cases are illuminating with respect to the issues at hand.

In *Nollan v. Coastal Commission* (1987) 483 U.S. 825 (*Nollan*), the United States Supreme Court declared invalid a condition by which the California Coastal Commission had required a property owner to dedicate an easement allowing public access across beachfront land as "mitigation" for the effects of a coastal development permit allowing the owner to replace a small residential structure with a larger one. In so holding, the court explained that, in order for a condition of approval requiring a property owner to give up land to be valid, a "nexus" must exist between the condition and a purpose that would justify denial of the permit (*i.e.*, the condition must be addressed to the same harm that would justify denial). (483 U.S. at pp. 834–837.)⁴

The court invalidated the condition requiring a dedication of property *along* the beach (rather than *to* the beach) because the landward visual impacts associated with the property owner's construction of a new home in no way created the need for such

⁴ The court also stated that any such condition must also "substantially advance legitimate state interests." (483 U.S. at p. 834.) In *Lingle v. Chevron U.S.A. Inc.* (2005) 544 U.S. 528, 540-542, however, the Supreme Court subsequently disapproved this first part of the *Nollan* "takings" analysis, which had first been announced in *Agins v. City of Tiburon* (1980) 447 U.S. 255, 260. The court in *Lingle* explained that "the language the Court selected [in *Agins*] was regrettably imprecise. The 'substantially advances' formula suggests a means-ends test: It asks, in essence, whether a regulation of private property is effective in achieving some legitimate public purpose. An inquiry of this nature has some logic in the context of a due process challenge, for a regulation that fails to serve any legitimate governmental objective may be so arbitrary or irrational that it runs afoul of the Due Process Clause. *** But such a test is not a valid method of discerning whether private property has been 'taken' for purposes of the Fifth Amendment." (544 U.S. at p. 542.)

“lateral” access. As the court explained, “[i]t is quite impossible to understand how a requirement that people already on the public beaches be able to walk across the Nollans’ property reduces any obstacles to viewing the beach created by the new house.” (483 U.S. at p. 838.) The court indicated, however, that the commission might have properly imposed a condition “that would have protected the public’s ability to see the beach notwithstanding construction of the new house.” (*Id.* at p. 836.)

In *Dolan v. City of Tigard* (1994) 512 U.S. 374 (*Dolan*), the court addressed a question left unanswered in *Nollan*. Whereas *Nollan* addressed the permissible *purposes* of requiring a land dedication as a condition of project approval, *Dolan* focused on the related but distinct question of just *how extensive* the burdens of such a condition may be (assuming the purpose is legitimate). The challenged agency action in *Dolan* was the issuance of a building permit for the expansion of a commercial development. The defendant city required the property owner to dedicate to the city certain land lying within the 100-year floodplain for the construction of a storm drainage system, and to dedicate a 15-foot strip of land adjacent to the floodway for a pedestrian/bicycle pathway. (512 U.S. at pp. 379–380.)

The court recognized the general legitimacy of the purposes addressed by the dedications required of the property owner: the need for flood control to handle runoff from increased pavement; and the need to reduce traffic impacts that might be created by an expanded commercial facility. Thus, to use the language of *Nollan*, there was an “essential nexus” between the actual impacts associated with the development and the purposes of the land dedication required as a condition imposed on the property owner. (*Id.* at pp. 386–388.) The court was therefore required to determine whether “the *degree* of the exactions demanded by the city’s permit conditions bear the required relationship to the projected impact of the petitioner’s proposed development.” (*Id.* at p. 388, italics added.)

In answering this inquiry, the court held that there must exist a “*rough proportionality*” between the extent of the impacts caused by a project approval and the extent to which the exactions actually mitigate such impacts. “No precise mathematical calculation is required, but the city must make some sort of individualized determination that the required dedication is related both in nature and *extent* to the impact of the proposed development.” (*Id.* at p. 391, italics added.) In contrast to “most generally applicable zoning regulations,” for which “the burden properly rests on the party challenging the regulation to prove that it constitutes an arbitrary regulation of property rights,” the case at hand involved “an adjudicative decision to condition petitioner’s application for a building permit on an individual parcel” for which “the burden properly rests on the city” to justify the extent of the required dedication. (*Id.* at p. 391, fn. 8.)

After announcing the “rough proportionality” standard, the court proceeded to apply it to the facts in question. Emphasizing that the requirement to dedicate property eliminates a landowner’s “right to exclude others,” the court held that the respondent city had failed to properly justify the exactions imposed on the landowner. (*Id.* at pp. 392–396.) In closing, the court noted that “[t]he city’s goals in reducing flooding hazards and traffic congestion, and providing for public greenways, are laudable, but there are outer limits to how this may be done.” (*Id.* at p. 396.)

In *Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854 (*Ehrlich*), the California Supreme Court interpreted and applied *Nollan* and *Dolan* in holding that a city had acted improperly in assessing a \$280,000 “recreation fee” against a property owner as a condition of approving a residential project requiring a general plan amendment, specific plan amendment, and rezone. The new development would replace a private club with tennis courts. The court determined that the fee was flawed because the \$280,000 required of the applicant was the amount necessary to build new *public* recreational facilities to replace the *private* facilities being “lost” with the project. The city’s approach wrongly assumed that the fee should fund the construction of new facilities that would be

open, without further cost, to the public at large. In fact, however, the “lost” facilities were private facilities funded through the marketplace by membership dues. “[U]nder the city’s formula, the public would receive, ex gratia, \$280,000 worth of recreational facilities the cost of which it would otherwise have to finance through membership fees. *Plaintiff is being asked to pay for something that should be paid for either by the public as a whole, or by a private entrepreneur in business for profit.* The city may not constitutionally measure the magnitude of its loss, or of the recreational exaction, by the value of facilities it had no right to appropriate without paying for.” (12 Cal. 4th at p. 883, italics added.)

The *Ehrlich* decision consists of (i) a “plurality opinion” signed by three of the court’s seven justices, (ii) a “concurring opinion” authored by Justice Mosk, (iii) a “concurring and dissenting opinion” written by Justice Kennard and joined by Justice Baxter, and (iv) a “concurring and dissenting opinion” penned by Justice Werdegar. Thus, as to some issues, there is no clear majority “holding.” As to certain other issues, however, there clearly was general agreement amongst the Justices.

All members of the court agreed that both the “essential nexus” standard of *Nollan* and the “rough proportionality” standard of *Dolan* applied to the facility replacement fee imposed by the city. (12 Cal. 4th at pp. 881, 887, 903, 912.) Speaking generally, the court concluded that those standards applied to monetary exactions imposed “on an *individual* and discretionary basis.” (*Id.* at p. 876, italics added.) The court said that it would decline to apply the rigorous *Nollan* standard, however, to the judicial review of assessments imposed on *numerous* projects via broadly applied *legislative* enactments. The court therefore distinguished between ad hoc exactions imposed on a project-by-project basis, on the one hand, and generally applicable legislative requirements imposed across the board via legislation such as ordinances, on the other hand. (*Id.* at pp. 876.)

In the matter at hand – the mitigation of impacts to Burton Mesa Chaparral habitat due to the Dana Reserve project – the relevant portion of *Ehrlich* is its embrace of the

reasoning of *Nollan* and *Dolan*. The County will impose mitigation for this habitat on an ad hoc, individualized basis as part of the environmental review process for the Project, rather than as a result of any generally applicable County ordinance addressing Burton Mesa Chaparral mitigation. The County's mitigation, then, must meet both the "essential nexus" and the "rough proportionality" requirements discussed above.

D. CEQA Case Law on Mitigation Measures for Biological Resource Impacts

Although, as quoted above, section 15126.4, subdivision (a)(4)(B), of the CEQA Guidelines says that "[t]he mitigation measure must be 'roughly proportional' to the impacts of the project," what this statement really means is that, *at most*, the mitigation for a significant environmental effect must be roughly proportional. While the constitutional principles discussed above preclude *over-mitigating* impacts, CEQA stops short of always requiring roughly proportional mitigation, though in practice it is often imposed, particularly where the environmental resources at issue, such as wetlands, are also subject to federal or state statutes or regulations above and beyond CEQA.

"The goal of mitigation measures is not to net out the impact of a proposed project, but to reduce the impact to insignificant levels." (*Save Panoche Valley v. San Benito County* (2013) 217 Cal.App.4th 503, 529.) "Mitigation measures need not include precise quantitative performance standards, but they must be at least partially effective, even if they cannot mitigate significant impacts to less than significant levels." (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 523.)

The definition of "mitigation" found in section 15370 of the CEQA Guidelines includes, among other things, "[r]ectifying the impact by repairing, rehabilitating, or restoring the impacted environment[,]" "[r]educing or eliminating the impact over time by preservation and maintenance operations during the life of the action[,]" and "[c]ompensating for the impact by replacing or providing substitute resources or

environments, including through permanent protection of such resources in the form of conservation easements.”

Though not all mitigation measures, to be valid, need to include performance standards, such standards are necessary where many of the crucial details for a mitigation plan are deferred until after project approval. “Formulation of mitigation measures shall not be deferred until some future time. The specific details of a mitigation measure, however, may be developed after project approval when it is impractical or infeasible to include those details during the project’s environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts *specific performance standards* the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will [be] considered, analyzed, and potentially incorporated in the mitigation measure.” (CEQA Guidelines, § 15126.4, subd. (a)(1)(B), italics added.)

One common performance standard that is discussed in CEQA case law is “no net loss” of wetland habitat, which is commonly required, in any event, by the United States Army Corps of Engineers under the Clean Water Act. This approach to CEQA mitigation can generally be termed “compensatory,” though it also typically involves the use of conservation easements and the rehabilitation or restoration of former wetlands, along with ongoing maintenance.

In *California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603 (*California Native Plant Society*), the court considered the adequacy of a mitigation measure addressed to mitigate for the loss of vernal pools, a kind of wetland, that were supporting two species of shrimp subject to protection under the Endangered Species Act. The measure was mitigation for “the direct loss of 14.1 acres of vernal pool fairy shrimp habitat” and “15.65 acres of vernal pool tadpole shrimp habitat.” (*Id.* at p. 610.) The measure “provided that these direct impacts would be mitigated ‘in such a manner that there will be no net loss of habitat (acreage and function) for these species in

the Laguna Formation following implementation of the project.” (*Ibid.*) Under the measure, “the applicant would be required to ‘complete and implement a habitat mitigation and monitoring plan that will compensate for the loss of acreage, function and value of the impacted resources.’” (*Ibid.*) “The plan would have to include ‘[t]arget areas for creation, restoration and preservation,’ ‘[a] complete biological assessment of the existing resources on the target areas,’ ‘[s]pecific creation and restoration plans for each target area,’ and “[p]erformance standards for success that will illustrate that the compensation ratios are met.” (*Id.* at pp. 610-611.)

In upholding this measure, the court stated that the respondent city “did not defer a determination of whether the Project would have a significant impact on the vernal pool and seasonal wetland habitats or defer the identification of measures calculated to mitigate that impact. Rather, the City determined the impact the Project would have—habitat loss—and identified a specific measure to mitigate that impact—preservation or creation of replacement habitat off site in a specific ratio to the habitat lost as a result of the Project. While it is true the City did not identify any specific proposed mitigation site, there is nothing that required it to do so.” (*Id.* at p. 622.)

Although the measure in *California Native Plant Society* prohibited any net loss of acreage, the measure also addressed the “function and value of the impacted resources.” (*Id.* at p. 610.) Options for mitigating the function and value of the impacted wetland habitat included “creation, restoration and preservation.” (*Id.* at pp. 610-611.)

In *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 794 (*Endangered Habitats League*), the court, using similar reasoning, upheld a mitigation measure addressed to the loss of habitat for the California gnatcatcher, a federally protected bird. The measure, the court said, “sets out the possibilities—on-site or off-site preservation of similar habitat at a ratio of at least two to one, or one of several possible habitat loss permits from relevant agencies. We believe this enumeration of alternative mitigation measures saves the provision from improper deferral.” (*Ibid.*)

The same court also upheld a “mitigation measure for tree loss [that] requires a tree restoration, maintenance, and monitoring plan to be prepared and approved prior to issuing grading permits. It provides the plan must ‘detail’ long-term maintenance and monitoring, include requirements for replanting procedures, and include a contract with a certified arborist for at least 10 years. The arborist must make reports throughout the year and must be given decision-making power over tree care and maintenance. We find these standards sufficient.” (*Id.* at p. 795.)

It is notable that, in *Endangered Habitats League*, the court upheld mitigation approaches that involved land preservation, tree replanting, maintenance, and monitoring as legitimate and complementary approaches to mitigation.

In *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 943, 946, the court upheld a mitigation measure addressing impacts to rare plants located on land identified for development. The measure allowed for “plant salvage and transportation plan to avoid, relocate or minimize impacts on these species.” The governing performance standard required the successful establishment of at least 80 percent of transplanted plants. Notable here is the fact that the measure was sufficient though its performance standard stopped short of requiring “no net loss” of the adversely affected plants.

In *Environmental Council of Sacramento v. City of Sacramento* (2006) 142 Cal.App.4th 1018, 1038 (*ECOS*), the court was clear that adequate mitigation under CEQA, as well as under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), need not always require acre-for-acre mitigation. In that case, the court upheld under both CEQA and CESA a Habitat Conservation Plan approved not only under CESA but also under the federal Endangered Species Act (16 U.S.C. § 1531 et seq.). The Conservation Plan required the purchase of a half-acre for habitat reserves for every acre of new development. The court explained the overall workings of the Conservation Plan as follows:

Under the plan, the Natomas Basin Conservancy (Conservancy), a nonprofit organization, will manage the habitat and monitor the health and welfare of the species, including the hawks and the snakes. The centerpiece of the plan is the purchase of one-half acre for habitat reserves for every acre that is developed, irrespective of the habitat quality of the land developed. The land acquisitions for reserves will be funded with mitigation fees paid by developers. The Conservancy will dedicate 50 percent of the 8,750 acres of reserve land to rice cultivation that serves as habitat for the snakes, 25 percent to managed marsh habitat for the snakes, and the remaining 25 percent in upland habitat for foraging opportunities for the hawks. *The Conservation Plan provides multiple justifications for the 0.5:1 ratio: “(1) the reserves will provide higher quality habitat than the lands to be developed, especially given that the reserves will be managed for the covered species; (2) much of the land to be developed is of limited value as habitat but will be assessed as if it were of value; (3) the reserves will provide permanent habitat for the covered species; (4) the [Conservation Plan] provides monitoring and adaptive management to protect the species; and (5) the reserves will be large and biologically viable.”*

(142 Cal.App.4th at p. 1025, italics added.)

The referenced 0.5 to 1 mitigation ratio was intended not only to satisfy CEQA’s mitigation requirements, but also to satisfy the CESA requirement that the impacts of any “take” of an endangered or threatened species be “minimized and fully mitigated” in a manner that is “roughly proportional in extent to the impact of the authorized taking on the species.” (*Ibid.*, quoting Fish & G.Code, § 2081, subd. (b)(2).)

As the lengthy quotation above makes clear, among the reasons why a ratio of half an acre to one acre was permissible under both CEQA and CESA were that “much of the land to be developed is of limited value as habitat” and that “the reserves will provide higher quality habitat than the lands to be developed.”

The court rejected the petitioner’s argument that a minimum one to one ratio was required by CEQA. The court explained that “[t]he Conservation Plan in fact mitigates for the impacts on covered species in a variety of ways beyond the purchase of a half acre

for every acre developed. The reserves purchased with the mitigation fees will be *maintained* as habitat in perpetuity. Moreover, the Conservancy is mandated by the Conservation Plan to *manage* rice farms, which might otherwise disappear from the Natomas Basin. The preconstruction surveys, preservation of land adjacent to Fisherman's Lake, avoidance of development in the one-mile hawk zone, and *planting of nest trees* are all part of the integrated mitigation plan designed to compensate for the incidental take of any covered plants and animals.” (142 Cal.App.4th at p. 1039, italics added.) The court thus emphasized that the Conservation Plan would improve the biological conditions of the land to be preserved through an integrated approach that include active maintenance, management, and enhancement of the land.

The court made similar points in upholding the mitigation ratio against an attack under CESA:

We have described at some length the impressive avoidance, minimization, and mitigation features of the Conservation Plan, including the purchase of reserve lands to be developed and maintained as high quality habitat, adaptive management, adjustments because of recovery plan adoption, and extensive compliance and biological effectiveness monitoring. The Department's findings that the entire Conservation Plan minimized and fully mitigated the impacts of the taking are further supported by the scientific assessment of the Natomas Basin in that several covered species do not occur in the basin or their use of the basin is low and sporadic, the basin constitutes an insignificant portion of most of the species' ranges, and habitat remains available within and outside the basin to satisfy species' essential behavioral needs.

(*Id.* at p. 1043.)

As the preceding detailed discussion of CEQA case law makes clear, there is abundant judicial authority for mitigation approaches that use tools such as conservation, enhancement, restoration, and recreation – separately or in combination – in order to achieve roughly proportional mitigation for lost or damaged biological resources. These are the very tools used in the Dana Reserve applicant's proposal to mitigate the effects of

the degraded Burton Mesa Chaparral habitat on the Project site. Where new or restored high-quality habitat will replace existing low-quality habitat, the proposal permissibly offers up smaller amounts of new or restored acreage to replace lost amounts of degraded acreage. The fact that the approach does not require “no net loss of acreage” does not make it legally or biologically infirm. The operative performance standard is “no net loss of habitat *quality*.” This approach is not only biologically legitimate; but it also functions within the parameters of the constitutional principles described at length above.

We recognize that, as with any mitigation measure associated with a project approved under CEQA, our proposal will be subject to inclusion in a mitigation monitoring or reporting program (MMRP) pursuant to Public Resources Code section 21081.6, subdivision (a)(1), and CEQA Guidelines section 15097. To the extent that County staff has any concerns regarding the details for determining how to assess and ensure full compliance with our proposed approach, one possible useful exercise would be to map out, sooner rather than later, what a monitoring or reporting strategy for our proposed measure could look like. Though lead agencies need not include MMRPs in their Draft EIRs, there is certainly no prohibition against thinking ahead about how monitoring or reporting could work. Nor is there any prohibition against including monitoring or reporting provisions within the four corners of a proposed mitigation measure.⁵

CONCLUSION

I am hopeful that this letter will assist San Luis Obispo County staff and its consultant team in understanding the reasoning behind the Dana Reserve applicant’s proposed approach for mitigating for the loss of degraded onsite Burton Mesa Chaparral

⁵ Our mitigation approach is also intended to achieve consistency with County General Plan Policy BR-2.6, which requires “require no net loss of sensitive natural plant communities and critical habitat areas.”

Mr. Singewald and Ms. Guetschow

March 23, 2022

Page 26

habitat. This habitat was degraded as of the time the NOP was issued and will be degraded even more the next time the current agricultural lessee of the property takes steps, as have occurred since the 1930s, to facilitate the growing of grasses for cattle grazing. For all of the reasons laid out above, I believe that the proposed mitigation approach is sound and appropriate from a legal standpoint. The net result of Project approval will be the conservation, enhancement, restoration, and/or recreation of permanent habitat in lieu of currently degraded habitat in which the plants that contribute to Burton Mesa Chaparral habitat are periodically uprooted and killed. I would be happy to participate in any future meetings or oral discussions on this subject matter.

Sincerely,



James G. Moose

Cc: Jon Ansolabehere (jansolabehere@co.slo.ca.us)
Ben Dore (bdore@co.slo.ca.us)
Nick Tompkins (Nick@nktcommercial.com)
Andrew Fogg (afogg@coxcastle.com)
Laura Tamura (laurie@urbanplanningconcepts.com)
LynnDee Althouse (lynnedee@althouseandmeade.com)

Enclosures (Althouse Memorandum and PleinAire Mitigation graphics)

Althouse Memorandum



1602 Spring Street, Paso Robles, CA 93446

(805) 237-9626 • FAX (805) 237-9181 • www.althouseandmeade.com

Memo

To: Jim Moose

From: LynneDee Althouse

Date: 3/23/2022

Copy: Nick Tomkins, Laurie Tamura

Re: Dana Reserve Maritime Chaparral Current Condition and Proposed Mitigation

Our recommended approach to reasonable and prudent mitigation for impacts to degraded maritime chaparral (aka Burton Mesa Chaparral) on the Dana Reserve is consistent with our 2021 Biological Report. This habitat has been periodically manipulated for farming and livestock range management since the 1930's (see historic aerials in Appendix F of our Biological Report).

1 SUMMARY OF IMPACTS

The Project proposes to impact 35 acres and preserve 0.9 acres of degraded Burton Mesa chaparral. The Alternative Project would impact 34.9 acres and preserve 1.1 acres of Burton Mesa chaparral.

Boundaries of the mapped Dana Reserve chaparral habitat circumscribe grazing land that contains occasional shrubs characteristic of Burton Mesa chaparral with scattered oaks (less than 20% oak cover) in habitat otherwise dominated by non-native grasses and herbs (see photos on page 3 of this memo). Rare manzanitas and ceanothus shrubs were very small (generally less than 3 feet in diameter, and less than 2 feet tall) during our site surveys. The project proposes to remove 460 rare chaparral shrubs (127 sand almond and 323 sand mesa manzanita) scattered within mapped maritime chaparral habitat that contains some of the constituent elements (plant taxa) characteristic of Burton Mesa Chaparral. In addition, approximately 6600 rare mesa horkelia plants would be removed. This perennial herb grows in patches along shady edges of oak woodland and among chaparral shrubs.

2 MITIGATION JUSTIFICATION

Below is a description from the Biological Report that describes characteristics of the Burton Mesa chaparral and site conditions observed during our biological surveys of the Dana Reserve. Note that characteristic chaparral plants had very low cover due to routine mowing/grubbing. Scattered oaks were present at less than 20 percent canopy cover.

2.1 Description of Typical Burton Mesa Chaparral

The National Vegetation Classification Hierarchy (USNVC by Jennings et al. 2009) may be used to classify constituent elements of chaparral on the Dana Reserve as part of the Californian

maritime chaparral group. This group is within the formation subclass called Mediterranean scrub and grassland.

Burton Mesa chaparral (California Code 37.322.00) described in the CNPS Manual of California Vegetation Online (2022) lists two rare manzanitas, Purissima manzanita (*Arctostaphylos purissima*) and/or sand mesa manzanita (*Arctostaphylos rudis*), as the dominant or characteristically present manzanitas in the shrub canopy. Another manzanita, Eastwood's manzanita (*Arctostaphylos crustacea* ssp. *eastwoodiana*) is also a characteristic manzanita found in Santa Barbara County. Common shrub associates typically include chamise (*Adenostoma fasciculatum*), California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), buck brush (*Ceanothus cuneatus* var. *fascicularis*), bush monkeyflower (*Diplacus aurantiacus*), mock heather (*Ericameria ericoides*), golden yarrow (*Eriophyllum confertiflorum*), rush rose (*Helianthemum scoparium*), deer weed (*Lotus scoparius*) and black sage (*Salvia mellifera*). Rare varieties of the ceanothus species called *Ceanothus impressus* are also characteristic of this habitat. Emergent trees may be present at low cover, including coast live oak (*Quercus agrifolia*) or Shreve oak (*Quercus parvula* var. *shrevei*). Shrubs are generally less than 5 meters (16 feet) tall and their canopy open to continuous.

In the Burton Mesa chaparral, the herbaceous layer is variable and may include cryptogamic crust. Burton Mesa chaparral soils are derived from Pleistocene sand deposits, and occasionally marine siltstones overlain with a thin sand layer.

Burton Mesa chaparral, also known as *Arctostaphylos* (*purissima*, *rudis*) Shrubland Special Stands, is a Sensitive Natural Community listed by CDFW as G1/S1 and is considered a Special Stand by CNPS, which defines this habitat type by the characteristic presence of sand mesa manzanita (CDFW 2022, CNPS 2022).

2.2 Maritime Chaparral on the Dana Reserve

On Dana Reserve, representatives of the Burton Mesa chaparral habitat occurs primarily as re-sprouting shrubs with an open canopy that has been disturbed by routine brush removal (Photo 1). This habitat type shows substantial evidence of vegetation type conversion from chaparral to Mediterranean annual grassland with scattered oaks as described by Pratt 2022. Mechanical disturbances allow herb invasion and a concurrent decline in shrub cover. Over time, shrubland has been replaced by grassland savannah with scattered oaks. During our site investigations of the Dana Reserve, the sand mesa manzanita (*Arctostaphylos rudis*) occurs as scattered re-sprouting individuals, though never reaching more than 1-2% cover (Photo 2).



Photo 1. Re-sprouting shrubs in the disturbed Burton Mesa chaparral habitat which receives routine brush clearing, view north. May 18, 2018.



Photo 2. Re-sprouting sand mesa manzanita. June 9, 2020.

Weedy grasses, such as riggut brome (*Bromus diandrus*) and veldt grass (*Ehrharta calycina*) are the dominant vegetation. Crown-sprouting chamise (*Adenostoma fasciculatum*) and black sage (*Salvia mellifera*) co-occur as scattered individuals in the shrub layer along with deerweed (*Acmispon glaber* [*Lotus scoparius*]), sticky monkeyflower (*Mimulus* [*Diplacus*] *aurantiacus*), coffeeberry (*Frangula californica*), hollyleaf cherry (*Prunus ilicifolia*), and broom rush-rose (*Crocianthemum* [*Helieanthemum*] *scoparium*).

This habitat on the Dana Reserve includes special status species as scattered individuals of sand mesa manzanita, sand almond (*Prunus fasciculata* var. *punctata*), sand buckbrush (*Ceanothus cuneatus* var. *fascicularis*), mesa horkelia (*Horkelia cuneata* var. *puberula*), and California spineflower (*Mucronea californica*).

Coast live oak trees are commonly found within Burton Mesa chaparral, but canopy does not exceed 20 percent absolute cover. Many of the species described within Burton Mesa chaparral are also present in coast live oak woodland, as both habitats often intergrade. The primary distinction between these two habitats is the canopy cover of coast live oaks, which, when greater than 20 percent, is considered a woodland or forest.

2.3 Characteristic Plant Taxa

The Dana Reserve contains taxa characteristic of the Burton Mesa Chaparral as described in the Manual of California Vegetation (Table 1). The most iconic representative chaparral plant is the rare sand mesa manzanita. Two rare ceanothus taxa are present as scattered individuals.

TABLE 1. CHARACTERISTIC BURTON MESA CHAPARRAL TAXA PRESENT ON THE DANA RESERVE

Scientific Name	Common Name	Rarity Status
<i>Acmispon glaber</i> [<i>Lotus scoparius</i>]	Deer weed	--
<i>Adenostoma fasciculatum</i>	Chamise	--
<i>Arctostaphylos rudis</i>	Sand Mesa manzanita	CRPR 1B.2
<i>Artemisia californica</i>	California sagebrush	--
<i>Baccharis pilularis</i>	Coyote brush	--
<i>Ceanothus cuneatus</i> var. <i>fascicularis</i>	Sand buck brush	CRPR 4.2
<i>Ceanothus impressus</i> var. <i>nipomensis</i>	Nipomo mesa ceanothus	CRPR 1B.2
<i>Diplacus aurantiacus</i> [<i>Mimulus aurantiacus</i>]	Sticky monkeyflower	--
<i>Ericameria ericoides</i>	Mock heather	--
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	Coast live oak	--
<i>Salvia mellifera</i>	Black sage	--

Other characteristic plant taxa listed in the Manual of California Vegetation not represented on the Dana Reserve include two manzanitas found in Santa Barbara County, plus two species well distributed in California: golden yarrow, a sub-shrub, and Shreve oak tree (Table 2).

TABLE 2. CHARACTERISTIC BURTON MESA CHAPARRAL TAXA NOT FOUND ON THE DANA RESERVE

Scientific Name	Common Name	Rarity Status
<i>Arctostaphylos crustacea</i> ssp. <i>eastwoodiana</i>	Eastwood's brittle-leaf manzanita	CRPR 1B.1
<i>Arctostaphylos purissima</i>	La Purissima manzanita	CRPR 1B.1
<i>Eriophyllum confertiflorum</i>	Golden yarrow	--
<i>Quercus parvula</i> var. <i>shrevei</i>	Shreve oak	--

2.4 Photos from CNPS MCVII Online

Two photographs from California Native Plant Society's website for the Manual of California Vegetation¹ for Burton Mesa Chaparral are provided below for reference. Notice structure and density of shrub cover in these reference sites.



Photo 3. Burton Mesa chaparral shrubs are densely packed. Older shrub crowns have started to die back. Younger, vigorous understory shrubs are in the foreground.

¹ Available at: <https://vegetation.cnps.org/alliance/130>



Photo 4. Dense manzanita shrub cover near the coast in Santa Barbara County.

2.5 Burton Mesa Chaparral Mitigation Considerations and Biological Justification

This section describes compensatory mitigation appropriate for loss of remnant Burton Mesa chaparral habitat and associated rare taxa that occur on the Dana Reserve. The total canopy area occupied by the sensitive characteristic herbs and shrubs plus oak trees on the Burton Mesa Chaparral during our site investigation was less than an acre (~25,000 sf; 0.57 acre), or less than 2 percent of the mapped 35 acre scattered distribution of the plants (Table 3). Burton mesa chaparral habitat should be replaced off site and protected for its habitat functions and values.

Individual rare plant taxa should be mitigated at ratios consistent with their rarity. Taxa considered rare and threatened (California Rare Plant Rank [CRPR] 1B) should have a higher mitigation ratio than less rare taxa (CRPR 4). For plants ranked 1B by CNPS the mitigation ratio shall be 2:1 for individuals in suitable/occupied habitat for taxa ranked 1B. Restore and/or enhance protected habitat suitable for 14,000 mesa horkelia, 100 Nipomo Mesa ceanothus, and 626 sand mesa manzanita (page 114 of the September 2021 Biological Report BIO-7).

For the annual plant ranked as 4, *California mucronea*, mitigation is complicated by its association with disturbance and its annual abundance directly affected by annual weather patterns. Mitigation measure BIO-8 in the Biological Report suggests restoration and/or enhancement of 45 acres of conserved land suitable for the spineflower. This measure may not be reasonable due to the variable population dynamics of this annual plant. This plant may occupy openings in chaparral shrub canopy within protected habitat.

Perennial plants on List 4 can be avoided (Michael’s rein orchid) or mitigated at a 1:1 ratio. Replacement plantings on or off-site should include at least two sand buck brush and 127 sand almond plants. Sand almond, another plant ranked 4, may be included in the Burton Mesa chaparral mitigation plan.

TABLE 3. IMPACTS TO SENSITIVE PLANT TAXA CHARACTERISTIC OF BURTON MESA CHAPARRAL ON THE DANA RESERVE

Sensitive Plant Species Impacted Alternative Plan	Rarity	Impact (approx. count)*	Impact degraded canopy (sf)	Percent of 35 Acres degraded habitat impacted
Herbs				
California spineflower [annual]	4.2	800,000**	variable	--
Mesa horkelia ² [perennial]	1B.1	6608	5947	0.39%
Shrubs				
Nipomo mesa ceanothus	1B.2	8	56s	<0.01%
Sand almond ³	4.3	127	897	0.06%
Sand buck brush	4.2	2	14	<0.01%
Sand mesa manzanita	1B.2	323	2280	0.15%
Rare shrub totals			3509	0.23%
Trees				
Coast live oaks (canopy)	(not rare)	155	101,160	6.64%
Total Rare Shrub, Oak Tree and Mesa Horkelia Canopy Cover			110,616 (2.5 acres)	7.26%

*Refer to Table 19 in Biological Report (Sept 2021)

**Count of individuals highly variable, depending on seasonal climate conditions. Individuals may occur in disturbed grassland or among chaparral shrubs in sandy soil.

Common species such as coyote brush, monkeyflower, California sagebrush, and chamise also occupy less than two percent vegetative cover within the chaparral habitat boundary. Low native shrub cover is due to decades of mowing and grubbing for livestock range management.

The functions and values of the Burton Mesa chaparral on site is very low; shrub cover is not contiguous, and does not provide substantial cover for songbirds, mammals, reptiles or insects. Unique habitat functions not present on the Dana Reserve include sufficient flowers, fruits, and vegetation necessary to support a stable population of chaparral dwellers such as rabbits, mice, voles, songbirds, bees, butterflies, spiders, flies, lizards, horned lizards, and snakes.

Chaparral habitat, as opposed to individual plants, may be mitigated by conservation of intact habitat, enhancement of weedy or lightly damaged protected habitat, restoration of degraded habitat, or re-creation of high-quality habitat. Depending on the approach taken, a ratio of 1 to 1 or higher may not be biologically necessary, given the low function and values of existing habitat being mitigated.

² A large proportion of impacted Mesa horkelia occurs along the edge of oak woodlands, NOT in the chaparral habitat. They are all included here for illustrative purposes.

³ Dune almond grows on sandy soil in and adjacent to maritime chaparral in San Luis Obispo County.

When **conserving** excellent but currently unprotected high-quality habitat as mitigation for the loss of degraded habitat, a 1.5 to 1 ratio will avoid loss of overall habitat quality because conservation with management for the benefit of unique habitat functions will offset the loss of highly degraded habitat. A ratio of more than 1:1 is needed because conservation does not produce new habitat, though it does provide legal protection for high-quality habitat against the possibility of future loss or degradation from lawful activities. The conserved habitat will also be managed to ensure that its high quality will be maintained.

When **enhancing** moderate to poor quality protected habitat as mitigation for the loss of degraded habitat, a 2 to 1 ratio will avoid loss of overall habitat quality because unique habitat functions that support chaparral dwellers is substantially improved by reducing invasive species cover, and/or reducing access that causes disturbance that otherwise diminishes chaparral habitat functions and values. The 2 to 1 ratio accounts for the fact that the habitat is already protected, though it is in poor to moderate condition.

When **restoring** damaged protected habitat as mitigation for the loss of degraded habitat, a 0.5 to 1 ratio will avoid any loss of overall habitat quality because weed removal in concert with replanting and routine maintenance for the benefit of habitat functions significantly improves habitat functions and values from a degraded or damaged condition. A ratio of less than 1 to 1 is sufficient because restoration of damaged protected habitat will substantially improve the condition of such habitat. An acre of restored habitat will have substantially more biological value than an acre of degraded habitat. A half-acre of restored habitat would function at least as well, if not better than an acre of degraded habitat.

When **recreating** high quality habitat on completely disturbed land such as abandoned farmland, a 0.25 to 1 ratio will avoid any loss of overall habitat quality because conversion from completely degraded conditions to a highly functioning habitat transforms the land from zero chaparral habitat value to high quality chaparral habitat. A ratio of less than 1 to 1 is sufficient because recreating high quality habitat where none currently exists will result in the creation of all new habitat where it had been eliminated. A quarter-acre of recreated habitat will have significantly more value than no habitat at all.

In summary, rare plant taxa associated with the Burton Mesa chaparral habitat on the Dana Reserve should be mitigated by replacement at ratios consistent with their rarity. These taxa should be planted in habitat protected for its chaparral functions and values for wildlife. The degraded habitat lost may be mitigated by a variety of methods from conservation of intact habitat, enhancement or restoration of moderate to poor quality habitat, and/or recreation of high-quality habitat.

3 REFERENCES

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PleinAire Mitigation Graphics



CONCEPTUAL NATIVE GARDEN AREA PLAN - MCA 5

0 20 40 80
SCALE: 1" = 40'-0" NORTH

PLANT LEGEND - NATIVE GARDEN AREA

TREES

SYMBOL	NAME	QTY.
T1	QUERCUS AGRIFOLIA COAST LIVE OAK	38
T2	PLATANUS RACEMOSA WESTERN SYCAMORE	2
T3	PRUNUS LUCIFOLIA HOLLYLEAF CHERRY	22

PRIMARY SHRUBS

SYMBOL	NAME	QTY.
S1	ARCTOSTAPHYLOS RUDIS SAND MESA MANZANITA	49
S2	CEANOTHUS CUNEATUS VAR. FASCICULARIS SAND BUCK BRUSH	48
S3	CEANOTHUS IMPRESSUS VAR. NIPOMENSIS NIPOMO MESA CEANOTHUS	47
S4	CLARKIA SPECIOSA SSP. IMMACULATA PISMO CLARKIA	78
S5	HORKELIA CUNEATA VAR. PUBERULA MESA HORKELIA	254
S6	MUCRONEA CALIFORNICA CALIFORNIA SPINEFLOWER	308
S7	PIPERIR MICHAELII MICHAEL'S PIPERIA	38
S8	PRUNUS FASCICULATA VAR. PUNCTATA SAND ALMOND	89

SECONDARY SHRUBS

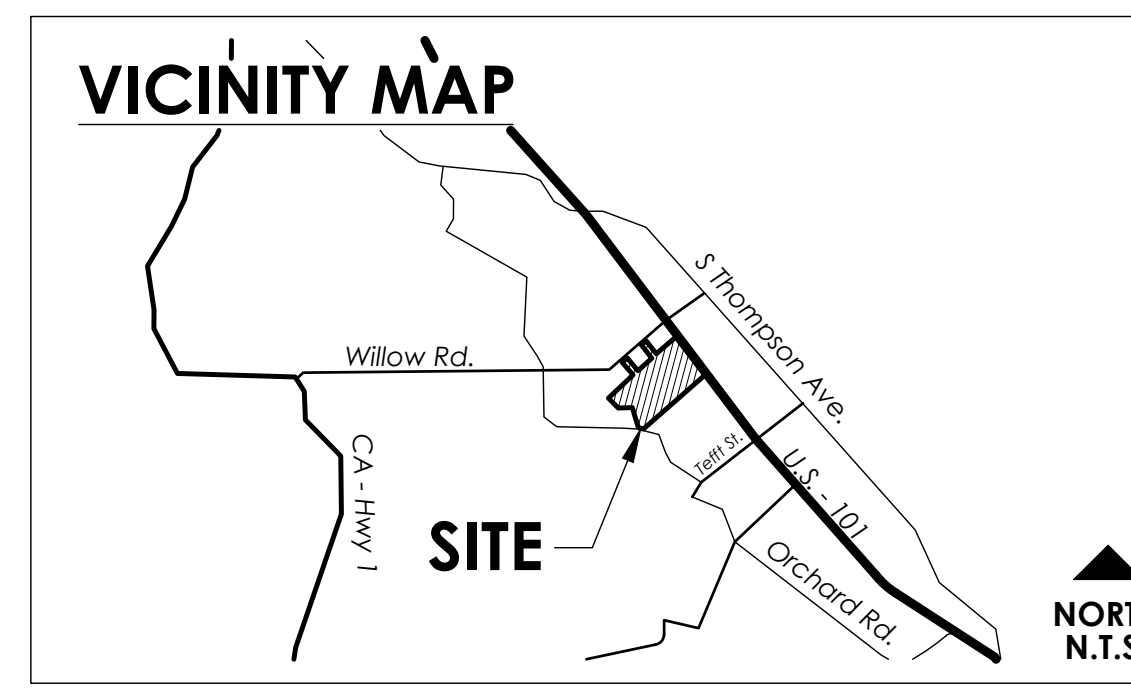
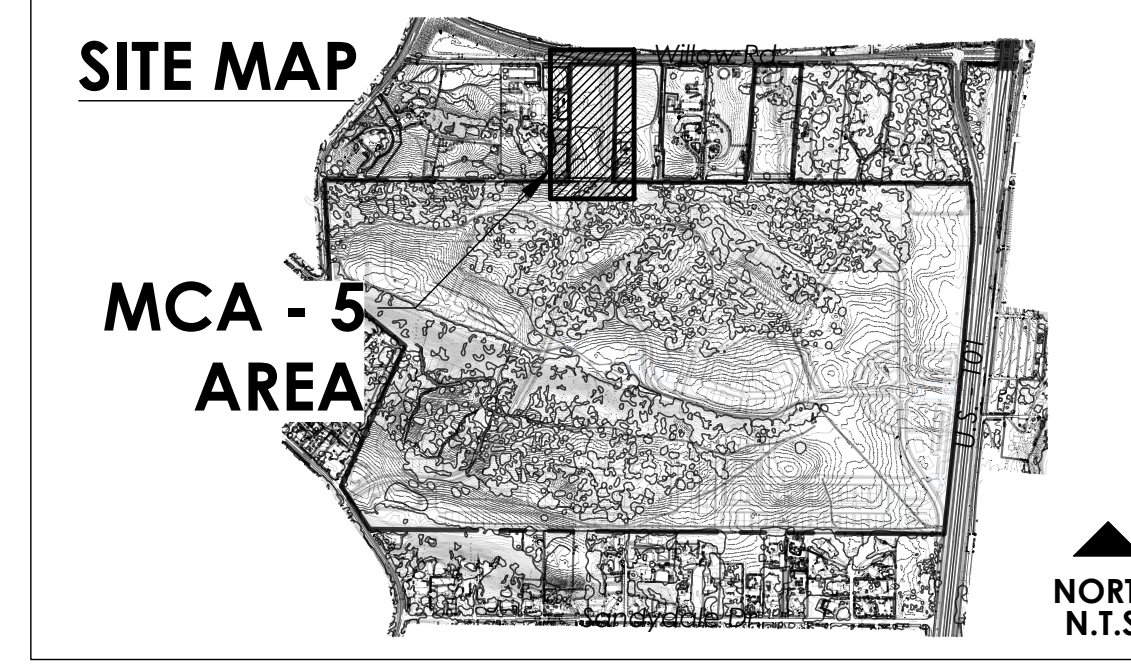
SYMBOL	NAME	QTY.
S9	ACMISPON GLABER DEERWEED	54
S10	ARTEMISIA CALIFORNICA CALIFORNIA SAGEBRUSH	56
S11	BACCHARIS PILLULARIS COYOTE BUSH	22
S12	FRANGULA CALIFORNICA COFFEEBERRY	32
S13	CROCANTHEMUM SCOPARIUM COMMON SUN ROSE	66
S14	HETEROMELES ARBUTIFOLIA TOYON	22
S15	SALVIA MELLIFERA BLACK SAGE	71
S16	SAMBUCUS NIGRA SSP. CAERULEA BLUE ELDERBERRY	20
S17	CEANOTHUS 'CONCHA' CONCHA CEANOTHUS	82
S18	RHUS INTEGRIFOLIA LEMONADE BERRY	52
S19	CARPENTERIA CALIFORNICA BUSH ANEMONE	65
S20	SALVIA APIANA WHITE SAGE	51
S21	CORNUS SERICEA CREEK DOGWOOD	14
S22	CEANOTHUS 'CARMEL CREEPER' CARMEL CREEPER CEANOTHUS	20

GROUNDCOVERS

SYMBOL	NAME	QTY.
G1	ANNUAL BROME GRASSLAND NATURALIZED PERENNIAL GRASSLAND	12,581 SQ. FT.

LEGEND

- A. OAK WOODLAND
- B. SECONDARY PLANTING
- C. MARITIME CHAPARRAL
- D. NATURALIZED GRASSES/MEADOW
- E. RIPARIAN AREA
- F. CALIFORNIA NATIVE PLANTING
- G. INTERPRETIVE SIGNAGE AREA



DANA RESERVE
MARITIME CHAPARRAL MITIGATION AREA PLAN

NIPOMO // SAN LUIS OBISPO COUNTY, CALIFORNIA 93444

**DANA RESERVE
MARITIME CHAPARRAL MITIGATION AREA PLAN**

NIPOMO // SAN LUIS OBISPO COUNTY, CALIFORNIA 93444

PRIMARY SHRUBS



Sand Mesa Manzanita



Sand Buck Brush



Nipomo Mesa Ceanothus



Pismo Clarkia

PRIMARY SHRUBS



Mesa Horkelia



California Spineflower



Michael's Piperia



Sand Almond

SECONDARY SHRUBS



Deerweed



California Sagebrush



Coyote Bush



Coffeeberry



Common Sun Rose



Toyon



Black Sage

SECONDARY SHRUBS



Blue Elderberry



Ceanothus Concha



Lemonade Berry



Bush Anemone



White Sage



Creek Dogwood



Carmel Creeper Ceanothus

TREES



Coast Live Oak



Western Sycamore



Hollyleaf Cherry

OTHER AMENITIES



Protection Signage



Interpretive Signs



Wood Benches



DG Path



Wood Rail Fence

NOTE:
PLANT IMAGERY SHOWN IS REPRESENTATIVE ONLY.
FINAL SELECTIONS MAY VARY.

NOTE:
AMENITY IMAGERY SHOWN IS REPRESENTATIVE ONLY.
FINAL SELECTIONS MAY VARY.

SHEET TITLE

**CONCEPTUAL
IMAGERY**

OWNER NKT Development, LLC
684 Higuera Street, Suite B
San Luis Obispo, California 93401

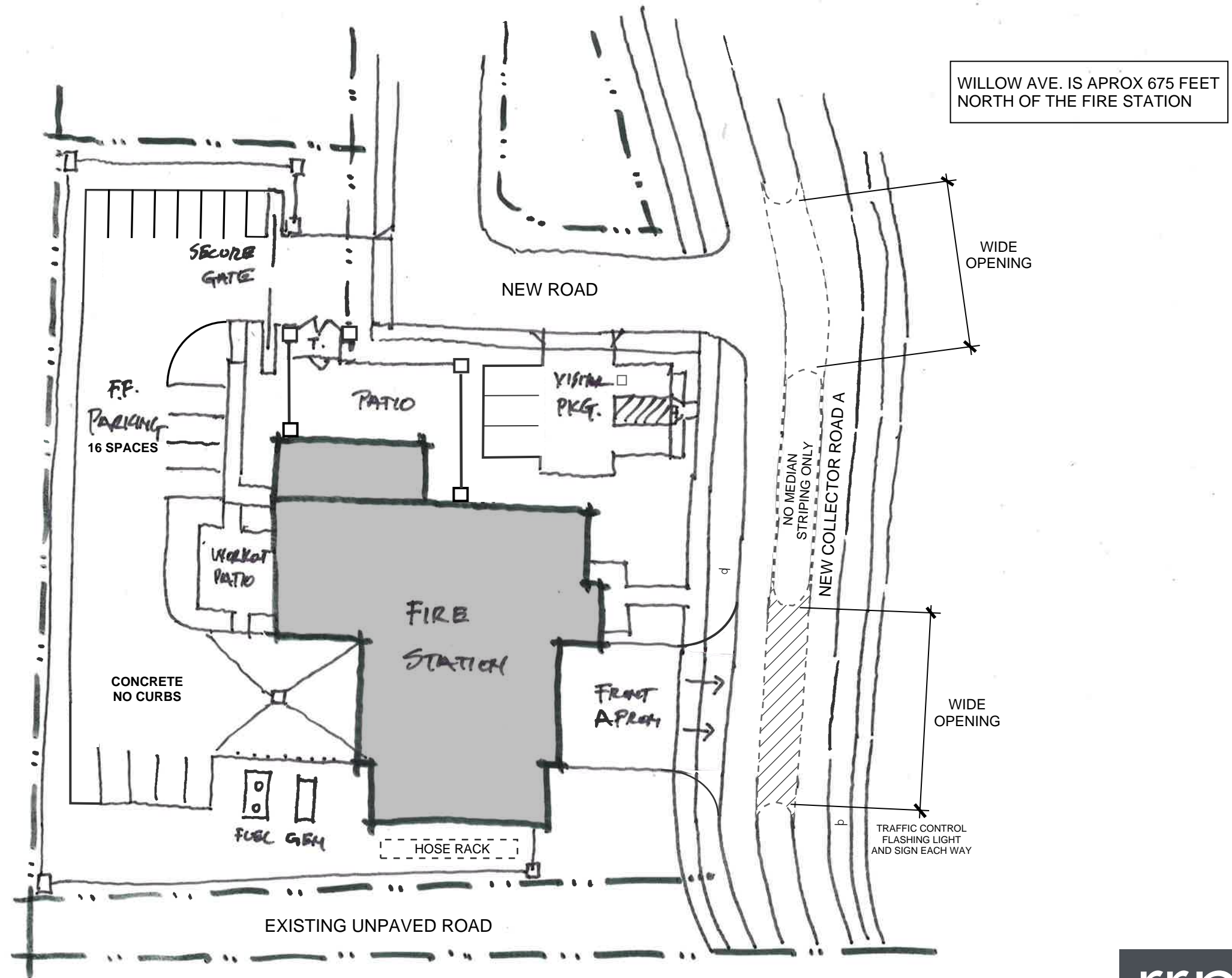
DATE 2022.03.17
22214

SHEET NO.

L-03

PROJECT INFORMATION:

1 STORY FIRE STATION
SITE AREA: 1.15 ACRES
VISITOR PARKING SPACES: 5
FF PARKING SPACES: 16



DANA RESERVE
FIRE STATION SITE LAYOUT



Jennifer Guetschow

From: Brian Hascall <bhascall@aol.com>
Sent: Sunday, July 31, 2022 5:59 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Preserve Project Comments

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Dear Ms. Guetschow,

My wife and I would like to express our opposition to the Dana Preserve project at this time.

While we are not fundamentally opposed to this project at some time in the future, we are currently in the grip of the worst drought to strike this area in modern history.

Most residents of Nipomo have been required to cut our water usage by 20% under pain of heavy fines and possible water meter restrictors being placed if we do not comply. This will most likely worsen without relief from the drought. The logistics of adding over 1300 water meters and the tremendous increase of use of ground water resources is unfathomable during this drought. We would request that this project be shelved until the drought issue is resolved and water supplies return to normal.

Sincerely,

Brian and Brenda Hascall
North Tejas Place
Nipomo

Jennifer Guetschow

From: Brian Sawyer <sawyer.brian@gmail.com>
Sent: Sunday, July 31, 2022 7:12 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve Comments - Sawyer

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

SLO Planning Commission

ATTN: Dana Reserve / Jennifer Guetschow; jguetschow@co.slo.ca.us

976 Osos Street, Room 300

San Luis Obispo, CA 93408

Ms. Guetschow,

I am writing you as a longtime Nipomo resident where I am also raising my young family. I have many concerns over the proposed Dana Reserve Project. I recognize the immediate need to housing in the SLO area but placing one massive project like this in Nipomo will drain the areas limited resources without providing any of the benefits stated by the project. Cramming 1300 homes into an already highly taxed small town seems like very poor planning and should not even have made it to this stage. Nipomo already suffers from heavy traffic, poor air quality, crowded schools, and limited park and recreational areas.

Traffic on Tefft is already notoriously heavy and will shortly be getting much worse with the addition of the large new strip mall on the S Frontage Rd containing many big box store. Willow traffic is also very heavy as it services BOTH the Blacklake and Monarch Dunes developments as well as all of the agricultural traffic headed to Guadalupe. As a resident living with my property directly touching 900 feet of Willow right off 101 I can tell you that there are many times during morning or evening rush hours that it is not possible to turn onto Willow due to this traffic. An additional 1300 homes with multiple cars per unit will choke Willow back onto highway 101 which is already beginning to clog during evening rush hours. This will make South County essentially gridlocked during evening rush hours. The plan ignores many of these issues by insisting that the installation of a traffic light at the 101/Willow intersection will solve all these problems but that is not the case. More modern traffic studies are needed for this development since the most recent ones used appear to be several years old.

Air Quality on the Nipomo Mesa has always been a top concern and the Air Pollution Control District is constantly issuing alerts due to dust and silica blown over the Mesa from the Dunes. Vegetation and especially trees are one of the few things that mitigates this dust on the Mesa the removal of almost 4000 mature oak trees is unacceptable as well as incompatible with San Luis Obispo's south county area plan. Allowing the removal of mature trees to be replaced by

non-developable areas that are very distant from the community sets a terrible precedent that will allow future developers to essentially clear huge amounts of mature trees and cause extensive vegetative loss in the local community. The current development plan is nothing short of a maximum housing cash grab with no environmental stewardship whatsoever.

Nipomo area schools are currently barely able to cope with the current population much less the addition of 1300 families. Nipomo High School is at 140%+ capacity with other schools in the area being very close to full capacity. There is no discussion in the EIR of the developer's plan to fund or provide for the requisite additional schooling facilities which would typically be included in a project of this scope.

Finally this is NOT, as stated in the project plan, a development with "multiple open green spaces" and public parks. There is ONE park in the middle of the development that even the County Parks called "too small and encumbered with drainage features that should not count toward acres used for park land". The other green spaces are simply access areas and curbsides. Compared to the pocket parks in Monarch Dunes or Blacklake, both much more responsible developments with their own hosts of issues this one is abysmal. Further the developer request to waive the Quimby fees by donating this land as a park is a joke. This park, that the County says shouldn't even be considered a park was required for project drainage. The developer should still be required to pay Quimby fees in any case to pay for his own "park" as well as the much heavier use of the actual local parks in Nipomo.

There are many more issues that I'm certain you are being inundated with so I will stop there. But overall I think it is shameful that San Luis Obispo County would even humor this current plan and EIR which is rife with Class I impacts. This would be the largest development this area has ever seen at a time when traffic, air pollution, school crowding, and public services in Nipomo are at their worst levels ever. Affordable housing is certainly needed in SLO county but it is needed evenly around the entire county, not packed into one high-density area so that one developer can make a billion dollars on the backs of the Nipomo citizenry. The massive negative impacts to Nipomo will not overcome any social or economic benefit seen by such an irresponsible plan.

Brian & Natalie Sawyer

622 Cherokee Pl

Nipomo, CA 93444

Rwd 8.1.22

SLO Planning Commission
c/oJennifer Guetschow; jguetschow@co.slo.ca.us

I am writing to express my concern regarding the Proposed Dana Reserve Project, a development project that will develop 288 acres in the Unincorporated County Community of Nipomo.

After reading the Draft Environmental Impact Report (DEIR), the Un-mitigatable Significant Class 1 issue which concerns me most is (circle or write in your greatest concern):

- Housing (imbalanced housing vs job creation, which also increases traffic)
- Transportation (increase traffic, impacts on many roads throughout Nipomo)
- Air Quality
 - Greenhouse Gas Emission
- Land Planning (multiple elements of the project are out of alignment with the south county area plan, including how this land was intended to be developed vs the present project)
- Biological impacts (3,948 oak trees to be removed, federally endangered species to be removed, special habitats to be removed)
 - Write in other issues of concern (i.e Water, public services) not determined to be a class 1 issue in the EIR

* Water - lack of it shortages

The limited social and economic benefits of the Dana Reserve Project will not outweigh the many significant impacts of the project. As a citizen of Nipomo, I ask that this project be denied until revised to such an extent that the impacts of the development are greatly decreased. We owe it to Nipomo to present a project that does not significantly decrease the quality of life for existing residents and retains the natural beauty of the land given to Captain Dana in 1837.

DATE: 07/27/22 SIGNED: [Signature]
email: scalisi.carol@gmail.com

Jennifer Guetschow

From: Cherie Fitz-Gerald <Cherfts@outlook.com>
Sent: Sunday, July 31, 2022 7:34 AM
To: Jennifer Guetschow
Subject: [EXT]The Dana Reserve Development

Importance: Low

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Dear County, s

Again, the residents of Nipomo, are having to address the County with a problem the Planning Board already knows exists. This project is no different than the Letitia Project in which the residents of Nipomo proved to the county that the water and road infrastructure are not adequate for this type of development. Nipomo does not have enough water to sustain a project of this size nor does it have the resources to fight a fire if one should occur.

As you well know, the problem for this project is the same as for all the other projects that have been before your board in the last 15 years. WATER, WATER, WATER. The county has put a hold on all water wells being drilled for Agricultural but this also affected Residential Water Wells. We were in the middle of having a well drilled when the SLO County put a hold on any wells being drilled which stopped our residential well from being drilled on the date it was scheduled. NIPOMO HAS A SERIOUS WATER SHORTAGE there are many areas of Nipomo that are dependent on rainfall as our water source. Much of Nipomo's property does not sit on an aquifer, we are in fractured shale. Therefore we do not have a pool of underground water to pull from. Many residential water wells have gone dry in the last 10 years and long time residents have had to re-drill very deep wells in order to have sufficient water for their residential needs. These long time residents are still conserving water even though they have new wells.

Nipomo is also a bedroom community as it does not support head of household jobs which means all future residents will be driving to their jobs location. This creates a problem for the existing road system and there is not a future plan for mitigating traffic, which means it does not have a plan in place for EMERGENCY FIRE EXITING OF THE COMMUNITY.

So let's address the main issues

1. WATER, WATER, WATER - NIPOMO is struggling with being able to supply the current residents with adequate water. Wells have gone dry and back up sources of water have had to be put in place just for normal daily use.
2. ROADS, ROADS, ROADS - The roads in Nipomo are not adequate for an additional inflow of 1500-3000 residents. The county is big on promising permit project money for roads but in the end redirects that money to other less appropriate projects. I have watched this happen since 1984. Project money was dedicated to pave the Thompson Area downtown and it was redirected and never was completed. The permit money was used to support 13 other ridiculous projects that were also never completed.
3. SCHOOL SAFETY-The existing community does not have adequate roads to evacuate the schools if there were a fire or other natural disaster or God forbid another school shooting.
4. NIPOMO IS A BEDROOM COMMUNITY-People sleep here they do not work here. There are very few HEAD OF HOUSEHOLD JOBS in Nipomo. This forces residents to use natural resources already in short supply putting them in a commuting position just to get to work.
5. SOUTH COUNTY AREA PLAN-this project is not in alignment with the plan on how this land was intended to be used.
6. BIOLOGICAL IMPACTS-the loss of over 3000 native California oak trees (old growth) and the irreparable loss of federally endangered species and native habitats.

As a long time Nipomo resident I have been involved in many of the county workshops and planning of developments. What was promised has usually never been brought to fruition.

It is time the county stops asking us to fight for what they know is not a good fit with the community. This is not why the residents of Nipomo have spent so many hours of our time meeting with County Officials, Boards, and Commissions. We have had workshops and have set up Advisory committees and still have to bring all these issues back to the County's attention with each newly elected board or commission. It is time for you to communicate amongst yourselves so that these projects do not even get to this stage.

Please deny this project due to the shortage of WATER in our community, the inadequate ROAD infrastructure and the ENVIRONMENTAL IMPACT on natural and federal species including but not limited to Native California Oak Trees and wildlife.

Sincerely,

Cherie A. Fitz-Gerald
380 Rim Rock Road
Nipomo, CA 93444
(805) 680-3753

Sent from [Mail](#) for Windows

Jennifer Guetschow

From: Cheryl Carlsen <cheryl92708@yahoo.com>
Sent: Monday, August 1, 2022 11:59 PM
To: Jennifer Guetschow
Subject: [EXT]PROPOSED DANA RESERVE PROJECT

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Hello, Jennifer,

I am sending this email to oppose the proposed Dana Reserve Project in its current form.

I am an owner with my husband, living adjacent to the property, where Hetrick and Glenhaven meet to form a hairpin turn.

The DEIR issues that concern me most are:

1) Removal of almost 4,000 oak trees and rare and endangered plants and native habitats. This is going to totally change the character of Nipomo, replacing the trees with high-density housing backed up to existing rural lots. I am also concerned about the effect on air quality. The trees have provided a wind-break, and with their removal, the increased dust in the air is going to be detrimental to health quality, especially us seniors with pre-existing conditions.

2) the increased traffic created by the addition of so many units. We already have traffic issues in our neighborhood with impatient drivers taking the shortcut from Pomeroy to Ten Oaks to Glenhaven to Hetrick at high speeds. It's hardly safe to walk around that corner now and with more cars, there will be more danger. I'm also concerned about the increased traffic that will be created on Willow.

I hope that you will take these concerns into consideration before approving the Project as it is today. Maybe fewer homes should be considered. Thank you.

Cheryl Carlsen
714 Glenhaven Place

Jennifer Guetschow

From: Leslie Mehigan <lesliehorton3@hotmail.com>
Sent: Friday, July 29, 2022 6:49 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

SLO Planning Commission

c/o Jennifer Guetschow; jguetschow@co.slo.ca.us

Dear Jennifer,

We are writing to express concerns regarding the Proposed Dana Reserve Project, a project that will develop 288 acres in the Unincorporated Community of Nipomo. We have been residents of Nipomo for 15 years, raising our children here, and plan to stay for many years to come.

After reading the Draft Environmental Impact Report (DEIR), the Un-mitigatable Significant Class 1 issues that concern us the most are increased traffic and the removal of almost 4,000 oak trees:

- Housing (imbalanced housing vs job creation, which also increases traffic)
- Transportation (increase traffic, impacts on many roads throughout Nipomo)
- Air Quality • Greenhouse Gas Emission
- Land Planning (multiple elements of the project are out of alignment with the south county area plan, including how this land was intended to be developed vs the present project)
- Biological impacts (3,948 oak trees to be removed, federally endangered species to be removed, special habitats to be removed)

Other areas of concern are future water availability and cost for Nipomo residents.

The limited social and economic benefits of the Dana Reserve Project will not outweigh the many significant impacts of this project. As a longtime resident of Nipomo, we ask that this project be denied until revised to such an extent that the impacts of the development are greatly decreased. We are not opposed to new housing developments in Nipomo, we just fear this project is too large and destructive to our beautiful town.

Thank you for your time,

Chris and Leslie Mehigan
880 Chata St.,
Nipomo
lesliehorton3@hotmail.com



Craig A. Steele

T 805.439.3515
F 800.552.0078
E csteele@rwglaw.com

847 Monterey Street, Suite 207
San Luis Obispo, California 93401
rwglaw.com

August 1, 2022

VIA ELECTRONIC MAIL jGuetschow@co.slo.ca.us & U. S. MAIL

Jennifer Guetschow
Supervising Planner
County of San Luis Obispo
976 Osos Street, Room 300
San Luis Obispo, California 93408

Re: Dana Reserve Specific Plan Draft Environmental Impact Report

Dear Ms. Guetschow:

I serve as legal counsel to the Nipomo Community Services District (“NCSD” or “District”). On behalf of NCSD, we submit the following comments on the Draft Environmental Impact Report (“DEIR”), State Clearinghouse No. 2021060558, dated June 2022, which was prepared by San Luis Obispo County (“County”) in connection with the proposed Dana Reserve Specific Plan and associated land use entitlements (the “project”). As noted in the DEIR, NCSD is a responsible agency for the project as defined in CEQA Guidelines Section 15381, and would rely on the Final EIR (if certified by the County) as a part of its consideration of the project developer’s application for annexation into the District.

NCSD requests that the DEIR be revised as requested in this letter, and that NCSD’s comments and the County’s responses be included in the Final EIR in accordance with CEQA Guidelines Section 15088.

Executive Summary

1. Table ES-1: The 22.3 acres shown for “Village and Flex Commercial” zones is not consistent with the 18.9 total acres listed for those use categories in table 4.19.19. 18.9 acres of commercial development was evaluated in NCSD’s Water and Wastewater Service Evaluation for the project dated March 30, 2022 (See Table 2.5). The March 30, 2022 evaluation superseded the February 7, 2022 version that was incorrectly included in the DEIR as Appendix H. Please correct table ES-1 and replace the February version of the evaluation with the attached March 30, 2022 version.

2. Under Project Objectives, item 10 should include meeting State law requirements for energy efficiencies and State law and NCS D policies and ordinances relating to water conservation. In item 13 please add the words “and Annexation Policy” between “District Code” and “to ensure....” Also, please add the words “funds or” between “DRSP” and “constructs....” Same comments on pages 2-14 and 5-2.
3. Mitigation Measure AES/mm-3.1 (wherever it appears in the document): For clarity, this mitigation measure should refer to the numerical tree replacement ratio required in BIO/mm-18.2.
4. Mitigation Measure AQ/mm-3.2 (wherever it appears in the document): Please note that reclaimed water is not available from the District. Further, requiring the contractor or builder to “consider” use of an approved dust suppressant to reduce the amount of water used during construction is not a specific action to reduce or eliminate an impact of the project, and thus not an adequate mitigation measure. The contractor and developer should be required to use approved dust suppressants instead of water if feasible. See, AQ/mm-3.3(5).
5. Mitigation Measure BIO/mm-1.1 (wherever it appears in the document): Please clarify that this measure applies to both off-site improvements and the specific plan area (see BIO impact 11).
6. BIO impacts 11-13 (wherever this discussion appears in the document): Do these activities require permits from CDFW and USFWS? If so, the mitigation measures should so-specify and note that obtaining and complying with the permits would be the obligation of the applicant.
7. Mitigation Measures BIO/mm-12.1 and 13.1 (wherever they appear in the document): These mitigation measures should be revised to provide that the studies, project biologist’s work, relocation, nesting bird surveys, other mitigations and their costs, permit costs, and costs of avoidance are all the applicant’s responsibility.
8. BIO Impacts 16, 17, and 19, and Mitigation Measures BIO/mm-16.1, 17.1, 17.2, 17.3 and 19.1 (wherever they appear in the document): All existing NCS D water and sewer lines are attached to the underside of SLO County’s Nipomo Creek Bridge, which reduces or eliminates impacts to the Creek. The proposed upsized water line in this area also would be attached to the underside of the bridge to avoid impacts and disturbance to the Creek. All compliance obligations in the mitigation measures must be made at the applicant’s cost.
9. BIO/mm-17.1 and 17.2 (wherever they appear in the document): clarify that all requirements listed for NCS D including, without limitation, retaining a biologist and

complying with these measures and any permit conditions, shall be at the applicant's expense.

10. Mitigation Measures CR/mm-1.1, 2.2, 2.3 and 2.4 (wherever they appear in the document): Please make the language of 1.1 consistent with 2.2, 2.3 and 2.4 to reflect that the applicant will fund and complete the Historical Resources Evaluation. Please revise all CR mitigation measures to provide that the mitigation measures would be the applicant's obligation to fund and complete.
11. GEO Impact 9, implementation of Mitigation Measures GEO/mm-8.1 through GEO/mm-8.3 (wherever they appear in the document): See comment regarding CR/mm-1.1.
12. Mitigation Measure N/mm-1.1 and discussion of noise impacts (wherever they appear in the document): Note that construction of off-site NCSD improvements may require night construction activities between the hours of 10 p.m. and 6 a.m. to avoid impacts to customers and systems associated with the connection of water and wastewater improvements to existing NCSD systems. Under County LUO Section 22.10.120(A)(7), the noise and construction hour limitations do not apply to NCSD's work on the maintenance or modification of its facilities. That correction should be throughout the document where the reference to Section 22.10.120 appears.
13. Noise Impact 2: See comment above regarding Mitigation Measure N/mm-1.1 and the applicability of the County's Land Use ordinance.
14. Impact PS 1: Mitigation Measure PS/mm-1 should be labeled in this chart. As drafted, the mitigation measure is inadequate to support the conclusion that the project's impact on the need for fire services will be mitigated. As drafted, the mitigation measure does not require that a new fire station be constructed, as the discussion of the impact seems to require. Simply dedicating land for a new fire station does not guarantee that fire services and responses will be improved. When will the dedication be required? When will the new fire station be constructed? What will be the mechanism be to guarantee that new fire station is constructed, equipped and staffed? Is a new fire station required before the first certificate of occupancy is issued, or at some later point?
15. Mitigation Measure WF/mm-3.1 (wherever it appears in the document): NCSD will require vehicular access for NCSD vehicles for all NCSD maintained water and sewer improvements located in any easement or open space area. However, note that NCSD typically does not accept facilities located in easements, unless no other reasonable alternative exists.
16. Mitigation Measure USS/mm-3.1: This measure should be revised to require the NCSD's "approval" rather than "affirmative concurrence" pursuant to the findings required under

NCSD's annexation policy and the District's standards for new water and wastewater services.

17. Under Section 6, Areas of Controversy, please note that the adequacy of the potable water supply has also been raised as areas of controversy, although NCSD's evaluation shows that there is sufficient water supply available to serve the project, as detailed in the correct version of Appendix H.
18. Description of Alternate 5. It seems that this alternative might reduce identified impacts to public services including water and wastewater. See comments below regarding the alternatives analyses.

Project Description

19. Section 2.2.1.2.2: Item 2 under Wastewater System Improvements should include the words "and force main" after "sewer lift station" and, in item 4, note that the improvements at the Southland plant were analyzed in the EIR NCSD certified for the Southland Wastewater Treatment Facility in 2011. Same comment as to item 4 at the top of page 2-47.
20. Page 2-8, footnote 3: The text should be revised to note that the project was planned as a part of the NCSD's 2007 Masterplan. The CEQA analysis for the increased pipe size was completed and approved by the NCSD Board in March of 2020. Same comment as to footnote 6 on page 2-47.
21. Section 2.5.2, second paragraph: Please revise to note that a responsible agency also could be required to make consistency determinations relating to this EIR, not just the County. See the last sentence of Section 2.5.3.4.4, for example.
22. Page 2-25: Are ADU estimates included in the number of units listed in Table 2.5?
23. Section 2.5.3.4.3 and Figures 2-20, 2-21 and 2-22: The text should note that all water and sewer lines dedicated to, and accepted by, NCSD must be located within public streets or dedicated property. NCSD does not accept easements unless no reasonable alternative exists. For new development, the project can be designed to avoid using easements alternatives. On Figures 2-20 and 2-22, and on figures 4.19-2 and 4.19-3, please clarify that the labeled 16" water line and 12" sewer line do not currently exist.
24. Pages 2-46, item 2 under Off-Site Wastewater System Improvements please add the words "and force main" after "sewer lift station."
25. Table 2-11: Total units for NBD 9 shown is inconsistent with the information in Table 2-4.

26. Table 2-11: Please verify and correct the unit numbers in the vertical columns for residential multi-family development DR-SF2, which do not appear to match. Otherwise, clarify why the combined numbers in each NBD do not add up to the totals provided.
27. Page 2-57: The description of the NCS D Board’s potential annexation actions following the County’s potential approval of the requested project entitlements is not complete. The applicant has already submitted an annexation application to NCS D. If the requested entitlements are approved, the NCS D Board will consider the requested annexation pursuant to its Annexation Policy, approved through Resolution 2020-1549. As noted several times in this comment letter, NCS D’s Annexation Policy is a critical policy document that should be included in the DEIR’s analysis. The NCS D Board also will consider an annexation agreement between NCS D and the developer, and a Property Tax Revenue Exchange Agreement to be negotiated between NCS D and the County. If the applicant complies with the conditions of NCS D’s annexation policy and the District’s Board approves the above-described documents, SLOLAFCO would consider the annexation proposal thereafter. The last sentence of this paragraph should be revised to provide that “SLOLAFCO would then coordinate with the County and NCS D to ensure that a proper plan of services is in place to guide orderly development of the annexed property.”

Environmental Setting

28. Section 3.2.1.10: The Nipomo Community Services District Code and its Annexation Policy, adopted through Resolution No. 202-1540, are applicable to the project and should be described in this Section.

Environmental Impacts Analysis

29. In general, for all mitigation measures that may be applicable to off-site improvements or work done by or with NCS D in connection with the project, NCS D requests that each mitigation measure be revised as necessary to clarify that all work required by that measure will be at the applicant’s expense.

Section 4.4 Biological Resources

30. For discussion of potential biological impacts of off-site improvements in the area of Nipomo Creek, including in Section 4.4.1.3.3, please note our comments above regarding BIO Impacts 16 and 17, and the location of NCS D improvements in relation to Nipomo Creek. This issue is especially important to the analysis of potential impacts to habitat, since the Creek itself need not be disturbed.
31. Section 4.4.1.3.3: The “wetland delineation” for off-site improvements should not be deferred. While the off-site improvements are not designed, the general locations are

known. The DEIR makes a determination on these issues for the “Specific Plan Area” in Section 4.4.1.2.3. At a minimum, this section should specify that the “wetland delineation” for the off-site improvements must be completed at the applicant’s expense and prior to the NCS D’s consideration of any annexation application, but it is not clear that later completion would protect the EIR against a “deferred mitigation” challenge. NCS D believes the work should be done before the EIR is certified.

32. Mitigation Measure BIO/mm-1.1: Please clarify whether the term “within the project area” includes off-site areas as well as the Specific Plan area.

Section 4.15 Public Services

33. PS Impact 1: See comment above regarding Mitigation Measure PS/mm-1. The text of Section 4.15 makes vague reference to the project’s contribution to the County’s Public Facilities Fees to off-set “project specific” impacts related to increased demand for fire services but does not identify how the developer’s payment of those fees over a significant period of time (presumably tied to building permit applications) will guarantee that there is a fire station, firefighters and equipment on-site when the impacts of this development begin to be experienced by the residents of Nipomo. Section 4.15 also notes that the project’s payment of the Facilities Impact Fee will fund improvements to County parks and libraries too, so it is not at all clear how the fire station will be funded and built, or when. The discussion of the impact notes that subsequent CEQA review of the fire station project will be required, but does not specify how, when, or at whose cost that review will be conducted. Without that level of specificity the DEIR’s conclusion that impacts will be less than significant after mitigation is not supported.
34. Section 4.15.6: In the discussion of cumulative impacts on public services, the DEIR states: “Development of a new CAL FIRE station in the community of Nipomo would further reduce response times by providing additional firefighters, fire engines, and other equipment to serve the area.” Again, the dedication of land for a fire station and the payment of a County fee over time, without more, will not “further reduce response times.” Comments regarding Impact PS 1 are restated here.

Section 4.19 Utilities and Service Systems

35. Page 4.19-3, last paragraph: After the words “groundwater supply” please add “though diminishing as a result of the drought,” and add “under current projections” after “is considered reliable.” Also, please add the following sentence: “Under NCS D’s Annexation Policy, any property annexed to the District is to be served only by imported water.” This added sentence would also be appropriate to add to the imported water discussion on page 4.19-4.

36. Page 4.19-4, second full paragraph: The sentence that begins “[p]ortions of the...” should be revised to read as follows: “The Santa Maria River crossing 24-inch pipeline of the NSWSP was designed with a delivery limit of 6,200 AFY of water. However, the license agreement between the County of Santa Barbara and NCSD, that limits the permissible delivery to 3,000 AFY, would need to be amended to allow NCSD full use of the NSWSP’s pipeline design limit of 6,200 AFY.”
37. Tables 4.19-10, 11 and 12: The number of annexations under review should be 176, pursuant to NCSD’s Urban Water Management Plan.
38. The years in Table 4.19-12 are mislabeled. The years should be 2021-2025. The groundwater supply total line should read 1,267 in each column.
39. Table 4.19-4: It is not entirely clear which data from the MKN report is incorporated in this table, but the “Peak Hour Flow” line appears to be incorrect. Based on Table 3-13 of the MKN report, however, this number should be 1.5 mgd.
40. Table 4.19-16: In the 10 year water production column, the “residential suburban” line should read 96,198 under the DR Evaluation, pages 3-6.
41. Pages 4.19-8 and 4.19-13: Appendix H, as circulated with the DEIR is the incorrect version of the water evaluation, as stated above. We do not believe that this update materially changes the impacts analysis. Please correct.
42. Page 4.19-17: IWMA does not actually “oversee local waste providers.” The appropriate term instead of “waste producers” would be “waste hauler” or “waste disposal services provider.” More important, each individual community member of IWMA “oversees” its waste hauler through a franchise agreement and, in the case of NCSD, local ordinances. IWMA provides compliance and monitoring services to its member agencies.
43. Section 4.19.2.3.4: Again, NCSD’s Annexation Policy and the District Code are part of the regulatory framework applicable to the project. For example, the six stages of drought response noted in the text are enforced through the NCSD Code. The Annexation Policy, as just one example, requires that new annexations be served only with imported water, which emphasizes the need for Santa Barbara County to drop its arbitrary limit on the amount of water Nipomo may import under the license agreement for the Nipomo Supplemental Water Project, as NCSD has repeatedly requested. Table 4.19-17 should be updated accordingly.
44. Page 4.19-31, second paragraph under “Construction”: Note that construction of off-site NCSD improvements may require night construction activities between the hours of 10 p.m. and 6 a.m. to avoid impacts to customers and systems associated with the connection of water and wastewater improvements to existing NCSD systems. Under

County LUO Section 22.10.120(A)(7), the noise and construction hour limitations do not apply to NCSD's work on the maintenance or modification of its facilities. This exception should be noted throughout.

45. Pages 4.19-31 through 43: As to the implementation of the mitigation measures listed in the analysis of impacts UPS Impacts 1-6, inclusive, note our previous comments regarding the applicant's responsibility for the costs of mitigation.
46. Page 4.19-35, first full paragraph: Same comment as number 41 above regarding construction hours.
47. Table 4.19-19, see comment above regarding Table ES-1.
48. Page 4.19-41: The discussion of peak flow conditions should refer to "peak hour flow" not "daily peak flows."
49. Table 4.19-21: The "Project Total Average Daily Flow" should read 228.86 rather than 228.68. "Project Peak Flow" should reflect hourly peak flows, not daily.
50. Page 4.19-46: With regard to SB 1383 compliance, IWMA does not require that haulers provide customers with "compost/green waste bin." Each local jurisdiction, including NCSD, is required by SB 1383 and CalRecycle regulations to impose that requirement on the waste hauler, **and** to require that customers in the jurisdiction comply with the organics recycling mandates. NCSD has adopted these requirements for its customers in the District Code and the Board approved an amendment to the solid waste franchise agreement to implement SB 1383. These requirements would apply to the properties in the project area, if annexation is approved. IWMA's role is to monitor compliance and enforce. These requirements were effective January 1, 2022 and enforcement is scheduled to start January 1, 2023.

Alternatives Analysis

51. Section 5.4.3: Alternative 2 is alternately referred to as "La Cañada Ranch or "Cañada Ranch."
52. Section 5.4.4.3 Analysis of Alternative 3: It is unclear how the proposed alternative could reduce residential development and possibly "preclude" annexation into NCSD due to the cost of infrastructure improvements, yet increase impacts related to utilities and service systems. Section 5.4.4.3.15 states that under this alternative the "demand on public services and facilities also would be substantially reduced." This same section then states that the impacts of off-site improvements would be similar to the proposed project. Section 5.4.4.3.19 then says that this alternative would require the construction of new and expanded utility infrastructure, and may include water storage tanks and septic

systems, which would *increase* impacts to utilities and water service systems. NCS D disfavors any residential alternative that would not take domestic water service from the District due to the potential that such development would adversely impact groundwater resources. It is not clear that the County legally could approve such an alternative. Please clarify the impact statements in this section.

53. Without further clarification of the impacts of Alternative 3, the conclusion that Alternative 3 is the Environmentally Superior Alternative is not supported by the text of the DEIR.

Chapter 7. Mitigation Monitoring and Reporting Program

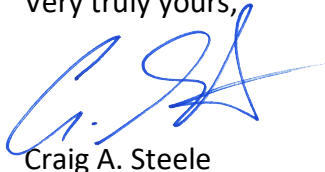
54. Please ensure that NCS D's requested changes to mitigation measures are carried over into the MMRP.

Appendix C

55. Page 3: The location of the proposed lift station should be labeled.
56. Page 4: Please note on the diagram that approximately at the intersection of Camino Caballo and Frontage Road a transition from force main to gravity main may be required.
57. For clarity, the sewer lines shown on pages 8, 9, and 10 are existing.

NCS D appreciates the opportunity to review and comment on the DEIR. We look forward to seeing these comments and the County's responses incorporated into the Final EIR. If you have any questions regarding these comments, please contact Peter Sevcik, NCS D's Director of Engineering and Operations, who participated in the development of these comments, or me.

Very truly yours,



Craig A. Steele

cc: President and Members of the NCS D Board
Mario E. Iglesias, General Manager
Peter V. Sevcik, Director of Engineering and Operations

Attachment

11415-0007\2698928v1.doc



**NIPOMO COMMUNITY
SERVICES DISTRICT
DANA RESERVE DEVELOPMENT
WATER AND WASTEWATER
SERVICE EVALUATION**

MARCH 30, 2022

PREPARED FOR:

**NIPOMO COMMUNITY SERVICES DISTRICT
148 SOUTH WILSON STREET
NIPOMO, CA 93444**

PREPARED BY:



**530B PAULDING CIRCLE
ARROYO GRANDE, CA 93420
805 . 904 . 6530**



NIPOMO COMMUNITY SERVICES DISTRICT

DANA RESERVE DEVELOPMENT WATER AND WASTEWATER SERVICE EVALUATION

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Report Prepared Under the Responsible Charge of:

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Table of Contents

1.0	INTRODUCTION	1-1
1.1	Description of Proposed Project.....	1-1
1.2	Purpose of Study	1-1
1.3	Scope of Work	1-1
2.0	WATER SYSTEM	2-1
2.1	Water Supply and Demand	2-1
2.1.1.	Water Demand Projections	2-2
2.1.2.	Dana Reserve Water Demand Projections.....	2-4
2.2	Water System Facilities	2-8
2.2.1.	Existing Facilities.....	2-8
2.2.2.	Proposed Master Plan Facilities	2-9
2.3	Hydraulic Analysis Results and Recommendations	2-9
2.3.1.	Hydraulic Modeling Analysis	2-9
2.3.2.	Recommended Offsite Pipeline Improvements	2-16
2.3.3.	Evaluation of Proposed Onsite Pipeline Improvements.....	2-16
2.4	Storage Analysis and Recommendations	2-17
3.0	WASTEWATER COLLECTION SYSTEM	3-1
3.1	Wastewater Flows	3-1
3.1.1.	Flow Monitoring	3-1
3.1.2.	District Projections	3-4
3.1.3.	Dana Reserve Wastewater Flow Projections.....	3-8
3.2	Collection System Facilities	3-11
3.2.1.	Existing Facilities.....	3-11
3.2.2.	Proposed Master Plan Facilities	3-12
3.2.3.	Hydraulic Analysis Results and Recommendations	3-12
3.2.4.	Recommended Offsite Improvements	3-16
3.2.5.	Evaluation of Proposed Onsite Improvements	3-16
4.0	WASTEWATER TREATMENT FACILITY.....	4-1
4.1	Influent Flow and Loading Analysis	4-1
4.1.1.	District Projections	4-1
4.1.2.	Dana Reserve Projections and Impact on Flows and Loadings at Southland WWTF	4-2

4.2	Existing Facilities.....	4-3
4.3	Proposed Master Plan Facilities	4-3
4.4	Process Capacity Analysis	4-5
4.4.1.	Influent Lift Station.....	4-5
4.4.2.	Influent Screens.....	4-5
4.4.3.	Grit Removal.....	4-5
4.4.4.	Extended Aeration System	4-6
4.4.5.	Secondary Clarifiers.....	4-6
4.4.6.	Sludge Thickener	4-7
4.4.7.	Sludge Dewatering Screw Press and Sludge Drying Beds.....	4-7
4.5	Future Water Quality Requirements.....	4-8
4.6	Recommended Improvements.....	4-10
5.0	PROJECT COST OPINIONS	5-1
5.1	Offsite Water Improvements	5-1
5.2	Offsite Wastewater Collection and Treatment Improvements.....	5-1
6.0	CONCLUSIONS AND RECOMMENDATIONS	6-1
6.1	Water.....	6-1
6.2	Wastewater	6-1

List of Tables

Table 2-1: Wholesale Water Agreement Delivery Schedule.....	2-1
Table 2-2: Total District Water Supply.....	2-2
Table 2-3 : Existing District Demands (2020).....	2-2
Table 2-4: NCS D Potential Future System Demands (Maximum Anticipated Infill Development).....	2-4
Table 2-5: Developer Provided Water Use Factor and Demand Projections (Table 5.1 from DRSP Update).....	2-5
Table 2-6: Dana Reserve Water Demand Factor Comparison	2-6
Table 2-7: NCS D Dana Reserve Water Demand Comparison	2-6
Table 2-8: Water Supply Allocation and Demand.....	2-7
Table 2-9: Existing Water Pipeline Statistics.....	2-8
Table 2-10: Hydraulic Analysis Scenarios 1-9.....	2-11
Table 2-11: Hydraulic Analysis Scenarios 10-23.....	2-14
Table 2-12: NCS D Served Population Summary.....	2-17
Table 2-13: Water System Storage Capacity.....	2-18
Table 3-1: Summary of Flow Monitoring Results (Oct. 23 – Nov. 28, 2020).....	3-1
Table 3-2: Historical Southland WWTF Influent Flow and Loading (January 2019 – December 2020)	3-2
Table 3-3: Sewer Flow Return Factors by Land Use.....	3-4
Table 3-4: Estimated Total Existing Sewer Flows.....	3-5
Table 3-5: Projected Future Sewer Flows (Not including Existing)	3-6
Table 3-6: Estimated Sewer Flow for FM01 Basin	3-7
Table 3-7: Estimated Sewer Flow for FM02.....	3-7
Table 3-8: Estimated Sewer Flow for FM03.....	3-8
Table 3-9: Historical Southland WWTF Influent Flow	3-8
Table 3-10: Developer Provided Wastewater Generation Factor and Demand Projections (Table 5.2 from DRSP Update) ..	3-9
Table 3-11: Dana Reserve Wastewater Flow Projections using Water Production-Based and 2007 Sewer Master Plan-Based Methods.....	3-10
Table 3-12: NCS D Dana Reserve Wastewater Flow Comparison	3-11
Table 3-13: Existing and Future Flows	3-11
Table 3-14: Existing Sewer Pipeline Statistics.....	3-12
Table 3-15: Dana Reserve Sewer Model Results	3-14
Table 4-1: Existing and Projected Influent Flows and Loadings from District Service Area.....	4-1
Table 4-2: Projected Influent Flows and Loadings from Dana Reserve Project.....	4-2
Table 4-3: Projected Influent Flows and Loadings from Dana Reserve Project and District Service Area.....	4-2
Table 4-4: Southland WWTF Phasing Plan.....	4-3
Table 4-5: Influent Lift Station Capacity (One Pump Operating)	4-5
Table 4-6: Influent Lift Station Capacity (Two Pump Operating).....	4-5
Table 4-7: Extended Aeration Basin Capacity (One Basin).....	4-6
Table 4-8: Secondary Clarifier Existing Capacity.....	4-7
Table 4-9: General Order R3-2020-0020 Secondary Treatment Effluent Limits (Tables 5 and 6 of the Order)	4-9
Table 4-10: Extended Aeration Basin Capacity for Denitrification via Wave Oxidation (Two Basins).....	4-9
Table 4-11: Extended Aeration Basin Capacity for Denitrification via Wave Oxidation (Three Basins)	4-10
Table 4-12: Summary of Southland WWTF Evaluation.....	4-10
Table 5-1: Water Transmission Main to Serve Dana Reserve.....	5-1
Table 5-2: Water System Storage and Looping Improvements to Serve Dana Reserve.....	5-1
Table 5-3: Wastewater Improvements to Serve Existing Conditions and Dana Reserve.....	5-1
Table 6-1: Recommendations for NCS D Water System Improvements	6-1

List of Figures

Figure 2-1: Proposed Pipeline Improvements to the District Water System.....2-13
 Figure 3-1: Wastewater Flow Meter Locations 3-3
 Figure 3-2: Sewer Collection System Improvements.....3-15
 Figure 4-1: Southland WWTF..... 4-4
 Figure 6-1: Proposed Water Distribution System Improvements..... 6-3
 Figure 6-2: Proposed Joshua Road Pump Station Reservoir Improvements 6-4
 Figure 6-3: Wastewater Collection System Improvements 6-5
 Figure 6-4: Proposed Southland WWTF Improvements 6-6
 Figure 6-5: Proposed Water and Sewer Improvements 6-7

List of Appendices

- Appendix A: Sewer Flow Monitoring 2020 Nipomo, CA
- Appendix B: Process Flow Diagram
- Appendix C: Opinions of Probable Cost

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1.0 INTRODUCTION

1.1 Description of Proposed Project

The Dana Reserve Development (Project) is a proposed multiuse neighborhood encompassing 288 acres of currently undeveloped land. The property is not within the Nipomo Community Services District (District) service area but is within the District's Sphere of Influence (SOI). The development includes a variety of single-family residences, condominiums, townhomes, and multifamily apartments. The development also incorporates open spaces and public parks, as well as various commercial uses including a village center, flex commercial/light industrial, neighborhood barn, hotel, daycare center, and a community college campus.

The developer has applied for annexation to the Nipomo Community Services District for water and wastewater services.

1.2 Purpose of Study

This study evaluated the impact this proposed development will have on District water and wastewater facilities. Recommended improvements from the Water and Sewer Master Plan Update (Cannon, 2007) and Southland WWTF Facility Master Plan Amendment 1 (AECOM, 2010) were reviewed to identify the improvements required to provide service to the project.

1.3 Scope of Work

The Scope of Work for the project included the following tasks:

Evaluation of Water Supply, Storage, and Distribution Facilities (Offsite and Onsite)

- Review Water Supply Assessment provided by developer and compare to District projections.
- Update existing water distribution system model with current demands from billing data and future demand from proposed annexation area.
- Review Water Master Plan, confirm status of master-planned projects, and update model with completed projects that may be necessary to support the development.
- Identify Master Planned projects which should be implemented to support the development.
- Perform model runs to identify offsite improvements necessary to support development. An evaluation of fire flow requirements, typical operating pressure ranges, and ability of the system to deliver Supplemental Water were performed. System storage requirements were also identified.
- Provide master-planning level cost opinion for proposed improvements, using unit costs escalated from previous master plans or planning documents.
- Evaluate onsite improvements recommended for development to confirm pipe sizes and pressure ranges are adequate for fire protection, maximum day, and peak hour demands.

Evaluation of Wastewater Collection Facilities (Offsite and Onsite)

- Place flowmeters at three (3) locations in the District sewer system for up to 30 days (to be performed by MKN's subconsultant, ADS).
- Review wastewater flow projections provided by developer and compare to District projections.
- Update existing collection system model with current flows from water billing data and future flows from proposed annexation area.
- Review Sewer Master Plan, confirm status of master-planned projects, and update model with completed projects that may be necessary to support the development.
- Identify Master Planned projects which should be implemented to support the development.
- Perform model runs to identify offsite improvements necessary to support development.
- Provide master-planning level cost opinion for proposed improvements, using unit costs escalated from previous master plans or planning documents.

Wastewater Treatment Capacity Evaluation

- Develop design flow and loading for the Southland Wastewater Treatment Facility under existing conditions. This analysis will include a review of past flow and loading records since the Phase I facility was completed; review of flow and loading projections from the Southland Wastewater Treatment Facility Master Plan (WWTF Master Plan); and a review of the flow and loading projections from the annexation area. The total flow and loading with contribution from the annexation area will be tabulated and compared to flows anticipated in the WWTF Master Plan.
- Discuss the ability of each unit process to meet existing flows and loads including the annexation area will be discussed for each phase. A process model will not be developed but flows and loads will be compared to typical loading rates for similar facilities based on industry standards and vendor-supplied information. Provide a recommendation as to whether future phases of the WWTF Master Plan should be implemented to address increased flows and loading.
- Provide master-planning level cost opinion for proposed improvements, using unit costs escalated from the previous WWTF Master Plan or other planning documents.

2.0 WATER SYSTEM

2.1 Water Supply and Demand

Water Supply

Historically, the District has relied heavily on pumped groundwater from the Nipomo Mesa Management Area (NMMA), a subbasin within the Santa Maria Groundwater Basin. The NMMA Technical Group, which is the court-assigned entity responsible for managing groundwater within the NMMA, has declared a Stage IV water severity condition for the subbasin. This condition requires purveyors reduce groundwater deliveries to 50% of the average production recorded between years 2009 and 2013. This results in a voluntary groundwater reduction goal of 1,267 AFY of pumped groundwater for the District.

Groundwater was the sole source of the District's water supply until 2015, when the District began importing water from the City of Santa Maria (City) as part of the Nipomo Supplemental Water Project (NSWP), dictated by the Final Judgment. The District executed the Wholesale Water Supply Agreement (Wholesale Agreement) with the City on May 7, 2013. Supplemental Water consists of a "municipal mix" of both surface water from the State Water Project and groundwater from the City of Santa Maria. The Wholesale Agreement requires a minimum water delivery to the District of 2,500 AFY by the 2025-26 fiscal year, a readily available amount of 500 AFY, and a maximum allowable delivery of 6,200 AFY. Due to a current Santa Barbara County license agreement limitation, this report focuses on the minimum delivery of 2,500 and the readily available 500 AFY totaling 3,000 AFY.

In addition to the Wholesale Agreement, a Water Replenishment Agreement requires water delivery to Woodlands Mutual Water Company (WMWC), Golden State Water Company (GSWC), and Golden State Water Company Cypress Ridge (GSWCCR). Table 2-1 outlines the required Wholesale Agreement water delivery schedule.

AFY	Effective Delivery Date
1,000	7/1/2020
2,500	7/1/2025
3,000	Planning Capacity
6,200	Maximum Capacity

While the District is obligated to meet the minimum delivery schedule from the Wholesale Agreement, the District still has to maintain and operate groundwater wells to meet additional demands that the NSWP cannot meet, and to comply with State regulations. **Table 2-1** outlines the required Wholesale Agreement water delivery schedule.

Table 2-2 depicts the total supply available to the District including delivered water from the NSWP based on the above delivery schedule and maximum groundwater allocation as required by the Final Judgment.

Table 2-2: Total District Water Supply	
Source	Water Supply
	AFY
NCS D Groundwater Available ¹	1,267
NSWP Allocation	2,500
Total Future Water Supply	3,767
NSWP New Development Allocation ²	500
Maximum Future Water Supply³	4,267
Notes:	
<ol style="list-style-type: none"> 1. NCS D’s current voluntary groundwater reduction goal based on fifty percent reduction from average production in the FY’s 2009-10 through 2013-14 as required by the Final Judgment, or fifty percent of 2,533 AFY based on Stage 4. 2. While this additional allocation is available to the District for delivery under the Wholesale Agreement, it should only be taken as needed. After the District requests 3,001 AFY, the District must maintain that delivery. It is believed the District may not have enough demand to warrant additional water delivery past 2,500 AFY in the planning horizon contemplated in this report. 3. Table 7-4, NMMA Stage 4, 2020 UWMP. 	

2.1.1. Water Demand Projections

Existing 2020 water demands for the District are summarized in **Table 2-3** based on calendar year 2020 usage as reported in the annual water usage report submitted to DWR and the 2020 UWMP update.

Table 2-3 : Existing District Demands (2020)		
Use Type	2020 Actual	
	Level of Treatment When Delivered	Volume (AF)
Single Family	Drinking Water	1,326
Multi-Family	Drinking Water	122
Commercial	Drinking Water	76
Landscape	Drinking Water	271
Other	Drinking Water	4
Agricultural Irrigation	Drinking Water	12
Losses	Drinking Water	237
	TOTAL (AF)	2,048
Notes:		
<ol style="list-style-type: none"> 1. Demands = Annual water consumption by customer type as shown above. 2. Values represent use as reported to DWR for 2020. 		

Projections under future conditions were developed in the 2020 UWMP and are summarized in **Table 2-4**. Future demand conditions included water service to parcels within the existing service area that are not currently served. This included parcels with Reserved District Capacity allocation (parcels not currently on the District’s system but have potential to be added to the system), parcels served by private wells, vacant parcels, and ADUs associated with that growth. Criteria used in this analysis for subdivision and/or adding an ADU are listed below:

1. District's GIS parcel mapping data was used to identify existing land use designation and acreage information.
2. Existing and vacant residential single family (RSF) parcels greater than 12,000 square foot (sf) and served by a community sewer are allowed by ordinance to subdivide into 6,000 sf lots.
3. Existing and vacant residential single family (RSF) parcels on septic have a 1.0-acre minimum lot size requirement.
4. Existing and vacant residential suburban (RS) parcels greater than 2.0 acres are allowed by ordinance to subdivide to 1.0 acre lots.
5. Existing and vacant residential rural (RR) parcels greater than 10.0 acres are allowed by ordinance to subdivide to 5.0 acre lots.
6. Blacklake Village residential parcels have ADU capability (based on Proposed Amendments to Title 22).
7. Residential Multi-Family (RMF) parcels do not have ADU capability, regardless of parcel size.
8. Land uses that allow ADU dwellings include the following:
 - a. Commercial, Retail (CR)
 - b. Office and Professional (OP)
 - c. Recreation (REC)
 - d. Residential, Rural (RR)
 - e. Residential, Suburban (RS)
 - f. Residential, Single Family (RSF)

This "Maximum Anticipated Infill Development" scenario assumes that every parcel that has the capability to subdivide based on the above criteria will subdivide. This does not affect the potential future demand for existing customers because neither the total area of the parcel nor the usage factor changes. This increase in subdivision does increase the total number of parcels available to add an ADU. It is assumed every new parcel able to add an ADU will do so. Total ADU demand is projected by multiplying all eligible parcels by a demand factor of 0.11 AFY/ADU. The "Maximum Anticipated Infill Development" scenario is a conservative approach, but is appropriate to assess future worst case scenario needs since the District does not control land use or zoning within its service area.

This scenario also includes current District water demand, as well as the required deliveries to the Woodlands Mutual Water Company (WMWC), Golden State Water Company (GSWC), and Golden State Water Company Cypress Ridge (GSWCCR) according to the Water Replenishment Agreement, and shown in **Table 2-4** below.

Table 2-4: NCS D Potential Future System Demands (Maximum Anticipated Infill Development)	
Description	Water Demand
	AFY
Current NCS D Customer Usage	
Existing District Customers ¹	2,048
Potential District Maximum Anticipated Infill	
Future Demand	340
Future Demand Subtotal²	2,388
District Interconnections	
WMWC	417
GSWC	208
GSWCCR	208
Interconnection Subtotal	833
Total Future Demand with Interconnections (AFY)²	3,221
Notes:	
1. Table 4-1, 2020 UWMP.	
2. Table 4-3, 2020 UWMP. Total District projected water demand for year 2045, excluding anticipated demand from the proposed Dana Reserve development.	

2.1.2. Dana Reserve Water Demand Projections

The proposed Dana Reserve development includes approximately 1,270 residential units, 18.9 acres of commercial land use, and 37.8 acres of public parks and streetscapes. Applying usage factors derived from the 2016 NCS D Urban Water Management Plan (UWMP) and additional factors pulled from the City of Santa Barbara and the County of SLO, the Developer estimated a total water demand for the new development of 370 acre-ft/year (AFY). This estimate includes a 10% contingency to account for additional miscellaneous water use. **Table 2-5** shows the developer’s water use factors used and total demand projections for the Dana Reserve development as outlined in the most recent Water Supply Assessment update by RRM Design Group (2020) as cited below. The water demands projected by the developer are different from water demands projected using the District’s methodology, as discussed below. Therefore, the District’s water demand projections were used in this Evaluation.

**Table 2-5: Developer Provided Water Use Factor and Demand Projections
(Table 5.1 from DRSP Update)**

Land Use Category	Number of Units or Acres	Water Use Factor ³ (AFY)	Potable Water Demand (AFY)	Daily Demand ² (gpd)
Residential				
Condos	173 units	0.13 AFY/unit	22.14	-
Townhomes	210 units	0.14 AFY/unit	30.24	-
Cluster	124 units	0.21 AFY/unit	25.79	-
4,000-5,999 SF	463 units	0.21 AFY/unit	96.30	-
6,000-7,000+ SF	225 units	0.34 AFY/unit	75.61	-
Affordable	75 units	0.14 AFY/unit	10.84	-
<i>Subtotal</i>	<i>1270 units</i>		<i>261.13</i>	<i>232,900</i>
Commercial¹				
Village Commercial	4.4 ac	0.17 AFY/1,000 sf	8.69	-
Flex Commercial	14.5 ac	0.17 AFY/1,000 sf	28.63	-
<i>Subtotal</i>	<i>18.9 ac</i>		<i>37.32</i>	<i>33,319</i>
Landscape				
Village and Commercial Area ⁴	6.3 ac	1.0 AFY/ac	6.30	-
Public Recreation	10.0 ac	1.0 AFY/ac	10.00	-
Neighborhood Parks	15.0 ac	1.0 AFY/ac	15.00	-
Streetscape/Parkways	6.5 ac	1.0 AFY/ac	6.50	-
<i>Subtotal</i>	<i>37.8 ac</i>		<i>37.80</i>	<i>28,121</i>
<i>Project Total</i>			<i>336.25 AFY</i>	<i>300,185 gpd</i>
<i>Project Total (with 10% contingency)</i>			<i>369.88 AFY</i>	<i>330,207 gpd</i>
Notes:				
1. Assumes 0.15 gpd/sf and 33% useable site area for buildings.				
2. Conversion factor: 1 AFY equals 892.742 gpd.				
3. Water usage factors used by the developer in the table above are derived from the following sources: 2016 NCSU UWMP, the City of Santa Barbara and the County of San Luis Obispo.				
4. Assumed 33% of the total commercial acreage is available for landscape.				
5. Updated Table 5.1 provided in email dated September 23, 2020, from Robert Camacho, RRM Design Group				

The water demand factors provided by the developer were compared to the standard water demand factors from the 2007 Water Master Plan referenced in the District Water and Wastewater Standards as well as calculated demand factors based on the 5-year and 10-year District average annual water production. This comparison is shown below in **Table 2-6**. The land use categories used by the developer (RRM) do not line up with categories that the District has outlined in the 2007 Water Master Plan (WMP) or within the District’s current water model. As such, the District land use factors were applied to the most appropriate Dana Reserve land use category.

Table 2-6: Dana Reserve Water Demand Factor Comparison

Land Use Category	Dana Reserve Water Supply Assessment ¹ (AFY/acre)	2007 Water Master Plan (AFY/acre)	5-Year Production Average (2016-2020 – AFY/acre)	10-Year Production Average (2011-2020 – AFY/acre)
Condominiums	2.29	3.75	2.22	2.47
Townhomes	2.60	3.75	2.22	2.47
Small Lots SFR ²	1.27	2.10	1.26	1.40
Medium Lot SFR	1.42	2.10	1.26	1.40
Affordable	2.71	3.75	2.22	2.47
Commercial	1.96	1.42	1.33	1.49
Parks/Streetscapes	1.00	0.98	0.71	0.79

Notes:

1. Developer originally used residential demand factors in the form of GPD/unit to calculate anticipated demand for residential development. Using information provided in the Dana Reserve Water Supply Assessment describing total areas for each land use category, average demand factors in the form of AFY/acre were calculated by MKN.
2. Small Lot SFR (Single Family Residence) includes “Cluster” Land Use Category shown in **Table 2-2**.

These demand factors were used to calculate average day demand, maximum day demand (MDD), and peak hour demand (PHD) for the Dana Reserve development. MDD and PHD were calculated by multiplying the average day demand by peaking factors of 1.7 and 3.78 (according to current District Standard Specifications) respectively. Each of the District projections include a 10% contingency to account for miscellaneous demand and total demands are outlined below in **Table 2-7**. We recommend using the projection calculated based on the 10-year production average, because it represents a range of years including both drought and non-drought conditions. While this is a conservative approach, it is an appropriate baseline for planning to meet future water demands. This is also the approach applied to potential annexations in the 2020 UWMP.

Table 2-7: NCS D Dana Reserve Water Demand Comparison

Projection Method	Average Day Flow ¹ (AFY)	Average Day Flow (MGD)	Maximum Day Flow (MGD)	Peak Hour Flow (MGD)
<i>Peaking Factor</i>	-		<i>1.7 x ADD</i>	<i>3.78 x ADD</i>
Water Supply Assessment (RRM)	358	0.32	0.54	1.21
2007 Water Master Plan Demand Factors	512	0.46	0.78	1.73
10-year Production Average Demand Factors (as applied in 2020 UWMP)	352	0.31	0.53	1.19
5-year Production Average Demand Factors	316	0.28	0.48	1.07

1. All average day demand values include a 10% contingency per the method used in the Water Supply Assessment.

Total demands for existing and future conditions within the District system, including anticipated demands from the Dana Reserve development, were compared with the future delivery capacity from the Nipomo Supplemental Water Project and groundwater allocation in **Table 2-8**.

Table 2-8: Water Supply Allocation and Demand		
Source	Existing Conditions with Deliveries to Purveyors	Maximum Anticipated Infill Development
	AFY	AFY
Average District Demand ¹	2,048	2,048
Potential District Maximum Anticipated Infill	-	340
Dana Reserve Demand	352	352
WMWC Demand ²	417	417
GSWC Demand ²	208	208
GSWCCR Demand ²	208	208
Total Demand	3,233	3,573
2025 NSWP Allocation	2,500	2,500
NCSD Voluntary Groundwater Reduction Goal ³	1,267	1,267
Total Future Water Supply	3,767	3,767
Supply Surplus / (Deficit)	534	194
NSWP New Development Allocation ⁴	500	500
Maximum Future Water Supply	4,267	4,267
Notes: 1. Table 4-1, 2020 UWMP. 2. 2025 purveyor wholesale estimate, Table 4-3, 2020 UWMP 3. NCSD current voluntary groundwater reduction goal based on fifty percent reduction from average production in the FY's 2009-10 through 2013-14 as required by the Final Judgment, or fifty percent of 2,533 AFY. 4. While this additional allocation is available to the District for delivery under the Wholesale Agreement, it should only be taken as a last resort. After the District requests 3000 AFY, the District must maintain that delivery. It is believed the District does not have enough demand to warrant additional water delivery past 2500 AFY.		

This analysis estimates that in 2025, even with the Dana Reserve Project, District water supplies will exceed demand by 534 AFY under existing conditions (with delivery to purveyors) and by 194 AFY under the Maximum Anticipated Infill Development scenario. If the District elects to take the New Development Allocation of 500 AFY, the remaining supply surplus will increase. A considerable challenge facing the District will be maintaining the currently operating wells within the system while continuing to meet contractual obligations for NSWP water deliveries. This is addressed in the storage discussion in Section 2.4.

2.2 Water System Facilities

2.2.1. Existing Facilities

The District’s existing water system includes the following supply, storage, and distribution facilities:

Supply

- Nipomo Supplemental Water Supply: Joshua Road Pump Station currently operating between 550 and 820 GPM with capacity to operate at 1,860 GPM (3,000 AFY).
- Sundale Well: Currently operating at 890 GPM.
- Via Concha Well: Currently operating at 610 GPM.
- Black Lake Well #4: Currently operating at 360 GPM.
- Knollwood Well: Currently operating at 240 GPM.
- Eureka Well #2: Currently inoperable. Future design capacity of 1000 GPM (To be online by 2022).

Storage

- Foothill Tanks: 4 tanks totaling 3,000,000 gallons of useful storage.
- Standpipe: 280,000 gallons of useful storage.
- Joshua Road Tank: 500,000 gallons; No useful storage for District system since it is a partially-buried tank intended primarily as operational buffer for Joshua Road Pump Station. Flow from the Tank must be pumped into the District system.

Distribution

- Pipeline Statistics:

The following table summarizes pipe lengths in the distribution system as extracted from District’s Water System GIS. The majority of pipelines (67%) are 8-inch diameter and smaller.

Table 2-9: Existing Water Pipeline Statistics		
Pipe Diameter (inches)	Pipe Length (feet)	% of Total
2	120	0.02%
4	1,189	0.24%
6	121,722	24.18%
8	215,531	42.82%
10	81,703	16.23%
12	48,052	9.55%
14	1,265	0.25%
16	22,746	4.52%
18	101	0.02%
24	10,898	2.17%
Total	503,327	100%

2.2.2. Proposed Master Plan Facilities

MKN reviewed the District's 2007 Water and Sewer Master Plan (Master Plan) for potential proposed improvements that may be necessary to support the development. Of the proposed improvements, the following were identified:

- 12" pipeline along Northeastern length of proposed Dana Reserve development from the corner of Sandydale Drive and North Frontage Road to Willow Road to loop the water system.
- 16" pipeline from the Foothill Tanks to Sandydale Drive and North Frontage Road. The pipeline was reduced from the 24" diameter originally proposed in the WMP. A 16" pipeline is more appropriate given the updated future demands and flows necessary to meet District demand as a result of future development and the Dana Reserve Project.

As an alternative, District staff recommended MKN evaluate a 16-inch pipeline on North Oakglen Avenue from West Tefft Street to Sandydale Drive and North Frontage Road.

2.3 Hydraulic Analysis Results and Recommendations

2.3.1. Hydraulic Modeling Analysis

MKN utilized the District's current WaterCAD hydraulic model to evaluate the impact of the proposed Dana Reserve development on the existing and future District water system based on existing and future projected demands.

For the purpose of this report, scenarios were modeled for both current and future conditions within the District's Water System. All scenarios assumed delivery to the Woodlands Mutual Water Company (WMWC), Golden State Water Company (GSWC), and Golden State Water Company Cypress Ridge (GSWCCR) as outlined in **Table 2-4**. The existing conditions scenarios also assumed a delivery of 1,336 gpm (2,157 AFY) from the NSWP at the Joshua Road Pump Station (JRPS), which is based on the District's current delivery from JRPS (820 gpm) plus future required deliveries to other purveyors (516 gpm total). Model runs were performed under steady state conditions based on the following model settings:

- Existing System Demands
 - Average day demand (ADD) conditions: 1850 gpm
 - Maximum day demand (MDD) conditions: 2,784 gpm (1.7 peaking factor)
 - Peak hour demand (PHD) conditions: 5,559 gpm (3.78 peaking factor)
 - Residential fire-flow: 1,000 gpm per 2016 California Fire Code
 - Commercial fire-flow: 3,000 gpm
- Delivery to WMWC at Trail View Place: 258 gpm (417 AFY)
- Delivery to GSWC at Primavera Lane: 129 gpm (208 AFY)
- Delivery to GSWCCR at Lyn Road: 129 gpm (208 AFY)
- Joshua Road Pump Station at 1336 gpm (2157 AFY)
- Available Well Production
 - Blacklake #4: 360 gpm
 - Knollwood: 240 gpm

- Sundale: 890 gpm
- Via Concha: 610 gpm
- Foothill Tanks in service
 - Tank level during ADD: 17 feet (540 feet)
 - Tank level during MDD: 15 feet (538 feet)
 - Tank level during PHD: 13 feet (536 feet)
- Standpipe in service
 - Tank level during ADD: 80.4 feet (540 feet)
 - Tank level during MDD: 78.4 (538 feet)
 - Tank level during PHD: 76.4 (536 feet)

The scenarios were assessed based on the following criteria, in conjunction with current District Standards and Specifications for Water System Design:

- System Pressure
 - Minimum Operating Pressure (ADD, MDD, PHD) = 40 psi
 - Minimum Operating Pressure (MDD plus fire-flow) = 20 psi
 - Maximum Recommended Operating Pressure (All conditions) = 80 psi
- Pipeline Velocity
 - Maximum Pipeline Velocity (All conditions – as a goal not a requirement) = 5 ft/s

Table 2-10 provides a description of Scenarios 1 through 9 and results of the analysis for baseline conditions as well as existing conditions with the addition of the proposed Dana Reserve Development. Modeled system pressures were observed at the following nine locations within the District’s water distribution system to identify pressure impacts to the District’s low pressure service area customers, high pressure service area customers, interconnection with WMWC, interconnection with GSWC, interconnection with GSWCCR, and four locations within the Dana Reserve development:

- Low Pressure (high elevation) Area in Summit Station: Futura Lane
- High Pressure (low elevation) Area in Main Zone: Honeygrove Lane
- WMWC Interconnection: Trail View Place
- GSWC Interconnection: Primavera Lane
- GSWCCR Interconnection: Lyn Road west of Red Oak Way
- Dana Reserve Connection: Sandydale Drive
- Dana Reserve Connection: Pomeroy Road
- Dana Reserve Connection: Willow Road (west)
- Dana Reserve Connection: Willow Road (east)

Table 2-10: Hydraulic Modeling Results with NSWP Delivery at 2157 AFY

WaterCAD Scenario and Settings							Dana Reserve Delivery	Futura Lane (EL = 454')	Honeygrove Lane (EL = 306')	Dana Reserve at Sandydale Drive (EL = 355')	Dana Reserve at Pomeroy Road (EL = 351')	Dana Reserve at Willow Road 1 (EL = 385')	Dana Reserve at Willow Road 2 (EL = 378')	WMCC Interconnect at Trail View Place (EL = 222')	GSWC Interconnect at Primavera Lane (EL = 312')	GSWCCR Interconnect at Lyn Road (EL = 328')
Scenario	Description	Total Demand (GPM)	NSWP Delivery (GPM)	Wells	Quad Tanks Level (Feet)	Standpipe Level (Feet)	Flow (GPM)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)
Baseline System Conditions without Delivery to Dana Reserve																
1	Average Day Demand	1850	1336	Off	17	80.4	-	37	102	80	81	-	-	137	99	91
2	Maximum Day Demand	2784	1336	Off	15	78.4	-	37	101	79	81	-	-	136	98	91
3	Maximum Day Demand + 1000 GPM Fire-flow at Futura Lane	3784	1336	Off	15	78.4	-	19.9	101	79	80	-	-	136	98	80
4	Peak Hour Demand	5559	1336	Off	13	76.4	-	36	93	72	73	-	-	129	91	90
System Conditions with Delivery to Dana Reserve																
5	Average Day Demand	2069	1336	Off	17	80.4	218	37	102	80	81	67	70	137	99	91
6	Maximum Day Demand	3155	1336	Off	15	78.4	371	36	99	78	79	65	68	135	97	90
7	Maximum Day Demand + 1000 GPM Fire-flow at Futura Lane	4155	1336	Off	15	78.4	371	19	99	78	79	65	67	135	97	79
8	Maximum Day Demand + 3000 GPM Fire-flow at Dana Reserve	6155	1336	Off	15	78.4	3371	35	92	68	70	54	57	127	90	89
9	Peak Hour Demand	6383	1336	Off	13	76.4	824	34	89	56	58	68	70	125	87	88

Legend:

- Falls within recommended range
- Falls under recommended pressure (40 psi for ADD, MDD, PHD; 20 psi for Fire-flow)
- Exceeds recommended pressure (80 psi for all scenarios)

Scenarios 1 through 4: Existing System Conditions

Scenarios 1-4 modeled existing pressures at the nine monitoring locations with NSWP delivery at 820 gpm, all storage tanks in service, and no wells in service under ADD, MDD, MDD plus fire-flow, and PHD conditions. Pressures throughout the water system under existing conditions vary slightly between ADD, MDD, MDD plus fire-flow, and PHD, but largely remain within the District's recommended pressure ranges. The District's high point, Futura Lane, faces pressures below the District's recommended range during all existing system condition scenarios. All purveyor interconnection sites experience high pressures (above 80 psi) throughout most existing system condition scenarios.

Scenarios 5 through 9: Existing System Conditions with Dana Reserve Addition

Results from Scenarios 5 through 9 show a minor decrease in system pressures (1-2 psi) during MDD plus fire-flow and PHD conditions across much of the system when compared to those same scenarios during existing conditions.

Figure 2-1 outlines the developer proposed water mains as well as four proposed improvement alternatives to mitigate the system impact made by the Dana Reserve Development. The impacts these alternatives have on the District's system in conjunction with increased future system demands were assessed in the hydraulic modeling analysis and are included in **Table 2-11** and the discussion to follow.

Table 2-11 summarizes Scenarios 10 through 23 and results of the analysis for future demands based on maximum anticipated infill development and increased NSWP delivery. These scenarios also included potential improvement projects in the analysis. The same assumptions were used as stated previously except for the following:

- Future System Demands
 - Average day demand (ADD) conditions: 2,277 gpm
 - Maximum day demand (MDD) conditions: 3,509 gpm (1.7 peaking factor)
 - Peak hour demand (PHD) conditions: 7,170 gpm (3.78 peaking factor)
- Joshua Road Pump Station at 1,550 gpm (2,500 AFY)



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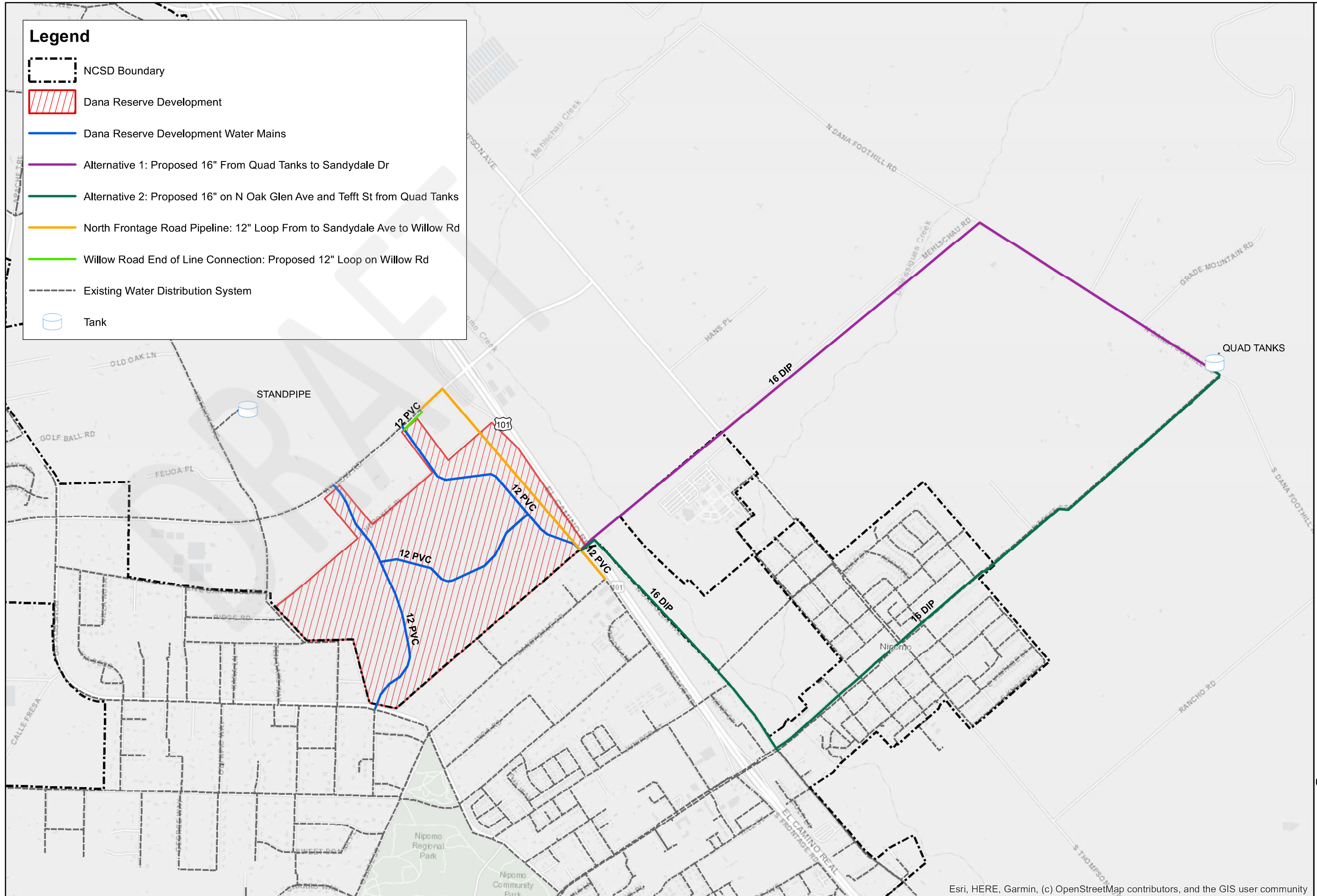
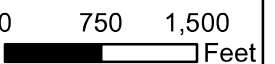
Dana Reserve Development - Water and Wastewater Service Evaluation

Figure 2-1

Proposed Pipeline Improvements for District Water System



1 inch = 1,500 feet



Legend










-  NCS Boundary
-  Dana Reserve Development
-  Dana Reserve Development Water Mains
-  Alternative 1: Proposed 16" From Quad Tanks to Sandydale Dr
-  Alternative 2: Proposed 16" on N Oak Glen Ave and Tefft St from Quad Tanks
-  North Frontage Road Pipeline: 12" Loop From to Sandydale Ave to Willow Rd
-  Willow Road End of Line Connection: Proposed 12" Loop on Willow Rd
-  Existing Water Distribution System
-  Tank

Table 2-11: Dana Reserve Hydraulic Modeling Results with NSWP Delivery at 2500 AFY

WaterCAD Scenario and Settings							Dana Reserve Delivery	Futura Lane (EL = 454')	Honeygrove Lane (EL = 306')	Dana Reserve at Sandydale Drive (EL = 355')	Dana Reserve at Pomeroy Road (EL = 351')	Dana Reserve at Willow Road 1 (EL = 385')	Dana Reserve at Willow Road 2 (EL = 378')	WMCC Interconnect at Trail View Place (EL = 222')	GSWC Interconnect at Primavera Lane (EL = 312')	GSWCCR Interconnect at Lyn Road (EL = 328')
Scenario	Description	Total Demand (GPM)	NSWP Delivery (GPM)	Wells	Quad Tanks Level (Feet)	Standpipe Level (Feet)	Flow (GPM)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)	Pressure (PSI)
System Conditions with Delivery to Dana Reserve and Future Flows Based on Subdivision Potential																
10	Average Day Demand	2277	1550	Off	17	80.4	199	37	102	80	81	67	70	137	102	91
11	Maximum Day Demand	3509	1550	Off	15	78.4	339	36	101	78	80	65	68	136	99	90
12	Maximum Day Demand + 1000 GPM Fire-flow at Futura Lane	4509	1550	Off	15	78.4	339	19	101	78	80	65	68	135	98	79
13	Maximum Day Demand + 3000 GPM Fire-flow at Dana Reserve	6509	1550	Off	15	78.4	3339	35	92	68	70	54	57	126	90	89
14	Maximum Day Demand + 3000 GPM Fire-flow at Dana Reserve & NO JRPS	6509	0	Off	15	78.4	3339	34	85	63	65	50	53	122	83	89
15	Peak Hour Demand	7170	1550	Off	13	76.4	754	33	92	70	72	58	60	127	90	87
16	Peak Hour Demand	7170	1550	All Wells On	13	76.4	754	34	97	76	78	63	66	137	95	88
System Conditions with Delivery to Dana Reserve and Future Flows Based on Subdivision Potential with Proposed 16" Pipeline From Quad Tanks																
17	Maximum Day Demand + 3000 GPM Fire-flow at Dana Reserve	6509	1550	Off	15	78.4	3339	35	97	73	75	59	62	131	95	89
System Conditions with Delivery to Dana Reserve and Future Flows Based on Subdivision Potential with Proposed 16" Pipeline on N Oak Glen and Tefft																
18	Maximum Day Demand + 3000 GPM Fire-flow at Dana Reserve	6509	1550	Off	15	78.4	3339	35	95	73	74	58	62	130	93	89
System Conditions with Delivery to Dana Reserve and Future Flows Based on Subdivision Potential without 10" Pipeline from Quad Tanks on Tefft																
19	Maximum Day Demand + 3000 GPM Fire-flow at Dana Reserve	6509	1550	Off	15	78.4	3339	35	93	68	70	54	57	127	90	89
20	Maximum Day Demand + 3000 GPM Fire-flow at Dana Reserve & NO JRPS	6509	0	Off	15	78.4	3339	34	80	59	61	45	48	117	78	88
System Conditions with Delivery to Dana Reserve and Future Flows Based on Subdivision Potential with Proposed 12" Loop on North Frontage from Sandydale to Willow																
21	Maximum Day Demand + 1000 GPM Fire-flow at Futura Lane	4509	1550	Off	15	78.4	339	19	101	78	80	65	68	135	98	79
22	Maximum Day Demand + 3000 GPM Fire-flow at Dana Reserve	6509	1550	Off	15	78.4	3339	35	95	70	72	56	59	128	93	89
23	Peak Hour Demand	7170	1550	Off	13	76.4	754	33	92	70	72	58	60	127	90	87
System Conditions with Delivery to Dana Reserve and Future Flows Based on Subdivision Potential with Proposed 12" End-of-Line Loop on Willow																
24	Maximum Day Demand + 3000 GPM Fire-flow at Dana Reserve	6509	1550	Off	15	78.4	3339	35	92	68	70	54	57	126	90	89

Legend:
Falls within recommended range
Falls under recommended pressure (40 psi for ADD, MDD, PHD; 20 psi for Fire-flow)
Exceeds recommended pressure (80 psi for all scenarios)

Scenarios 10 through 16: Future System Conditions with Dana Reserve Addition

System pressures at the monitoring locations increased by 1-2 psi for flow conditions with the higher demands and NSWP delivery (3000 AFY) compared to existing system conditions. Futura Lane remains consistently below allowable system pressures for all conditions except MDD plus fire-flow at Dana Reserve, which is consistent with the existing conditions scenarios. It should be noted that the worst-case scenario run, MDD plus fire-flow conditions at Dana Reserve (3000 gpm) with JRPS not operating, still yielded acceptable pressures at all monitored nodes.

Scenario 17: Future System Conditions with Dana Reserve Addition and Proposed Alternative 1

Alternative 1 includes a 16" pipeline from the Foothill Tanks to the connection point at Dana Reserve as shown in **Figure 2-1**. This scenario was performed assuming MDD plus fire-flow conditions at Dana Reserve (3000 gpm) and improves system pressures by 2-3 psi at all nodes except for Futura Lane and the GSWCCR Interconnection. This improvement was modified from the original 24" Master Plan improvement recommended to account for low pipeline velocities.

Scenario 18: Future System Conditions with Dana Reserve Addition and Proposed Alternative 2

Alternative 2 includes a 16" pipeline on North Oak Glen Avenue from Tefft Street to the connection point at Dana Reserve, and the replacement of the 10" AC pipeline on Tefft with a new 16" ductile iron pipe as shown in **Figure 2-1**. This scenario was performed assuming MDD plus fire-flow conditions at Dana Reserve (3000 gpm) and the pipeline improves system pressures by 1-2 psi at the Dana Reserve site, but lowers system pressures by less than 1 psi at Honeygrove Lane (low elevation system location) and the WMCC Interconnection. It should be noted that both of those nodes are consistently above recommended system pressures for the District system, so lower pressures at these sites are of less concern.

Scenarios 19 through 20: Future System Conditions with Dana Reserve Addition and Without 10" Pipeline from Foothill Tanks on Tefft (Proposed Alternative 2)

These scenarios were run performed to demonstrate the degree to which the District relies on the 10" and 12" pipelines running from the Foothill Tanks to the rest of the District's distribution system. The 10" pipeline is asbestos cement and is over 50 years old (originally installed in 1966). These scenarios assumed MDD plus fire-flow at Dana Reserve (3000 gpm) condition and the same condition without JRPS online, to demonstrate the effects on the distribution system without NSWP delivery and with limited flow from the Foothill Tanks. The first scenario lowers system pressures by 1-3 psi across the system, and most significantly impacted the Dana Reserve development. This scenario increased the pipeline velocity in the parallel 12" pipeline coming from the Foothill Tanks, but not above the District's limit of 5 ft/s. Scenario 20 without JRPS online decreased system pressures by 10-15 psi when compared to Scenario 13 (Future System Conditions at MDD plus fire-flow at Dana Reserve). This scenario also increased the pipeline velocity in the parallel 12" pipeline coming from the Foothill Tanks to approximately 6.08 ft/s, exceeding the maximum recommended velocity outlined by the District Standards.

Scenarios 21 through 23: Future System Conditions with Dana Reserve Addition and North Frontage Road Pipeline

These scenarios analyze approximately 4750 LF of 12" pipeline along North Frontage Road to the existing dead-end on Willow Road as shown in **Figure 2-1**. Results from these scenarios indicate that this pipeline will not improve system pressures by a significant margin, however, this improvement promotes looping from the tanks to Dana Reserve which is an important benefit to eliminate dead end water mains and minimize water age throughout the system. The District requires looping of water mains to prevent dead ends.

Scenario 24: Future System Conditions with Dana Reserve Addition and Willow Road End-of-Line (EOL) Connection

This scenario includes a 12" loop on Willow Road to prevent a dead-end line on Willow Road as an alternative to the North Frontage Road Pipeline as shown in **Figure 2-1**. This alternative causes no change to system pressures shown in Scenario 13 (Future System Conditions at MDD plus fire-flow at Dana Reserve) but does satisfy District looping requirements with minimal off-site improvements.

2.3.2. Recommended Offsite Pipeline Improvements

The hydraulic analysis indicated that the Dana Reserve development will likely impact the District's water distribution system most significantly during MDD plus fire-flow at Dana Reserve and PHD conditions with minor decreases of less than 1 psi under other ADD and MDD conditions. The District should consider either Alternatives 1 or 2 to ensure reliable water delivery and adequate pressures throughout their system with the addition of the Dana Reserve Development.

1. **Alternative 1:** Construction of the new 16-inch pipeline (shown in Figure 2-1) from the Foothill Tanks to the Sandydale connection point would allow the District to maintain high system pressures during MDD plus fire-flow conditions at Dana Reserve and provide an additional freeway crossing, adding required redundancy to the existing distribution system.
2. **Alternative 2:** Construction of the new 16-inch pipeline on North Oak Glen Drive from Tefft Street to the Sandydale connection point; and replacement of the existing 10-inch AC pipeline from the Foothill Tanks to North Oak Glen Drive on Tefft Street with a new 16-inch PVC pipeline (shown in Figure 2-1). These improvements would allow the District to maintain high system pressures during MDD plus fire-flow conditions at Dana Reserve and provide an additional freeway crossing, adding required redundancy to the existing distribution system (shown in Figure 2-1). These improvements would also provide required redundancy to the District's water supply from the Foothill Tanks. The existing 10-inch is at high risk of failure because of the age of the pipeline. This pipeline also provides much of the system's water supply, and if it were to fail, pressures would fall across the system.

2.3.3. Evaluation of Proposed Onsite Pipeline Improvements

The Developer proposed four connection points for the Dana Reserve water system based on anticipated projects. However one proposed connection does not connect to the District's existing system. As such, it is recommended that the southeast connection point be moved to the intersection of Sandydale Drive and North Frontage Road.

Figure 2-1 shows the Developer-proposed water mains for the Dana Reserve development per the most recent copy of the Draft DRSP (April 2020). The proposed 12-inch mains are appropriate for maintaining District recommended pressures and velocities. **Figure 2-1** shows the North Frontage Road Pipeline that provides looping for the overall system and prevents a dead end on Willow Road. While looping is required to meet District standards, it is recommended the District pursue the Willow Road EOL Connection, outlined in **Figure 2-1**, to avoid a dead-end connection, while maintaining services at the end of the 12-inch line on Willow Road. This alternative maintains looping requirements but avoids unnecessary off-site improvements.

It should be noted that the Draft DRSP only identifies transmission mains to serve the Dana Reserve development, so the extent of onsite improvements that could be reviewed and modeled was limited. Further evaluation will be needed after preliminary design of onsite improvements is submitted by the developer.

2.4 Storage Analysis and Recommendations

Table 2-13 outlines the water system storage capacity for the District system under three scenarios, with and without the Dana Reserve Development. The first scenario represents existing conditions of the current District system based on current system demands and service population. The second scenario represents the maximum anticipated infill potential based on parcels that could be added to the District system, particularly those designated NCS D Reserved Capacity, those on private wells, and vacant parcels. This scenario assumes that those parcels that can subdivide will subdivide, increasing ADU potential. The final scenario represents the future conditions outlined in the Storage Capacity Analysis of the 2007 Water and Sewer Master Plan. This scenario anticipated the construction of 1,000,000 gallons of additional storage, increasing the overall system storage to a total of 4,280,000 gallons. The 2007 Water and Sewer Master Plan analysis also included Sundale Well as an emergency supply. It was assumed that Sundale Well could reliably produce 1,000 gpm of emergency water supply for a three-day period, which is equivalent to 3,710,000 gallons. This assumption is not valid if the wells are not operated sufficiently.

The District is required by State law (California Code of Regulations Title 22) to maintain sufficient water storage capacity within its system to meet three basic needs: fire storage, equalization storage, and emergency storage. Fire flow storage must be greater than that required to produce the maximum anticipated fire-flow for a specified duration. Equalization storage is necessary to maintain availability of demand during peak conditions when system demands are greater than that being fed directly from supply sources. Emergency storage must be on hand to produce at least 50 gallons per capita per day for three days.

Fire-flow storage is calculated by multiplying fire-fighting flowrate by the duration of the fire-fighting event. A 3,000 gallon per minute flowrate for a duration of three hours was used to determine the minimum fire storage required for the system (540,000 gallons). This minimum value was assumed to be equal for both existing and future conditions.

Equalization storage is estimated by the formula: $(1.5 - 1) \times (\text{MDD in GPM}) \times (14 \text{ hours}) \times (60 \text{ minutes per hour})$. The calculated values are displayed in **Table 2-13** for three scenarios.

Emergency storage is calculated by multiplying population by 50 gallons per day for three days. Existing population within the NCS D service area is estimated at 13,771 for the year of 2020 as calculated using the Department of Water Resources (DWR) Population Tool. Existing and future population projections from the 2020 DWR service population estimates are shown in **Table 2-12**, including future projections from the 2020 UWMP.

Table 2-12: NCS D Served Population Summary		
Conditions	2020 Population	2045 Population with Maximum Anticipated Infill Development
District Service Area	13,771	16,031
District Service Area with Dana Reserve Project	13,771	18,398
Notes:		
1. Per Tables 3-1 and 3-1a from the District's 2020 UWMP update.		

Table 2-13: Water System Storage Capacity

Storage Requirements	Existing Conditions ¹	Existing Conditions with Dana Reserve	Maximum Anticipated Infill Development ² with Dana Reserve
	gallons	gallons	gallons
Fire	540,000	540,000	540,000
Equalization	952,489	1,108,198	1,256,843
Emergency	2,065,650	2,486,250	2,550,600
Total	3,558,139	4,134,448	4,347,443
Existing Above-Ground Storage Capacity	3,280,000	3,280,000	3,280,000
Gross Surplus/(Deficiency)	(278,139)	(854,448)	(1,067,443)
Notes:			
1. Existing conditions based on 2019 NCS D customer usage data.			
2. Maximum anticipated infill development based on current land development status and potential future development status.			

The District’s existing tank storage is not adequate to meet current and future needs including the Dana Reserve. While current storage does not adequately provide storage for existing conditions, the addition of Dana Reserve increases the storage need by almost 577,000 gallons.

As delivery from the NSWP increases, the District will require more operational storage for the water distribution system. Unlike wells, which can be sequenced to match daily diurnal usage fluctuations, the NSWP delivers constant flow into the District system. This requires additional equalization or “buffer” storage to prevent overflowing tanks or draining them below typical operating levels. As the District continues to operate their existing groundwater wells, the District will operate them during times when the cost for energy is low, which typically falls during low water demand hours (late night to early morning). This increased production during low consumption periods will dictate the District’s need for additional storage. It is recommended that the District invest in additional aboveground storage in order to maintain enough storage to improve flexibility in operating with higher NSWP deliveries alongside continued groundwater well pumping. The preferred location for new storage is at the Foothill Tanks site.

Adding the new 1.0 MG storage tank recommended in the Water Master Plan will require that the District purchase additional land. The expanded storage capacity will allow the District to meet the identified storage requirements and will provide required redundancy. The additional tank will also facilitate tank maintenance as cleaning and recoating can require taking a tank out of service for months at a time. The addition of a new tank at the Foothill Tanks site would necessitate improvements to the District’s current chemical injection as well as valving between tanks. The current chemical injection system relies on manual injection of chemicals to the water stored in the elevated tanks. The construction of an additional storage tank would warrant automation and improvements to the existing chemical injection. It is also recommended that the District automate the current manual isolation valves between tanks to control water quality and manage constant flow from the NSWP.

Operational storage for NSWP delivery is another area of concern. The existing 500,000 gallon partially-buried reservoir at JRPS receives water from the City of Santa Maria. Pressure conditions in the City’s system can fluctuate, necessitating the inclusion of this reservoir to provide a constant water supply to JRPS. The reservoir is

one of the only major components of NSWP with no redundancy. If the existing JRPS Reservoir is taken out of service for repairs, cleaning or maintenance, NSWP may not have adequate supply from the City to operate which could leave the District unable to meet system demands. Adding a second 500,000-gallon reservoir at JRPS is required to provide redundancy in case the reservoir must be taken out of service for maintenance or repairs.

DRAFT

3.0 WASTEWATER COLLECTION SYSTEM

3.1 Wastewater Flows

3.1.1. Flow Monitoring

To aid in estimating existing wastewater flows and the distribution across the District wastewater collection system, MKN’s subconsultant, ADS, placed three (3) depth-velocity flow meters in the District’s collection system at locations indicated on **Figure 3-1**. MKN and District staff worked with ADS to identify manholes for placement. Five-minute depth and velocity data were collected between October 23, 2020, and November 28, 2020 and converted to flow in gallons per minute (GPM). The report from ADS (Appendix A) describes the flow meter type and data collection methodology and provides graphs of calculated flows at each location.

The sewershed upstream of Flow Meter No. 1 (FM01) includes contributions from the two other flow meters (FM02 and FM03).

The flow conditions used throughout the next two sections of the Study are defined below.

- *Average Annual Flow (AAF)*: The flow rate averaged over the course of the year and the base flow for the collection system and WWTF.
- *Average Daily Flow (ADF)*: The flow rate averaged by day over a monitoring period.
- *Maximum Month Flow (MMF)*: The average daily flow during the month with the maximum cumulative flow. MMF is often the basis for a WWTF permitted flow limit.
- *Peak Day Flow (PDF)*: The maximum daily flow rate used to design or evaluate hydraulic retention times for certain wastewater treatment processes.
- *Peak Hour Flow (PHF)*: The maximum one-hour flow experienced by the facility is typically used for sizing collection system mains, WWTF piping, pump stations, flow meters and WWTF headworks systems. Peak hour flow is typically derived from facility influent records, flow monitoring, or empirical equations used to estimate PHF based on service area population.

The following table summarizes results for each flow meter during the flow monitoring period.

Parameter	Units	Flow Meter		
		FM01	FM02	FM03
Pipe Diameter	Inches	24	12	10
Average Daily Flow	GPD	560,000	191,000	74,000
Average Daily Flow	GPM	389	133	52
Average Flow Depth	Inches	4.75	2.95	2.25
Peak Hour Flow	GPM	747	258	101
Peak Hour Flow Depth	Inches	5.08	3.00	2.32
Peak Hour Peaking Factor (PHF/ADF)	-	1.9	1.9	1.9
Peak Instantaneous Flow (5-minute data)	GPM	875	643	172

Results for FM01 during the study period were compared to flows at the Southland WWTF influent flow meter during the study period and between January 2019 and December 2020.

Table 3-2: Historical Southland WWTF Influent Flow and Loading (January 2019 – December 2020)		
Parameter	Unit	Value
Average Flow During Study Period (Oct/Nov 2020)	MGD	0.50
Average Annual Flow (AAF)	MGD	0.49
Maximum Month Flow (MMF)	MGD	0.51
Peak Day Flow (PDF)	MGD	0.57
Peak Hour Flow (PHF) ¹	MGD	1.3

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¹ Peak hour was determined from data collected between July 2018 and June 2020 for another study being conducted by the District.



Nipomo Community Services District

Dana Reserve Development - Water and Wastewater Service Evaluation

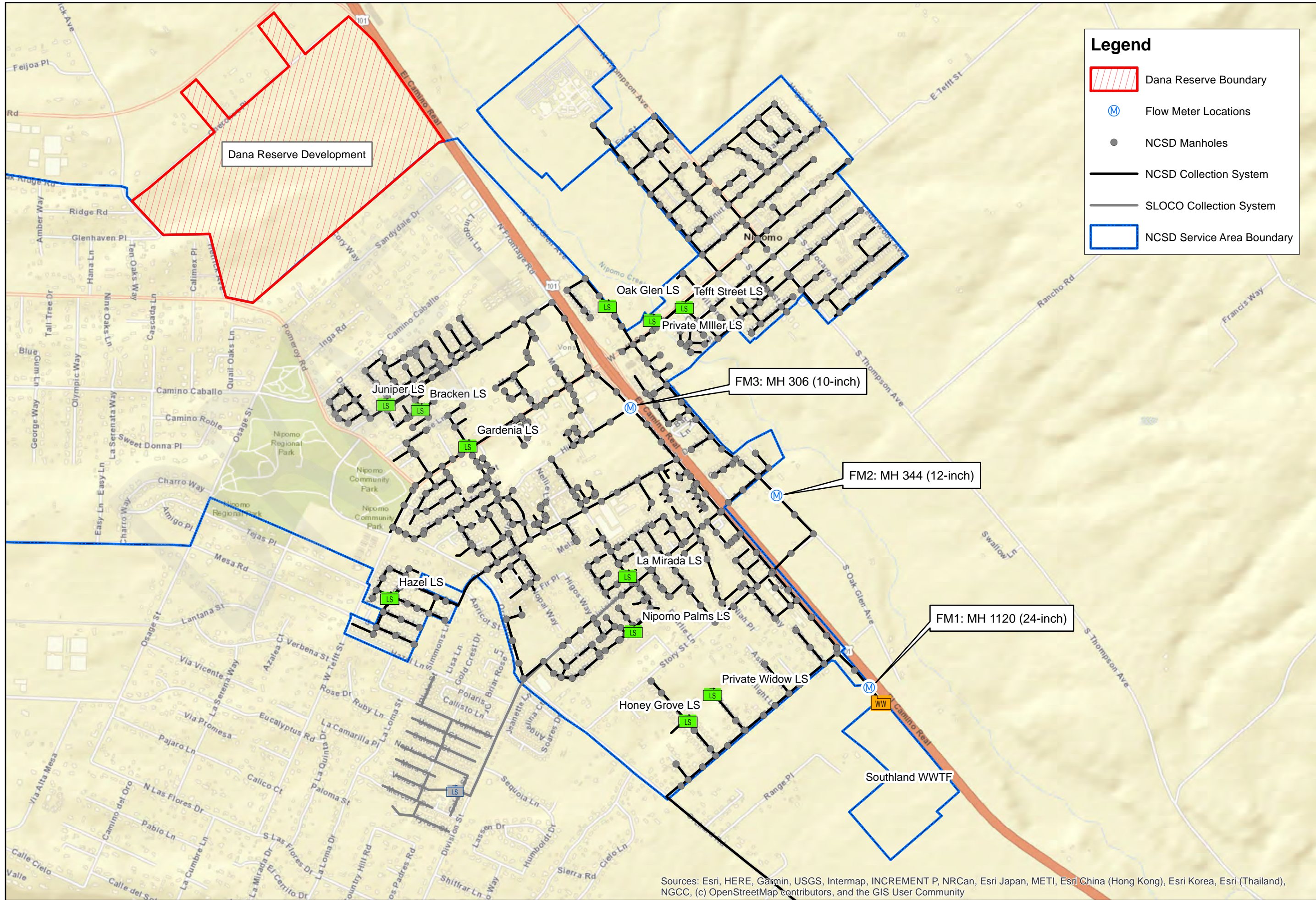


Figure 3-1:
Flow Meter Locations

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



0 750 1,500
Feet



3.1.2. District Projections

The District includes two wastewater service areas: Town and Blacklake. District staff is developing the Blacklake Sewer Consolidation Project to regionalize wastewater treatment at a central District facility. Existing influent wastewater from the Blacklake sewer collection system will be diverted from the Blacklake Water Reclamation Facility (WRF) to the Southland Wastewater Treatment Facility (WWTF). This project will require installation of a lift station at the existing Blacklake WRF site and construction of a force main to convey wastewater from the Blacklake system to the Town Sewer system for conveyance and treatment at the Southland WWTF. The existing Blacklake WRF will be decommissioned.

County sewer customers are also connected to the Town System through the Galaxy and People’s Self Help (PSH) Lift Stations. These customers are identified separately in **Table 3-4**.

Future District projections in **Table 3-5** include both Blacklake and Town service areas since both will be served in the future. District GIS has identified parcels which are not yet tied into District sewer mains but could be served in the future, therefore these parcels were included. Two different methods were considered to estimate future AAF:

- Method 1: Return flows applied to 10-year (2011-2020) water production records².
- Method 2: Duty factors from the 2007 Water and Sewer Master Plan Update

Method 1 results were developed from average daily demand (ADD) calculated as described in Section 2.1 for the Maximum Anticipated Infill Development Scenario and potential ADUs with return factors applied based on land use of each parcel. Return factors are summarized in the table below.

Land Use	Sewer Flow Return Factor (%)
Agriculture	-
Commercial Retail	90%
Commercial Service	90%
Multi-Land Use Category	90%
Office and Professional	90%
Open Space	65%
Public Facility	65%
Recreation	-
Rural Lands	-
Residential Multi-Family	90%
Residential Rural	90%
Residential Suburban	50%
Residential Single Family	60%

² Historical demands by parcel, based on billing records, were adjusted using the 10-year production average. These demands by individual parcel were then used to calculate water usage factors per acre based on land use category.

Both methods are summarized below for the entire Town Sewer service area, including the County service areas. Both methods are also compared to the flow metering results discussed in Section 3.1.

Table 3-4: Estimated Total Existing Sewer Flows								
Land Use	No. of Sewered Parcels	Area (Ac)	% of Total	10-yr Water Production (gpd)	% of Total	Return Factor (%)	Estimated Sewer Flow based on Return Factors (gpd)	Estimated Sewer Flow with MP Sewer Factors (gpd)
Commercial Retail	3	57	7%	76,151	9%	90%	68,536	61,113
Commercial Service	9	8	1%	3,464	0%	90%	3,117	2,032
Multi-Land Use Category	1	3	0%	359	0%	90%	323	0
Office and Professional	18	5	1%	2,992	0%	90%	2,693	942
Public Facility	5	12	1%	4,186	0%	65%	2,721	5,188
Rural Lands	1	3	0%	268	0%	0%	0	0
Recreation	1	122	16%	86,473	10%	0%	0	0
Residential Multi-Family	525	72	9%	158,785	19%	90%	142,906	189,711
Residential Suburban	112	39	5%	21,382	3%	50%	10,691	12,817
Residential Single Family	1,878	384	49%	479,326	58%	60%	287,596	354,371
Agriculture	1	79	10%	40,938	0%	0%	0	0
Subtotal	2,554	783	100%	874,325	100%	-	518,584	626,173
County Service Areas							72,662	77,074
Total Estimated Flow							591,246	703,247
Measured Flow							559,673	559,673
% Difference							6%	26%

Table 3-5 summarizes future flow estimates under both methods described above.

Table 3-5: Projected Future Sewer Flows (Not including Existing)

Land Use	No. of Sewered Parcels	Area (Ac)	% of Total	10-Yr Water Production (gpd)	% of Total	Return Factor (%)	Estimated Sewer Flow with Return Factor (gpd)	Estimated Sewer Flow with MP Sewer Factors (gpd)
Commercial Retail	62	71	15%	94,133	21%	90%	84,720	75,544
Commercial Service	11	49	10%	21,883	5%	90%	19,695	12,838
Multi-Land Use Category	0	0	0%	0	0%	90%	0	0
Office and Professional	14	9	2%	5,576	1%	90%	5,018	1,755
Public Facility	2	12	2%	4,279	1%	65%	2,782	5,304
Rural Lands	0	0	0%	0	0%	0%	0	0
Recreation	0	0	0%	0	0%	0%	0	0
Residential Multi-Family	29	38	8%	83,775	13%	90%	75,398	100,092
Residential Suburban	91	132	28%	72,673	21%	50%	36,336	43,560
Residential Single Family	169	153	33%	191,222	37%	60%	114,733	141,372
Agriculture	0	0	0%	0	0%	0%	0	0
Subtotal	378	464	100%	473,541	100%	-	338,681	380,465
Blacklake WRF¹							58,000	58,000
Future ADUs							26,161	26,161
Total Flows							422,842	464,626
Notes:								
1. Blacklake WRF will be decommissioned in the future with flows going to Southland WWTP instead. Future flow from the 2017 Blacklake Sewer Master Plan (MKN) was used.								

Flow meter results were compared to estimated existing flows as shown in the following tables to calibrate the District’s sewer model. Existing flows were estimated by applying the return factors to water billing records for each customer. The readings at FM01 and FM02, the largest sewersheds, were significantly closer to modeled AAF estimates than FM03 (3.4% and 0% compared to 28%). FM03 only represented 13% of the measured flow. Since the flow monitoring represented a limited period, but monthly flows at Southland WWTF do not vary significantly from AAF, the flow monitoring results indicate Method 1 and the assumed return factors are adequate for modeling sewer system flows in each sewershed.

Table 3-6: Estimated Sewer Flow for FM01 Basin

Existing							
Land Use	No. of Sewered Parcels	Area (Ac)	% of Total	Water Usage (gpd)	% of Total	Reduction Factor (%)	Estimated Sewer Flow (gpd)
Commercial Retail	3	5	2%	6,533	2%	90%	5,879
Commercial Service	9	8	3%	3,463	1%	90%	3,117
Multi-Land Use Category	1	3	1%	359	0%	90%	323
Public Facility	1	0	0%	0	0%	65%	-
Rural Lands	1	3	1%	271	0%	0%	-
Residential Multi-Family	317	43	17%	95,760	29%	90%	86,184
Residential Suburban	86	35	13%	19,181	6%	50%	9,591
Residential Single Family	777	166	63%	206,869	62%	60%	124,122
Subtotal	1,195	262	100%	332,437	100%	--	229,216
County Service Areas							72,662
Total							301,877
FM01-(FM02+FM03) Measured Flow (gpd)							294,355
% Difference							3.4%

Table 3-7: Estimated Sewer Flow for FM02

Existing							
Land Use	No. of Sewered Parcels	Area (Ac)	% of Total	Water Usage (gpd)	% of Total	Reduction Factor (%)	Estimated Sewer Flow (gpd)
Commercial Retail	41	24	8%	31,648	12%	90%	28,484
Commercial Service	0	0	0%	0	0%	90%	0
Office and Professional	18	5	2%	2,993	1%	90%	2,693
Public Facility	4	12	4%	4,139	2%	65%	2,691
Residential Multi-Family	184	27	9%	59,391	22%	90%	53,452
Residential Suburban	26	4	1%	2,201	1%	50%	1,101
Residential Single Family	647	136	48%	170,477	63%	60%	102,286
Agriculture	1	79	28%	0	0%	0%	-
Total	921	287	100%	270,850	100%	--	190,706
Measured Average Daily Flow (gpd)							190,986
% Difference							0.0%

Table 3-8: Estimated Sewer Flow for FM03

Existing							
Land Use	No. of Sewered Parcels	Area (Ac)	% of Total	Water Usage (gpd)	% of Total	Reduction Factor (%)	Estimated Sewer Flow (gpd)
Commercial Retail	24	29	12%	37,973	17%	90%	34,175
Office and Professional	0	0	0%	0	0%	90%	0
Public Facility	0	0	0%	0	0%	65%	0
Recreation	1	122	52%	86,473	38%	0%	-
Residential Multi-Family	24	2	1%	3,631	2%	90%	3,268
Residential Single Family	454	82	35%	101,986	44%	60%	61,192
Total	503	234	100%	230,063	100%	--	98,635
Measured Average Daily Flow (gpd)							74,332
% Difference							28%

Peaking factors for maximum month, peak day, and peak hour flow conditions were determined from historical flows at Southland WWTF between January 2019 and December 2020. Peak hour was determined from data collected between July 2018 and June 2020 for another study being conducted by the District. The following table summarizes these flows and the resulting peaking factors:

Table 3-9: Historical Southland WWTF Influent Flow

Parameter	Unit	Value	Calculated Peaking Factor (PF)
AAF	MGD	0.50	--
MMF	MGD	0.51	1.02
PDF	MGD	0.57	1.14
PHF	MGD	1.3	2.6

3.1.3. Dana Reserve Wastewater Flow Projections

Approximate wastewater generation from the new development was calculated by the developers in the Dana Reserve Specific Plan totaling an average flow of 0.204 million gallons per day (MGD) and a Peak Hour Flow (assuming a peaking factor of 2.5) of 0.510 MGD. Residential wastewater generation factors were calculated as percentages of the average water demand, with single-family home parcels above 6000 square feet equaling 60% of the water demand, single-family home parcels between 4,000 to 6,000 square feet equaling 70%, and 90% for all other residential categories. Wastewater flow generation factors for commercial land uses were derived from the City of San Luis Obispo Infrastructure Renewal Strategy (Dec. 2015).

**Table 3-10: Developer Provided Wastewater Generation Factor and Demand Projections
(Table 5.2 from DRSP Update)**

Land Use Category	Number of Units or Acres	Wastewater Generation Factor ^{3,4} (GPD)	Annual Demand (af/yr)	Daily Demand ² (gpd)
Residential				
Condos	173 units	103/unit	19.93	
Townhomes	210 units	116/unit	27.21	
Cluster	124 units	167/unit	23.21	
4,000-5,999 SF	463 units	130/unit	67.41	
6,000-7,000+ SF	225 units	180/unit	45.36	
Affordable	75 units	116/unit	9.72	
<i>Subtotal</i>			<i>192.84⁵</i>	<i>172,245</i>
Commercial¹				
Village Commercial	4.4 ac	100/k-sf	7.16	
Flex Commercial	14.5 ac	100/k-sf	23.58	
<i>Subtotal</i>			<i>30.74</i>	<i>27,443</i>
Landscape				
Public Recreation	10.0 ac	0.50 af-ft/yr-acre	5.00	
Neighborhood Parks	15.0 ac	-	-	
Streetscape/Parkways	6.5 ac	-	-	
<i>Subtotal</i>			<i>5.00</i>	<i>4,464</i>
<i>Project Total Average Day Flow:</i>			<i>228.68 af/yr</i>	<i>204,152 gpd</i>
<i>Project Peak Flow (assumes 2.5 Peaking Factor):</i>			<i>571.70 af/yr</i>	<i>510,381 gpd</i>
Notes:				
1. Assumes 33% useable site area for buildings.				
2. Conversion factor: 1 af/yr equals 892.742 gpd.				
3. Wastewater flow generation factors for single family are a percentage of average water demand: 60% for 6,000+, 70% for 4,000-6,000, 90% for all others.				
4. Wastewater flow generation factors for commercial: City of San Luis Obispo, Infrastructure Renewal Strategy (Dec. 2015).				
5. Subtotal for Residential land use was identified as 192.94 in the draft table but calculated as 192.84.				
6. Updated Table 5.2 provided in email dated September 23, 2020, from Robert Camacho, RRM Design Group.				

In **Table 3-11**, flows estimated by the developer were compared to estimated wastewater flows developed using both methods (2007 Sewer Master Plan and water usage-based flow estimates) discussed in Section 3.1.2.

Table 3-11: Dana Reserve Wastewater Flow Projections using Water Production-Based and 2007 Sewer Master Plan-Based Methods

Land Use	Acres	10-Year Water Land-Use Factor (GPD/acre)	10-Year Water Production (GPD)	Sewer Flow Return Factor	Sewer Flow Rate Using Water Production and Return Factors (GPD)	2007 Sewer Master Plan Update Duty Factors (GPD/acre)	Sewer Flow Rate Using District Duty Factors (GPD)
Multi-Family Cluster	19.3	2205	42,557	90%	38,301	2,634	50,836
4000 SF Lot	16.2	2205	35,721	90%	32,149	2,634	42,671
4800 SF Lot	53.4	1250	66,750	60%	40,050	924	49,342
6000 SF Lot	26.7	1250	33,375	60%	20,025	924	24,671
6000-7000 SF Lot	15.8	1250	19,750	60%	11,850	924	14,599
Affordable	37.3	1250	46,625	60%	27,975	924	34,465
<i>Subtotal</i>	4	2205	8,820	90%	7,938	2634	10,536
<i>Subtotal</i>	172.7	-	253,598	-	178,288	-	227,120
Flex Commercial	14.5	1326	19,227	90%	17,304	1064	15,428
Village Commercial	4.4	1326	5,834	90%	5,251	1064	4,682
<i>Subtotal</i>	18.9	-	25,061	-	22,555	-	20,110
Public Parks	10	357	3,570	65%	2,321	442	4,420
Neighborhood Parks	15	-	-	-	-	-	-
Streetscapes/park ways	6.5	-	-	-	-	-	-
<i>Subtotal</i>	31.5	-	3,570	-	2,321	<i>Subtotal</i>	4,420
Projected Average Day Flow (Rounded)					203,000		252,000

As shown, the projections provided by the developer closely match the projections using water production and return factors.

The following table summarizes peak flows from Dana Reserve using the peaking factors from **Table 3-9**.

Table 3-12: NCSD Dana Reserve Wastewater Flow Comparison

Projection Method	Average Annual Flow (MGD)	Maximum Month Flow (MGD)	Peak Day Flow (MGD)	Peak Hour Flow (MGD)
Dana Reserve Proposed Peaking Factor	-			2.5 x AAF
Dana Reserve Specific Plan	0.204		--	0.51
Peaking Factor	-	1.02 x AAF	1.14xAAF	2.6 x AAF
2007 Sewer Master Plan Demand Factors	0.251	0.256	0.286	0.653
Water Usage / Return Flows	0.203	0.207	0.231	0.528

The following table summarizes existing District flows, future District projections, future ADU contributions, and Dana Reserve projections. These flows are the basis for evaluating capacity of District facilities and anticipating impact of the Dana Reserve development.

Table 3-13: Existing and Future Flows

Flows	Average Annual Flow (MGD)	Maximum Month Flow (MGD)	Peak Day Flow (MGD)	Peak Hour Flow (MGD)
Existing District and County Service Area Flows	0.59	0.60	0.67	1.5
Future Blacklake Service Area	0.058	0.078	0.13	0.23
Future District Service Area Flows	0.34	0.35	0.39	0.88
ADU Contributions	0.026	0.027	0.030	0.068
Dana Reserve Projections	0.20	0.21	0.23	0.53
Total Future Flows	1.22	1.26	1.46	3.25
Notes:				
1. Blacklake MMF, PDF, and PHF estimated using peaking factors of 1.34, 2.30, and 4.0 respectively from the 2017 Blacklake Sewer Master Plan.				

3.2 Collection System Facilities

3.2.1. Existing Facilities

The District wastewater system consists of ten (10) lift stations in the Town Sewer System, three (3) lift stations in the Blacklake Sewer System, gravity sewer mains, and the Blacklake WRF and Southland WWTF. Treatment facilities are discussed in Section 4 of this study.

As discussed previously in this section, the Blacklake Sewer System will ultimately be connected to the Town Sewer System through a new lift station and force main. In addition to the ten District Town System lift stations, the Town Sewer System receives flow from two County of San Luis Obispo lift stations (Galaxy and People’s Self Help or PSH). Collection system pipeline sizes and lengths for the Town Sewer System are summarized in the table below:

Table 3-14: Existing Sewer Pipeline Statistics		
Diameter (inches)	Length (feet)	% of Total
6	6,038	3.85%
8	116,994	74.67%
10	2,030	1.30%
12	22,713	14.50%
15	3,462	2.21%
18	1,162	0.74%
21	3,152	2.01%
24	1,140	0.73%
Total	157,000 (Rounded)	100%

3.2.2. Proposed Master Plan Facilities

MKN reviewed the District’s 2007 Water and Sewer Master Plan (Master Plan) for proposed improvements that may be necessary to support the development. The completed Frontage Road Trunk Sewer Project implemented Master Plan recommendations between Division Street and Southland WWTF, providing additional capacity downstream of the Dana Reserve Annexation. Of the proposed improvements, the following were identified:

- Replace existing 12-inch with 15-inch between Grande and Division
- Replace existing 10-inch with 15-inch sewer main between Hill Street and Grande Street
- Replace existing 10-inch with 12-inch sewer main between Juniper Street and Hill Street
- Install 8” between Camino Caballo and Juniper Street

3.2.3. Hydraulic Analysis Results and Recommendations

MKN utilized the District’s current SewerCAD hydraulic model to evaluate the impact of the proposed Dana Reserve development on the existing District wastewater collection system based on existing and future projected demands. The focus area was along the Frontage Road trunk sewer, which would convey flow from Dana Reserve to Southland WWTF.

Flow meter data was used to validate existing flow scenarios in the model as described in Section 3.1.1.

For the purpose of this report, scenarios were modeled for both current and future conditions within the District’s Town Sewer System. Model runs were performed under steady state conditions as described below:

- Scenario 1: Existing Average Annual Flow (AADF) conditions
- Scenario 2: Existing Peak Hour Flow (PHF)
- Scenario 3: PHF conditions with Blacklake Sewer Consolidation, future conditions, and Tefft Street lift station (LS) pumped flows
- Scenario 4: PHF conditions with Blacklake Sewer Consolidation, future conditions, Tefft Street LS pumped flows, and Dana Reserve
- Scenario 5: PHF conditions with Blacklake Sewer Consolidation, future conditions, Tefft Street LS pumped flows, Dana Reserve, and Frontage Road improvements per Blacklake Sewer System Consolidation Study

Unless otherwise stated, lift stations were modeled assuming pumped flow is equivalent to inflow. Most of the lift stations pump for only a few minutes every hour, serve small areas or cul-de-sacs, and assuming all pumps were activated at the same time under peak hour conditions resulted in capacity exceedances that were not representative of system observations. In Scenarios 3, 4, and 5, Tefft St Lift Station was modeled to pump at 636 gpm, which is near the design point of 600 gpm at 89.1 ft total dynamic head (TDH).

The scenarios were evaluated based on the following depth over diameter (d/D) criteria, in conjunction with the 2007 Sewer Master Plan Update:

- For pipelines 12-inches or less: $d/D < 50\%$
- For pipelines 15-inches or greater: $d/D < 75\%$

Table 3-15 provides results of the analysis for scenarios listed above on the Frontage Road trunk main. **Figure 3-2** identifies the sewer mains included in the table. The mains that do not meet the d/D criteria are highlighted in red. Under existing conditions, without Tefft Street LS pumped flows, the sewer system meets d/D criteria. However, once Tefft Street pumped flows are included in the analysis, the smaller, upstream mains are too small to meet d/D criteria due to submerged downstream conditions.

Increasing the size of Frontage Road trunk mains beyond sizes recommended in the Master Plan kept d/D within recommended ranges. The following improvements are recommended:

1. Replace existing 10-inch with 3,500 LF 15-inch PVC sewer main and manholes between Juniper Street and Grande Avenue; and
2. Replace existing 12-inch with 1,170 LF 18-inch PVC sewer main and manholes between Grande Avenue and Division Street.

No sewer service is available near the development. The developer will be responsible for installing a lift station with force main, gravity sewer mains, or a combination to connect Dana Reserve to the District sewer system. This decision must be approved by District staff. Installing a lift station to convey all Dana Reserve flows could result in significant impacts to the District sewer system if variable frequency drives are not utilized to reduce instantaneous peak flows from pumps. District staff should revisit the hydraulic analysis for upsizing the existing Frontage Road Trunk sewer after preliminary design for the sewer connection is submitted by the developer.

Table 3-15: Dana Reserve Sewer Model Results

Pipe ID From Sewer Model ¹	Existing Pipe Diameter (in)	Scenario 1: Existing ADF Condition (gpm)	Scenario 1: Existing ADF Condition (d/D)	Scenario 2: Existing PHF Condition (gpm)	Scenario 2: Existing PHF Condition (d/D)	Scenario 3: Future ² PHF with Tefft St LS Pumped Flows (gpm)	Scenario 3: Future ² PHF with Tefft St LS Pumped Flows (d/D)	Scenario 4: Future ² PHF with Tefft St LS Pumped Flows and Dana Reserve (gpm)	Scenario 4: Future ² PHF with Tefft St LS Pumped Flows and Dana Reserve (d/D)	Scenario 5: Future ² PHF with Tefft St LS Pumped Flows, Dana Reserve, and Frontage Rd Improvements ³ (gpm)	Scenario 5: Future ² PHF with Tefft St LS Pumped Flows, Dana Reserve, and Frontage Rd Improvements ³ (d/D)
495(2)	10	24	14.6%	62	23.3%	379	80.6%	746	100.0%	746	49.4%
499	10	24	14.8%	62	23.7%	379	100.0%	746	100.0%	746	50.4%
496	10	24	15.3%	62	24.6%	379	100.0%	746	100.0%	746	52.7%
501	10	24	17.1%	62	29.5%	379	100.0%	746	100.0%	746	56.8%
500	10	24	21.1%	62	36.2%	379	100.0%	746	100.0%	746	58.8%
504	10	60	23.2%	156	38.0%	579	100.0%	946	100.0%	946	56.9%
503	10	63	24.2%	165	39.8%	588	100.0%	955	100.0%	955	59.3%
418	10	63	22.8%	165	37.5%	588	83.1%	955	100.0%	955	56.7%
417	10	66	18.2%	171	29.6%	679	61.9%	1,046	100.0%	1,046	44.2%
446	10	66	17.9%	171	29.0%	679	66.3%	1,046	100.0%	1,046	48.9%
447	10	66	33.3%	171	55.1%	684	83.2%	1,051	100.0%	1,051	69.2%
806	12	131	30.7%	339	50.7%	994	100.0%	1,361	100.0%	1,361	59.3%
807	12	132	30.2%	342	49.2%	997	100.0%	1,364	100.0%	1,364	57.1%
451	12	132	31.6%	344	51.6%	999	100.0%	1,365	100.0%	1,365	59.3%
464	12	134	29.5%	349	49.9%	1,003	100.0%	1,370	100.0%	1,370	58.8%
299	12	134	29.8%	349	50.1%	1,003	82.0%	1,370	87.5%	1,370	57.9%
1010	21	235	15.0%	609	24.2%	1,305	35.9%	1,672	41.0%	1,672	41.0%
1011	21	235	15.1%	609	24.3%	1,305	36.0%	1,672	41.0%	1,672	41.0%
1013	21	238	13.6%	619	21.8%	1,315	32.0%	1,682	36.4%	1,682	36.4%
1014	21	238	16.7%	619	27.2%	1,315	40.2%	1,682	44.7%	1,682	44.7%
1015	21	373	18.7%	968	30.5%	2,075	45.3%	2,442	49.2%	2,442	49.2%
1016	21	384	18.2%	998	29.6%	2,120	43.9%	2,486	47.9%	2,486	47.9%
1020	21	384	18.9%	998	30.8%	2,120	45.5%	2,486	49.5%	2,486	49.5%
1018	21	386	18.5%	1,004	30.0%	2,125	44.5%	2,492	48.6%	2,492	48.6%
1019	21	386	18.5%	1,004	30.1%	2,125	44.6%	2,492	48.7%	2,492	48.7%
1022	21	386	18.5%	1,004	30.0%	2,125	44.5%	2,492	48.6%	2,492	48.6%
1024	21	386	17.2%	1,004	28.2%	2,125	42.1%	2,492	49.6%	2,492	49.6%
1023	21	386	20.2%	1,004	32.8%	2,125	49.5%	2,492	53.9%	2,492	53.9%
1025	24	411	19.3%	1,068	31.2%	2,358	48.0%	2,725	52.3%	2,725	52.3%
1026	24	411	19.4%	1,068	31.4%	2,358	48.4%	2,725	52.7%	2,725	52.7%
1028	24	411	17.8%	1,068	28.9%	2,358	44.0%	2,725	47.7%	2,725	47.7%
1030	24	411	15.1%	1,068	24.4%	2,358	36.6%	2,725	39.5%	2,725	39.5%

Notes:

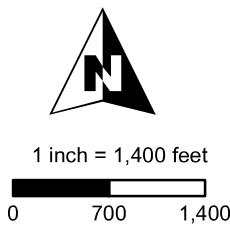
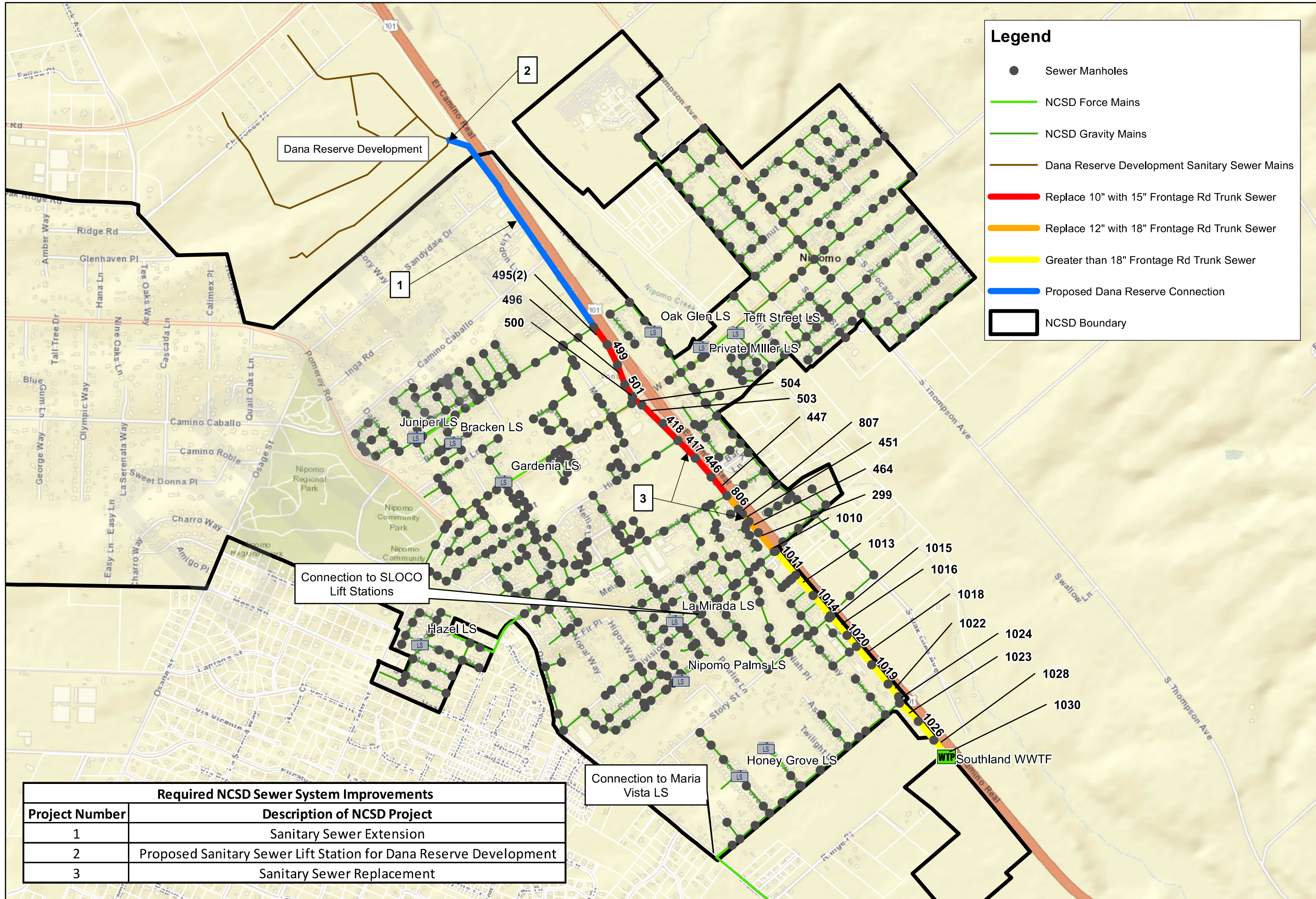
- Pipelines are in order from upstream to downstream
- Future flows include parcels that will tie into the sewer system, potential ADUs developments, and Blacklake pumped flows
- Frontage Rd pipeline improvements include increasing pipe diameters from 10-inch to 15-inch and from 12-inch to 18-inch



Nipomo Community Services District

Dana Reserve Development - Water and Wastewater Service Evaluation

Figure 3-2 Wastewater Collection System Improvements



3.2.4. Recommended Offsite Improvements

The hydraulic analysis indicated that the Dana Reserve development will likely impact the District's wastewater collection system most significantly during PHF conditions. The District should consider implementing the following projects in Frontage Road:

1. Replace existing 10-inch with 3,500 LF 15-inch PVC sewer main and manholes between Juniper Street and Grande Avenue; and
2. Replace existing 12-inch with 1,170 LF 18-inch PVC sewer main and manholes between Grande Avenue and Division Street.
3. The developer will also need to extend sewer service to the Dana Reserve development from Juniper Street.

3.2.5. Evaluation of Proposed Onsite Improvements

The DRSP identifies a network of sewer mains conveying flow to the proposed connection along Frontage Road. Sizes are not identified but it is assumed all mains will be designed and constructed in accordance with District standards. Two lift stations are identified to convey flow from neighborhoods 8 and 9 (near Hetrick Avenue) to the onsite collection system. Not enough information was provided to evaluate capacity of these onsite improvements. It is recommended the developer and District evaluate onsite sewer design and the potential impact of the two lift stations on proposed offsite improvements after preliminary design proceeds.

4.0 WASTEWATER TREATMENT FACILITY

4.1 Influent Flow and Loading Analysis

4.1.1. District Projections

Historical water quality data was analyzed from the Southland WWTF between January 2019 and December 2020. Average annual and maximum monthly flows were calculated as described in Section 3.1.1 and were applied to this water quality data to calculate influent loading values for 5-day biological oxygen demand (BOD₅), total suspended solids (TSS) and Total Kjeldahl Nitrogen (TKN).

Through the Blacklake Sewer Consolidation Project, the Blacklake WRF will be decommissioned and all Blacklake flow will be sent to Southland WWTF as discussed in the previous section. In order to determine whether the Southland WWTF has the capacity to handle the added influent from the proposed Dana Reserve development, the combined existing influent flows and loading rates were analyzed.

As a result of the influent from Blacklake being transmitted through a force main and then being conveyed through a gravity sewer main, the rate of flow from Blacklake will likely be dampened to some extent before reaching the Southland WWTF. As such, using the same peak hour flowrates that were assumed for the Blacklake WRF to estimate the increased inflow to the Southland WWTF is a conservative analysis. Flow values shown in **Table 4-1** are a combination of existing flows to the Southland WWTF and anticipated flows from the Blacklake WRF.

Parameter	Unit	Existing
ADF	MGD	0.65
MMF	MGD	0.68
PHF	MGD	1.76
Average Annual BOD ₅ Concentration	mg/L	403
Average Annual BOD ₅ Load (Rounded)	ppd	2,170
Maximum Month BOD ₅ Concentration	mg/L	537
Maximum Month BOD ₅ Load (Rounded)	ppd	2,890
Average Annual TSS Concentration	mg/L	289
Average Annual TSS Load (Rounded)	ppd	1,560
Maximum Month TSS Concentration	mg/L	333
Maximum Month TSS Load (Rounded)	ppd	1,790

4.1.2. Dana Reserve Projections and Impact on Flows and Loadings at Southland WWTF

The projected flows and loading from the Dana Reserve development are summarized in **Table 4-2**. Since the District’s sewer service area is primarily residential, it is assumed that the BOD and TSS concentrations in the wastewater from the development will be similar to what is currently observed at the Southland WWTF.

Table 4-2: Projected Influent Flows and Loadings from Dana Reserve Project		
Parameter	Unit	Quantity
ADF	MGD	0.204
MMF	MGD	0.210
PHF	MGD	0.533
Average Annual BOD ₅ Concentration	mg/L	403
Average Annual BOD ₅ Load	ppd	686
Maximum Month BOD ₅ Concentration	mg/L	537
Maximum Month BOD ₅ Load	ppd	913
Average Annual TSS Concentration	mg/L	289
Average Annual TSS Load	ppd	492
Maximum Month TSS Concentration	mg/L	333
Maximum Month TSS Load	ppd	566

Flows from Dana Reserve will result in a 31% increase over existing District service area maximum month flows and loads. The projected flows and loads at Southland WWTF including the Dana Reserve Project are summarized in **Table 4-3**.

Table 4-3: Projected Influent Flows and Loadings from Dana Reserve Project and District Service Area		
Parameter	Unit	Existing + Dana Reserve
ADF	MGD	0.85
MMF	MGD	0.89
PHF	MGD	2.30
Average Annual BOD ₅ Concentration	mg/L	403
Average Annual BOD ₅ Load (Rounded)	ppd	2,860
Maximum Monthly BOD ₅ Concentration	mg/L	536
Maximum Monthly BOD ₅ Load (Rounded)	ppd	3,800
Average Annual TSS Concentration	mg/L	289
Average Annual TSS Loading (Rounded)	ppd	2,050
Maximum Monthly TSS Concentration	mg/L	333
Maximum Monthly TSS Loading (Rounded)	ppd	2,360

4.2 Existing Facilities

Wastewater generated in and collected by the District is conveyed to Southland WWTF, a secondary wastewater treatment facility that uses an influent lift station with two (2) screw centrifugal pumps, two (2) fine screens, one (1) grit removal system with classifier, one (1) in-pond extended aeration system (Parkson Biolac®), two (2) secondary clarifiers, 10 percolation ponds. The WWTF also has an existing gravity belt thickener and twelve (12) concrete lined sludge drying beds for waste sludge dewatering. The District recently installed a dewatering screw press to assist in the waste sludge dewatering, particularly during wet weather. A 400 KVA generator provides backup power when needed.

4.3 Proposed Master Plan Facilities

The Southland WWTF site was planned to allow phased improvements as demand increases. The Phase I design included design and construction of the above listed facilities, replacing the previous treatment pond facility to maintain and improve treatment for increasing flows and loading.

Phases II and III were outlined in Southland WWTF Master Plan Amendment 1 (AECOM, 2010) to plan for anticipated increases in flow rate and loading at Southland WWTF. Equipment and processes were designed to be able to meet greater demands with additional equipment, such as additional aeration basins or sludge digesters; in a phased approach without requiring removal or replacement of previous improvements. Anticipated phases and major system components are summarized in the tables below. Planning “triggers”, or flows, at which each phase should be implemented, are also included in **Table 4-4**. At the time the master plan was developed, the 90th percentile BOD₅ and TSS were both 300 mg/L for use in sizing facilities. The existing maximum month TSS is slightly lower (289 mg/L) whereas the BOD₅ is higher (333 mg/L). Therefore, the planning “triggers” should be reconsidered based on actual flows and loadings as compared to the Amendment 1 recommendations.

In the original Amendment 1, the District had planned to construct new aerobic sludge digesters in Phases I and III. However, during the Phase I design, the District opted to install a sludge thickening system instead and twelve (12) sludge drying beds were constructed to store sludge. The aerobic digesters were no longer needed. The sludge handling system was further improved by installing a new dewatering screw press as described above.

Project Phase	Capacity (MMF, MGD)	Planning Trigger (MMF, MGD)
Phase 1 – Existing Facilities	0.9	--
Phase 2	1.28	0.7
Phase 3	1.80	1.4

Phase II included a new pump and associated valves, piping, and controls; aeration system, and blower for Aeration Basin #2; a second clarifier; new concrete liners and decant system in one drying bed; and a new emergency generator. The secondary clarifier, twelve (12) concrete lined drying beds with decant system, and generator were installed as part of Phase I. A third blower was recently installed in the blower building.

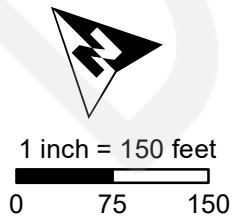
Phase III included a second grit removal system and classifier; new Aeration Basin #3 with liner, air piping and headers, controls, and aeration equipment; third clarifier; and new concrete liners and decant system in one drying bed. As noted above, all lined drying beds were installed as part of Phase I. The existing plant is shown on **Figure 4-1**.



Figure 4-1

Southland WWTF

Dana Reserve Development
 Water and Wastewater Service Evaluation
 Nipomo Community Services District



4.4 Process Capacity Analysis

The process flow diagram and design parameters from the Southland WWTF Phase 1 Improvements plans are included as Appendix B. The ability of each process to handle the anticipated combined existing flows and loads was reviewed in the following sub-sections.

4.4.1. Influent Lift Station

The existing influent lift station at the Southland WWTF consists of two screw centrifugal pumps with 20 horsepower motors, and each with a capacity of 1,700 GPM (2.45 MGD) at 30 feet of total dynamic head (TDH). The pumps alternate operation, with one pump operating and the other remaining on standby to provide 100% redundancy.

The existing combined influent PHF is estimated to be 2.30 MGD, which leaves excess capacity of 0.15 MGD while maintaining one pump for standby.

Flow Condition	Units	Design Capacity	Existing + Dana Reserve
Peak Hour Flow	MGD	2.45	2.30
Available Capacity	MGD	-	0.15

With two pumps operating and a third on standby, the estimated capacity is approximately 4.83 MGD as shown in **Table 4-6** below.

Flow Condition	Units	Design Capacity	Existing + Dana Reserve
Peak Hour Flow	MGD	4.83	2.30
Available Capacity	MGD	-	2.53

The 2012 Conceptual Design Report (CDR) for Southland WWTF identified the future installment of a third pump to handle increased flow in future phases. The wetwell was sized for this anticipated upgrade and piping was installed to accommodate a third similarly-sized pump to handle the increased influent PHF while maintaining one pump in standby mode. The District plans to install a third pump to provide additional required redundancy. This will also meet demands from Dana Reserve.

4.4.2. Influent Screens

Southland's existing headworks screen system consists of two shaftless screw screens designed for a peak flow of 4.83 MGD, with a maximum equipment capacity of 5.5 MGD.

With a rated equipment capacity of 5.5 MGD each, the headworks screens have the ability to handle anticipated combined existing and future peak hour flow rates.

4.4.3. Grit Removal

Southland WWTF's existing grit removal system consists of one vortex-type grit tank with a single self-priming grit pump. One grit tank was installed during the Phase I Improvements, with provisions to add a second in the future.

The grit tank was designed for a peak flow of 2.5 MGD. The combined existing influent PHF with Dana Reserve is estimated to be 2.30 MGD. Since existing flows with Dana Reserve will nearly meet capacity, a second grit removal system is required for redundancy. With the second grit removal system installed, the design capacity of 5.0 MGD will provide an estimated 2.7 MGD of additional capacity.

4.4.4. Extended Aeration System

Southland WWTF currently operates one extended aeration basin with a total volume of 1.41 million gallons (MG) and a design mixed liquor suspended solids (MLSS) concentration of 3,223 mg/L. The existing basin was designed for a solid retention time (SRT) of 60 to 70 days and a hydraulic retention time (HRT) of 1.63 days. The basin was sized based on a recommended range of BOD₅ loading to the aeration basin of 5 to 12 ppd per 1000 cubic feet of basin volume. The combined loads are compared with the design minimum and maximum capacity in the table below.

Condition	Units	Recommended Design Criteria (Min – Max)³	Existing + Dana Reserve
Average Annual BOD ₅ Load	ppd	943 – 2,262	2,860
Maximum Month BOD ₅ Load	ppd	943 – 2,262	3,800

The existing maximum month BOD₅ load with Dana Reserve exceeds the maximum design criteria by 1,538 ppd, indicating that a second aeration basin will be needed. In addition to the aeration basin, new diffusers, and supporting electrical, mechanical, and instrumentation will be required. A new blower, new blower building or expansion of the existing blower building will be necessary if aeration is not sufficient to meet projected demands.

4.4.5. Secondary Clarifiers

Two existing 55-foot diameter concrete circular secondary clarifiers are operating at Southland WWTF, each with a design overflow rate (OFR) of 240 gallons per day per square foot (gpd/ft²) at ADF and 694 gpd/ft² at PHF. Industry standards⁴ recommend overflow rates of 200 – 400 gpd/ft² for average flow conditions and 600 – 800 gpd/ft² at peak flow conditions. Each clarifier is designed for a solids loading of 0.95 pounds per square foot per hour (lbs/ft²/hr) at average conditions and 1.67 lbs/ft²/hr at peak conditions. The design overflow rates and solids loading rates are compared with the anticipated existing combined flow and loading conditions in **Table 4-8**.

³ Min = 5 ppd/1000 cf of basin volume. Max = 12 ppd/1000 cf of basin volume.

⁴ Wastewater Engineering Treatment & Reuse, 4th Edition, Tchbanoglous, et. al.

Table 4-8: Secondary Clarifier Existing Capacity

	Average Overflow Rate	Peak Overflow Rate	Average Solids Loading Rate	Peak Solids Loading Rate
Units	gpd/ft ²	gpd/ft ²	lb/ft ² /hr	lb/ft ² /hr
Design Value	240	694	0.95	1.67
Recommended Range	200 - 400	600 - 800	0.2 - 1.0	<1.4
1 Clarifier	358	967	1.00	2.71
2 Clarifiers	179	483	0.50	1.35

With one clarifier operating, the existing combined average OFR falls well within the recommended range outlined by Tchbanoglous, et al. (ibid.) However, the combined peak OFR exceeds the recommended maximum value by 167 gpd/ft² and the peak solids loading rate exceeds the maximum value by 1.31 lb/ft²/hr.

With two clarifiers operating, both the existing combined average OFR and the peak OFR fall under the lower bound of the recommended range. However, this is not anticipated to be an issue as the District is successfully operating two clarifiers under existing conditions. The existing average solids loading rate falls within the recommended range for one clarifier and the peak solids loading rate is less than the maximum with two operating clarifiers. However, this leaves no redundancy in the event one clarifier is out of service. Therefore, a third clarifier is recommended to meet existing conditions with Dana Reserve’s contribution.

The existing clarifiers have Return Activated Sludge (RAS) pump stations, consisting of two pumps, each with a capacity of 875 GPM. The Phase I Concept Design Report (CDR – AECOM, 2015) assumed RAS flowrates at 150% of the AAF and designed the RAS pumps to meet 150% of 0.84 MGD (approximately 1.2 MGD). The existing combined AAF is anticipated to be 0.85 MGD which is greater than the design range of the pumps. District staff can operate RAS pumps closer to 100% of AAF. However, it is recommended to upgrade RAS pumps to provide flexibility under increased flows from Dana.

4.4.6. Sludge Thickener

Southland WWTF currently conveys between 34,000 and 51,000 gallons of sludge per day to the existing gravity belt thickener. The waste sludge has a solids concentration between 0.35 and 0.5 percent total solids. The gravity belt thickener currently operates between 6 and 7 hours per day for approximately 35 hours per week. The annexation and Blacklake consolidation will increase the average annual flow, organic loads, and solids loads at the Southland WWTF by 44 percent, which will have a significant impact on the run time for the thickener. It is assumed sludge feed rates under the combined existing and Dana Reserve loading scenario will increase as a percentage based on average annual loading. This methodology yields an estimated sludge waste rate between 49,000 and 74,000 gallons per day for existing combined load conditions. It is anticipated that the sludge thickener may need to run for an additional 16 hours per week, between 9 and 11 hours per day, for a total of approximately 51 hours per week. This would require plant staff to work an additional two days per week to operate and observe the gravity belt thickener. An additional thickener is necessary for redundancy.

4.4.7. Sludge Dewatering Screw Press and Sludge Drying Beds

The District is completing installation of a new sludge dewatering screw press at the Southland WWTF. The sludge dewatering screw press will have a hydraulic capacity of 15 to 90 GPM and a solids capacity of 250 pounds per

hour (PPH). The design feed concentration ranges from 0.5% to 3% total solids and the dewatered sludge concentration is a minimum of 15% total solids. During normal operation, the screw press will receive thickened sludge from the gravity belt thickener, and, thus, will operate for the same durations as the thickener. Two days of operation will be added to accommodate Dana Reserve loads. A second press is necessary for redundancy.

In the event a screw press is taken out of service, the District has sludge drying beds that are utilized to store dewatered sludge. They can be used to temporarily store thickened sludge in case a screw press is out of service. The remaining screw press can also be operated for longer periods during the day to accommodate a short-term outage.

4.5 Future Water Quality Requirements

The Central Coast Regional Water Quality Control Board (RWQCB) recently adopted General Waste Discharge requirements for Discharges from Domestic Wastewater Systems with Flows Greater than 100,000 gallons per day (Order No. R3-2020-0020). RWQCB staff have indicated that the Southland WWTF will likely be enrolled under this General Order. However, the schedule for this is not known. The General Order contains stricter effluent limits, including a total nitrogen limit of 10 mg/L and varying limits for salts, depending on the underlying groundwater basin. The General Order includes a provision allowing 24 months to come into compliance for dischargers that are unable to meet the effluent requirements after enrollment under the Order. Additional time may be granted through a request for a time schedule order. The effluent limits anticipated for Southland WWTF under this General Order are summarized in the table below.

**Table 4-9: General Order R3-2020-0020 Secondary Treatment Effluent Limits
(Tables 5 and 6 of the Order)**

Constituent	Units	30-day Average	7-day Average	Sample Maximum
BOD ₅	mg/L	30	45	NA
TSS	mg/L	30	45	NA
Settleable Solids	mg/L	0.1	0.3	0.5
pH	NA	6.5 – 8.4	NA	NA
Limits based on a 25-month rolling median, for the Lower Nipomo Mesa SubBasin (1)				
Total Nitrogen	mg/L	10	--	--
Total Dissolved Solids (TDS)	mg/L	710	--	--
Chloride	mg/L	95	--	--
Sulfate	mg/L	250	--	--
Boron	mg/L	0.16	--	--
Sodium	mg/L	90	--	--
Notes:				
1. The General Order indicates dischargers have two options for meeting requirements for Total Nitrogen, TDS and the other salt constituents. The discharger may comply with the effluent limitations specified, or the discharger will be required to implement a groundwater monitoring program to demonstrate compliance.				

Increasing use of Supplemental Water is anticipated to reduce discharge of TDS, chloride, and sodium from the WWTF. MKN reviewed historical effluent water quality to evaluate the existing WWTF performance regarding nitrogen reduction and ability to meet the future total nitrogen limit.

Total nitrogen in wastewater includes ammonia, nitrate, nitrite, and organic nitrogen. The Southland WWTF utilizes the Parkson Biolac® system, which when operated in the wave oxidation mode, has the ability to both nitrify (convert ammonia to nitrate) and denitrify (convert nitrate to nitrite and nitrogen gas). This will require operating the extended aeration basins at loading rates of 5 to 9 lb BOD₅/1000 cubic feet (cf), instead of the range of 5 to 12 lb BOD₅/1000 cf recommended for organics removal to meet current effluent limits.

The following table summarizes the anticipated loading of a two-basin system and the design criteria to meet this effluent nitrogen limit under current combined loading rates.

Table 4-10: Extended Aeration Basin Capacity for Denitrification via Wave Oxidation (Two Basins)

Condition	Units	System Design Criteria	Existing + Dana Reserve
Average Annual BOD ₅ Load	lb/day	1,886 – 3,394	2,860
Maximum Month BOD ₅ Load	lb/day	1,886 – 3,394	3,800

As shown, a two-basin system meets the design criteria for denitrification under existing combined average annual loading but not under maximum month loading conditions.

A three-basin system was then evaluated and it was found that the capacity exceeds the requirements under each loading condition. The results of this analysis are shown in the table below.

Flow Condition	Units	Minimum System Design Criteria	Existing + Dana Reserve
Average Annual BOD5 Load	lb/day	2,829-5,091	2,860
Maximum Monthly BOD5 Load	lb/day	2,829-5,092	3,800

In summary, Aeration Basins #2 and #3 will be necessary to meet future permit requirements under existing conditions with Dana Reserve. In addition to the aeration basins, new diffusers, and supporting electrical, mechanical, and instrumentation will be required. A new blower building or expansion of the existing blower building will also be necessary.

4.6 Recommended Improvements

The following table summarizes the capacity assessment described in the previous sections.

Process	Summary of Findings	Recommendations to Meet Existing Demands with Dana Reserve
Influent Lift Station	Capacity is adequate for existing conditions.	Install a third pump, sized the same as existing
Influent Screen	Capacity is adequate for existing flowrates	-
Grit Removal	Capacity is adequate for existing conditions.	Install second grit system
Extended Aeration Basins	Additional basins required	Install Aeration Basin #2 to meet current capacity requirements. Install Aeration Basin #3 to meet anticipated permit requirements. Expand blower system as needed
Secondary Clarifiers	Overflow rate is adequate for existing conditions. Peak solids loading rate is exceeded at existing demands with Dana Reserve.	Install third clarifier for redundancy. Upgrade RAS pumping system.
Gravity Belt Thickener (GBT)	Additional operating hours will be necessary to meet existing demands with Dana Reserve. No redundancy is available if the single GBT fails.	Install second GBT
Dewatering Screw Press	Additional press required to meet combined loading.	Install second screw press

5.0 PROJECT COST OPINIONS

Appendix C includes assumptions and calculations used to develop conceptual project cost opinions. The opinions of probable project costs presented in this study were developed according to the ACE International Class 4 level cost estimate classification. The cost opinions incorporate the engineer’s judgment as a design professional, are planning level budget estimates, and are supplied for the general guidance of the District.

Since MKN has no control over the cost of labor and materials, MKN does not guarantee the accuracy of such opinions as compared to contractor bids or actual cost to the District. It is recommended that an opinion of cost be developed and updated during project design. A construction contingency of 30% and allowance for engineering, construction management, and administration of 30% were applied to construction cost subtotals. All cost opinions were developed in September 2021 (ENR-LA = 13212.48).

5.1 Offsite Water Improvements

The following table summarizes project costs to connect the Dana Reserve water system as described in Section 3. Projects are identified on Figure 6-1. Costs for the developer to extend the waterline to the existing connection along Frontage Road are not included below.

Table 5-1: Water Transmission Main to Serve Dana Reserve		
Project	Description	Cost
1,2,5	New 16" Main on North Oak Glen Drive and Tefft Street	\$10,510,000
Total		\$10,510,000

Table 5-2 summarizes project costs for the end-of-line (EOL) looping at Willow Road and storage improvements at the Foothill Tank and Joshua Road sites.

Table 5-2: Water System Storage and Looping Improvements to Serve Dana Reserve		
Project Number	Description	Cost
4	Willow Road EOL Project	\$260,000
6	Foothill Tank Improvements	\$3,920,000
7	Joshua Road Reservoir	\$4,760,000
Total		\$8,940,000

5.2 Offsite Wastewater Collection and Treatment Improvements

The following table summarizes project costs to connect the Dana Reserve wastewater system as described in Sections 3 and 4. Costs for the developer to connect to the existing system are not included below.

Table 5-3: Wastewater Improvements to Serve Existing Conditions and Dana Reserve		
Project	Description	Cost
1 – 3	Wastewater Collection Improvements	\$3,630,000
4 – 9	Southland WWTF Improvements	\$15,960,000
Total		\$19,590,000

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Water

The Dana Reserve Development will have a significant impact on District water and wastewater facilities. Groundwater and 2025 NSWP allocation are adequate to serve existing and future demands with Dana Reserve. However, pipeline and storage improvements will be needed. Figures 6-1 and 6-2 identify the projects described below.

Installing the Willow Road EOL Connection will address the District's looping requirements. Implementing the following project is recommended to convey NSWP water to Dana Reserve:

- Construction of new 16-inch pipeline on North Oak Glen Drive from Tefft Street to the Sandydale connection point.
- Replacement of the existing 10-inch AC pipeline from the Foothill Tanks to North Oak Glen Drive on Tefft Street with a new 16-inch PVC pipeline.

Storage improvements are also recommended to manage additional flow from NSWP and to meet emergency, fire flow, and operational needs. The recommended improvements for Foothill Tank site include a new 1.0 MG storage tank, chloramination improvements, and an automated valve station to improve storage and protect water quality. A new 500,000 gallon reservoir at Joshua Road Pump Station should be constructed to provide required redundancy for NSWP.

The following table summarizes the recommended improvements

Project	Required Improvements
1, 2, 5	New 16" Main on North Oak Glen Drive and Tefft Street
3	Frontage Road Waterline Extension
4	Willow Road EOL Project
6	Foothill Tank Improvements
7	Joshua Road Reservoir

6.2 Wastewater

A new sewer connection from the development to Juniper Street is required which may involve a lift station and force main with sections of gravity sewer. Lift station peak flows should be managed with the use of variable frequency drives to reduce impact to receiving sewers. Improvements along Frontage Road will also be necessary to accommodate flow from the development under existing District demands. These project improvements are listed below and identified in Figures 6-3 and 6-4:

Table 6-2: Recommendations for NCS D Sewer System Improvements	
Project	Required Improvements
1	Connection to Dana Reserve collection area.
2	Potential sanitary sewer lift station for Dana Reserve Development
3	Replace existing 10-inch with 3,500 LF of 15-inch PVC sewer main and manholes between Juniper Street and Grande Avenue.
	Replace existing 12-inch with 1,170 LF 18-inch PVC sewer main and manholes between Grande Avenue and Division Street.

Southland WWTF will require significant improvements to meet existing demands with Dana Reserve and future demands. The table below summarizes improvements necessary to meet current Waste Discharge Requirements.

Table 6-3: Recommendations for Southland WWTF Improvements		
Project	Process	Required Improvement
4	Influent Lift Station	Install a third pump, sized the same as existing
5	Grit Removal	Install second grit system
6	Extended Aeration Basins	Install Aeration Basins #2 & #3 and expand aeration system
7	Secondary Clarifiers	Install third clarifier for redundancy. Upgrade RAS pumping system.
8	Gravity Belt Thickener (GBT)	Install second GBT
9	Dewatering Screw Press	Install second screw press

In addition to the aeration basins, new diffusers and supporting electrical, mechanical, and instrumentation will be required. A new blower building or expansion of the existing blower building will also be necessary.

A summary of water and sewer improvement projects is illustrated in Figure 6-5.



Nipomo Community Services District

Dana Reserve Development - Water and Wastewater Service Evaluation

Required NCS D Water System Improvements	
Project Number	Description of NCS D Project
1	Waterline Extension - 16 inch DIP
2	Waterline Crossing Under 101 - 16 inch DIP
3	Waterline Extension - 12 inch PVC
4	Waterline Extension - 12 inch PVC
5	Waterline Replacement - Replace 10 inch with 16 inch DIP
6	Foothill Tank #5/#6

Legend

- NCS D Boundary
- Dana Reserve Development
- Dana Reserve Development Water Mains
- Proposed 16" on N Oak Glen Ave and Tefft St from Foothill Tanks
- Proposed 12" Loop on Willow Rd
- Existing Water Distribution System
- Tank

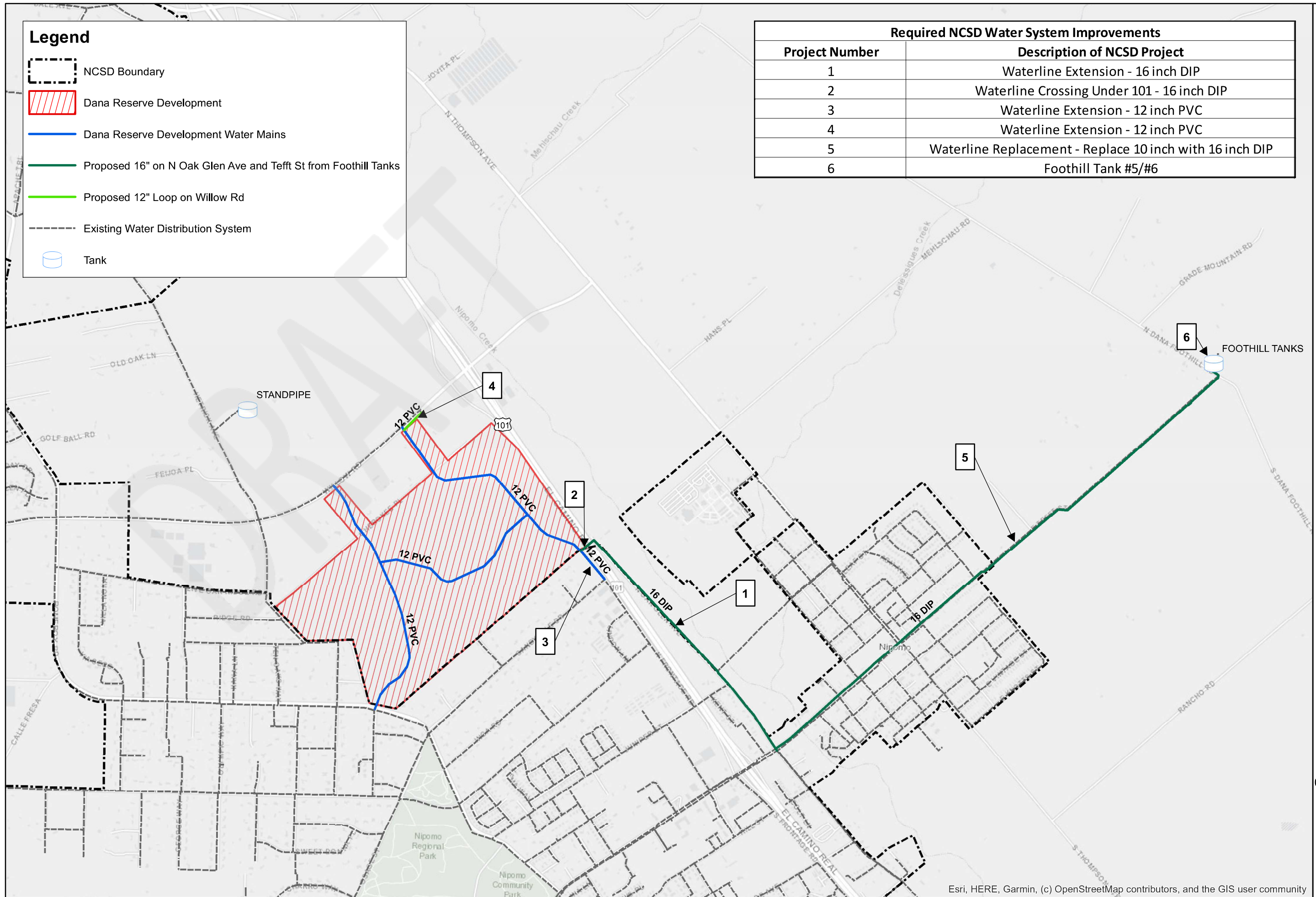
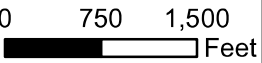


Figure 6-1
Proposed Water Distribution System Improvements



1 inch = 1,500 feet

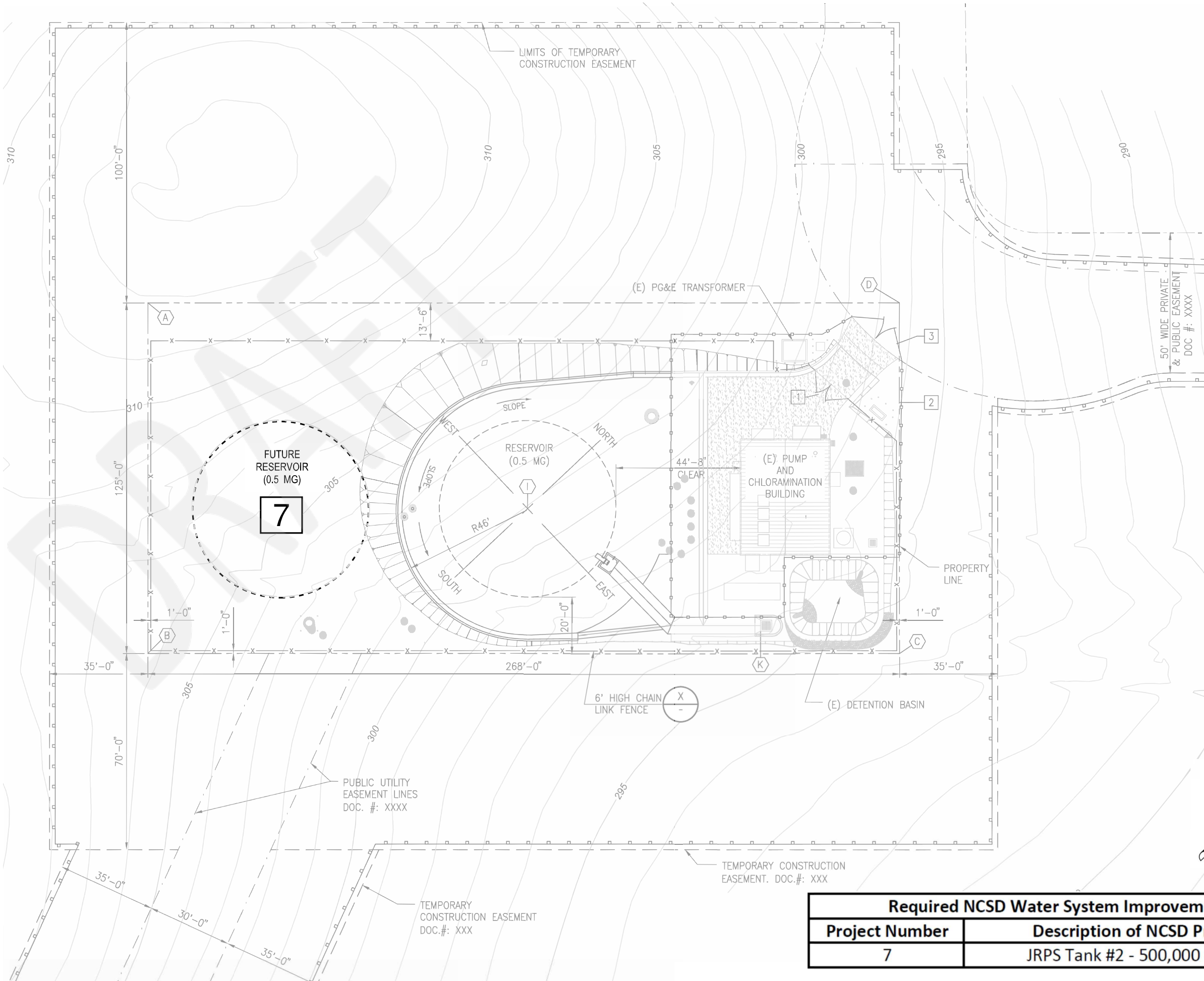




Nipomo Community Services District

Dana Reserve Development - Water and Wastewater Service Evaluation

Figure 6-2
Proposed Joshua Road Pump Station Reservoir Improvements



Required NCSD Water System Improvements	
Project Number	Description of NCSD Project
7	JRPS Tank #2 - 500,000 Gallon

NTS

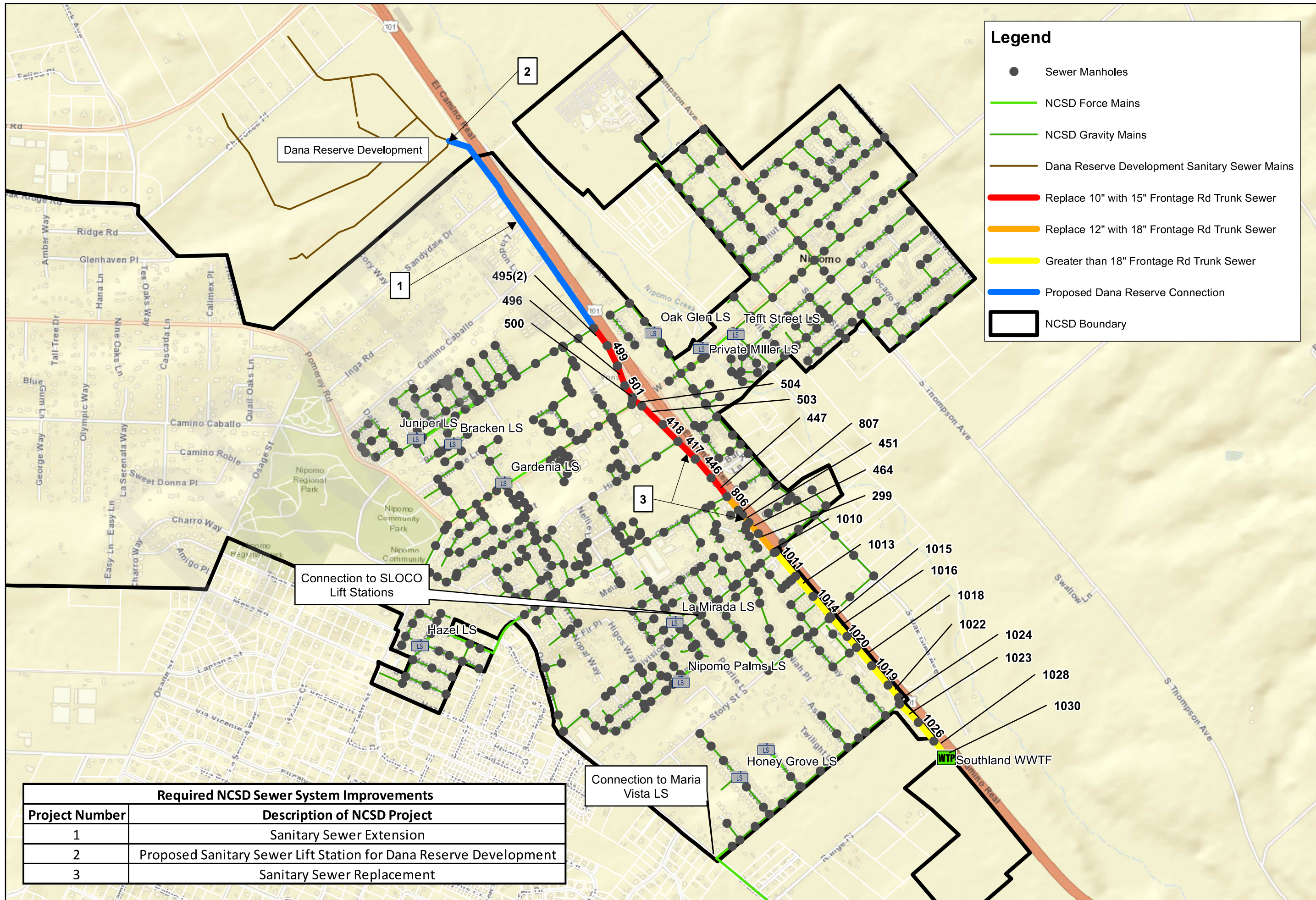




Nipomo Community Services District

Dana Reserve Development - Water and Wastewater Service Evaluation

Figure 6-3 Wastewater Collection System Improvements



Legend

- Sewer Manholes
- NCS D Force Mains
- NCS D Gravity Mains
- Dana Reserve Development Sanitary Sewer Mains
- Replace 10" with 15" Frontage Rd Trunk Sewer
- Replace 12" with 18" Frontage Rd Trunk Sewer
- Greater than 18" Frontage Rd Trunk Sewer
- Proposed Dana Reserve Connection
- NCS D Boundary

Required NCS D Sewer System Improvements	
Project Number	Description of NCS D Project
1	Sanitary Sewer Extension
2	Proposed Sanitary Sewer Lift Station for Dana Reserve Development
3	Sanitary Sewer Replacement

1 inch = 1,400 feet

0 700 1,400



Required NCSW Sewer System Improvements	
Project Number	Description of NCSW Project
4	Influent Lift Station Pump #3, install third pump, sized the same as existing
5	Install Grit Removal System #2
6	Install Aeration Basin #2 & #3, expand aeration system
7	Install Clarifier #3, upgrade RAS pumping system
8	Install Gravity Belt Thickener #2
9	Install Screw Press #2

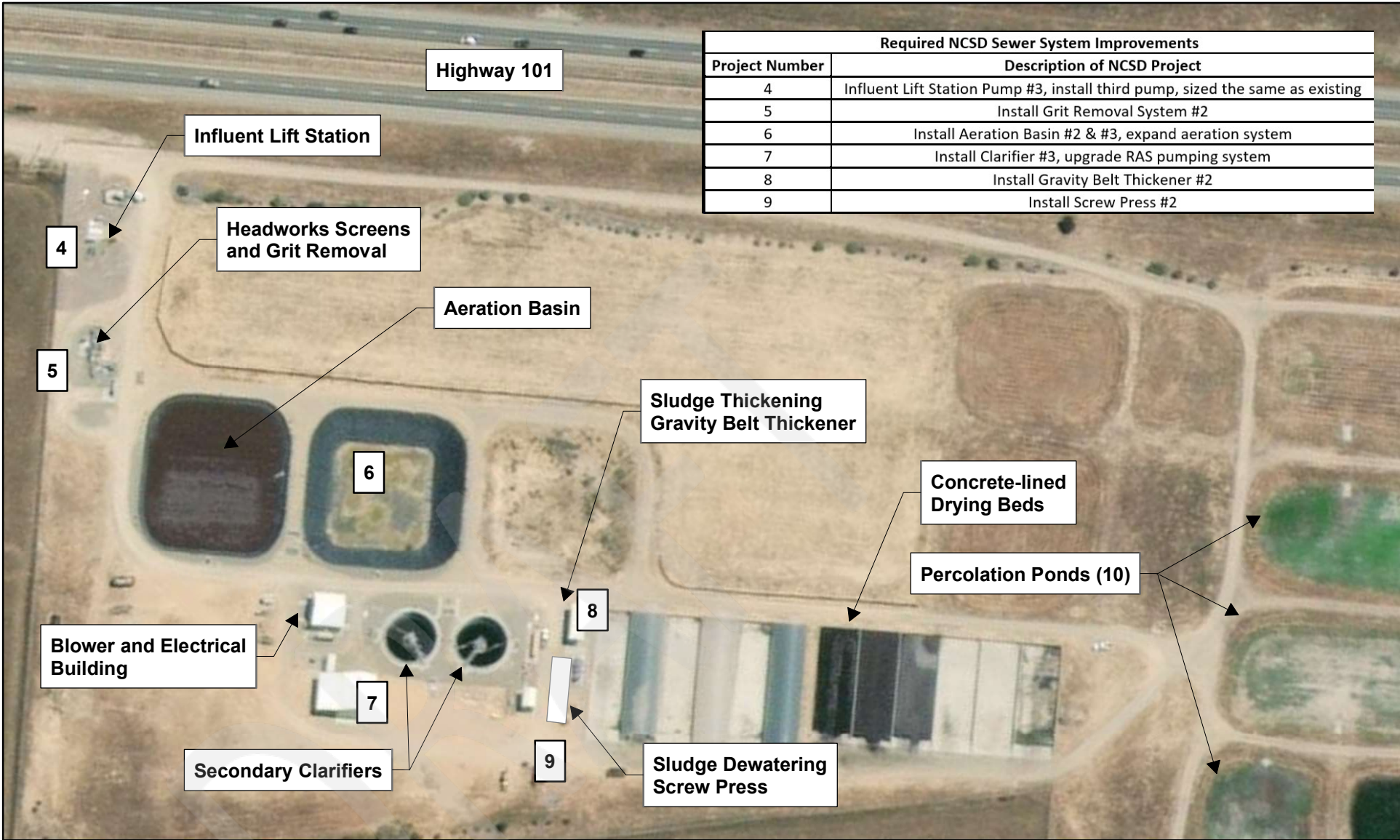
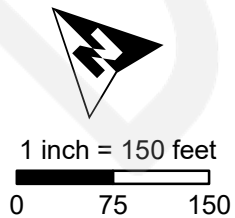
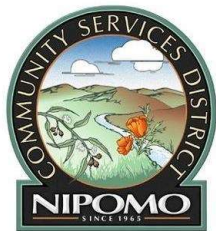


Figure 6-4
 Proposed Southland WWTF Improvements
 Dana Reserve Development
 Water and Wastewater Service Evaluation
 Nipomo Community Services District

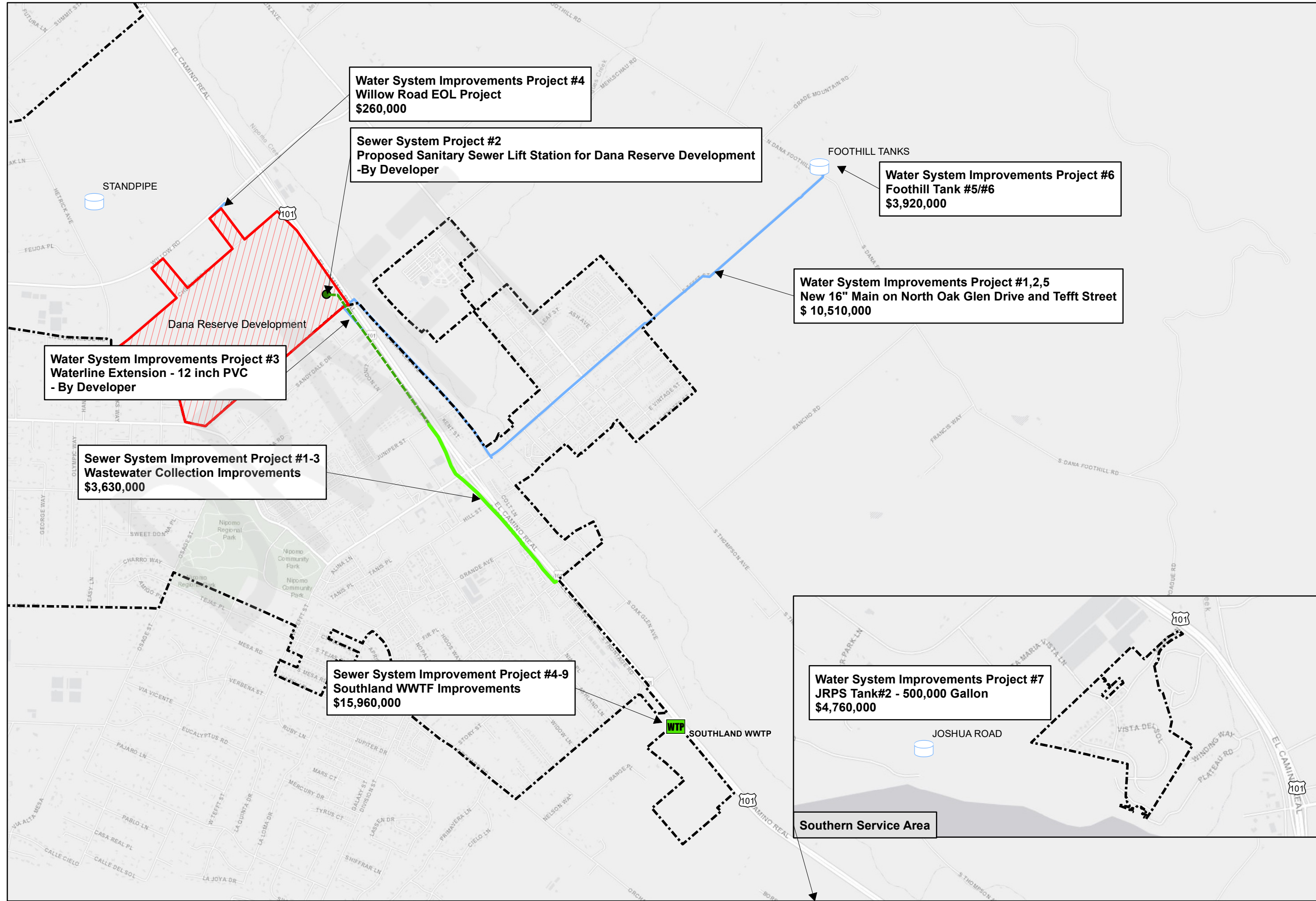




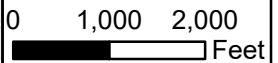
Nipomo Community Services District

Dana Reserve Development - Water and Wastewater Service Evaluation

Figure 6-5 Proposed Water and Sewer System Improvements



1 inch = 2,000 feet



APPENDIX A

Sewer Flow Monitoring 2020 Nipomo, CA

October 23, 2020 – November 28, 2020

Final Report Submitted to **MKN & Associates, Inc.**
December 22, 2020



ADS ENVIRONMENTAL
SERVICES



December 22, 2020

Rob Lepore, GISP
Michael K. Nunley & Associates, Inc.
P.O. Box 1604
Arroyo Grande, CA 93421

SUBJECT: Sewer Flow Monitoring 2020, Nipomo, CA Final Report

Dear Mr. Lepore,

ADS is pleased to submit the report for the Nipomo, CA Sewer Flow Monitoring Study completed on behalf of MKN & Associates, Inc. The metering was conducted at three (3) locations. The study was conducted during the period of Friday, October 23, 2020 to Saturday, November 28, 2020.

The report contains depth, velocity, and quantity hydrographs as well as daily long tables for the metering period. An Excel file containing depth, quantity, and velocity entities for the monitoring location in 5-minute format was provided previously.

In addition, we would be happy to further explain any details about the report that may seem unclear. Should you have any questions or comments, you may contact the Project Manager, Paul Mitchell at 714-379.9778.

It has been our pleasure to be of service to you in the performance of this project. Thank you for choosing ADS products and services to meet your flow monitoring needs.

Sincerely,
ADS ENVIRONMENTAL SERVICES

Jackie Crutcher
Data Manager

ADS LLC
An IDEX Fluid & Metering Business
Accusonic
ADS Environmental
Services Hydra-Stop

Sewer Flow Monitoring 2020 Nipomo, CA

Prepared For:



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Table of Contents

Scope & Methodology.....	1
FM01altB	5
Site Commentary	5
Site Report	7
Hydrograph Report.....	8
Scattergraph Report.....	9
Daily Tabular Report	10
FM02.....	11
Site Commentary	11
Site Report	13
Hydrograph Report.....	14
Scattergraph Report.....	15
Daily Tabular Report	16
FM03.....	17
Site Commentary	17
Site Report	19
Hydrograph Report.....	20
Scattergraph Report.....	21
Daily Tabular Report	22

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Scope and Methodology

Introduction

Michael K. Nunley & Associates, Inc. ([mkn](#)) entered into an agreement with ADS Environmental Services to conduct flow monitoring at (3) three locations in the Nipomo, CA Sanitary Collection System. The study was scheduled for a period of (30) thirty calendar days. Seven additional data days have been provided. Once in place, the flow monitoring equipment was used to measure depth, velocity, and to quantify flows. The objective of this study was to confirm sanitary sewer flows in the monitored locations for planning purposes.

Project Scope

The scope of this study involved using flow monitors to quantify wastewater flow at the designated locations for the 37-day time period. Specifically, the study included the following key components.

- Investigate the proposed flow-monitoring site for adequate hydraulic conditions
- Flow monitor installation
- Flow monitor confirmations and data collections
- Flow data analysis

The monitoring period began on October 23, 2020 and was completed on November 28, 2020. Equipment was removed from the system on December 09, 2020.

Flow Monitoring Equipment



The **ADS FlowShark Triton** monitor was selected for this project. This flow monitor is an area velocity flow monitor that uses both the Continuity and Manning's equations to measure flow.

The ADS FlowShark Triton monitor consists of data acquisition sensors and a battery-powered microcomputer. The microcomputer includes a processor unit, data storage, and an on-board clock to control and synchronize the sensor recordings. The monitor was programmed to acquire and store depth of flow and velocity readings at 5-minute intervals.

The FS Triton monitor features cross-checking using multiple technologies in each sensor for continuous running of comparisons and tolerances. The FS Triton monitor can support two (2) sets of sensors. The sensor option used for this project was:

The Peak Combo Sensor installed at the bottom of the pipe includes three types of data acquisition technologies.

The **up looking ultrasonic depth** uses sound waves from two independent transceivers to measure the distance from the sensor upward toward the flow surface; applying the speed of sound in the water and the temperature measured by sensor to calculate depth.

The **pressure depth** is calculated by using a piezo-resistive crystal to determine the difference between hydrostatic and atmospheric pressure. The pressure sensor is temperature compensated and vented to the atmosphere through a desiccant filled breather tube.

To obtain **peak velocity**, the sensor sends an ultrasonic signal at an angle upward through the widest cross-section of the oncoming flow. The signal is reflected by suspended particles, air bubbles, or organic matter with a frequency shift proportional to the velocity of the reflecting objects. The reflected signal is received by the sensor and processed using digital spectrum analysis to determine the peak flow velocity.

Installation

Installation of flow monitoring equipment typically proceeds in four steps. First, the site is investigated for safety and to determine physical and hydraulic suitability for the flow monitoring equipment. Second, the equipment is physically installed at the selected location. Third, the monitor is tested to assure proper operation of the velocity and depth of flow sensors and verify that the monitor clock is operational and synchronized to the master computer clock. Fourth, the depth and velocity sensors are confirmed and line confirmations are performed.

In pipes up to 42 inches in diameter, the sensors were mounted on expandable stainless-steel rings, inserted at least a foot upstream into influent pipes and tightened against the inside walls of the pipes. Influent pipe installations reduce the influences of turbulence and backwater often caused by changes in channel geometry in manholes.





Data Collection, Confirmation, and Quality Assurance

Data collects were done remotely via wireless connect on a weekly basis. As needed, during the monitoring period, field crews visit each monitoring location to verify proper monitor operation and document field conditions. The following quality assurance steps are taken to assure the integrity of the collected data:

Measure power supplies: monitors were powered by dry cell battery packs. Voltages were recorded and battery packs replaced, as necessary. Separate batteries provided back-up power to memory allowing primary batteries to be replaced without loss of data.

Clock synchronization: Field crews synchronized monitor clocks to master clocks.

Confirm depth and velocity readings: Field crews descended into meter manholes to manually measure depths and velocities and compare them meter readings to confirm that they agreed. They also measured silt levels, if any, in the inverts of the pipes. Silt areas were subtracted from flow areas to compute true areas of flow.

Confirm average velocities through cross-sectional velocity profiles: Since ADS velocity sensors measure peak velocity, field crews collected cross-sectional velocity profiles in order to develop a relationship between peak and average velocity in lines that meet the hydraulic criteria.

Upload and Review Data: Data collected from the monitors were uploaded and reviewed by a Data Analyst for completeness, outliers and deviations in the flow patterns, which indicate system anomalies or equipment failure.

Flow Quantification Methods

There are two main equations used to measure open channel flow: the **Continuity Equation** and the **Manning Equation**. The Continuity Equation, which is considered the most accurate, can be used if both depth of flow and velocity are available. In cases where velocity measurements are not available or not practical to obtain, the Manning Equation can be used to estimate velocity from the depth data based on certain physical characteristics of the pipe (i.e. the slope and roughness of the pipe being measured). However, the Manning equation assumes uniform, steady flow hydraulic conditions with non-varying roughness, which are typically invalid assumptions in most sanitary sewers. The Continuity Equation was used exclusively for this study.

Continuity Equation

The Continuity Equation states that the flow quantity (Q) is equal to the wetted area (A) multiplied by the average velocity (V) of the flow.

$$Q = A * V$$

This equation is applicable in a variety of conditions including backwater, surcharge, and reverse flow.

Data Analysis and Presentation

Data Analysis

A flow monitor is typically programmed to collect data at 5-minute intervals throughout the monitoring period. The monitor stores raw data consisting of (1) the ultrasonic depth, (2) the peak velocity and (3) the pressure depth. The data is imported into ADS's proprietary software and is examined by a data analyst to verify its integrity. The data analyst also reviews the daily field reports and site visit records to identify conditions that would affect the collected data.

Velocity profiles and the line confirmation data developed by the field personnel are reviewed by the data analyst to identify inconsistencies and verify data integrity. Velocity profiles are reviewed and an average to peak velocity ratio is calculated for the site. This ratio is used in converting the peak velocity measured by the sensor to the average velocity used in the Continuity equation. The data analyst selects which depth sensor entity will be used to calculate the final depth information. Silt levels present at each site visit are reviewed and representative silt levels established.

Occasionally the velocity sensor's performance may be compromised resulting in invalid readings sporadically during the monitoring period. This is generally caused by excessive debris (silt) blocking the sensor's crystals, shallow flows (~< 1") that may drop below the top of the sensor or very clear flows lacking the particles needed to measure rate. In order to use the Continuity equation to quantify the flow during these periods, a Data Analyst and/or Engineer will use the site's historical pipe curve (depth vs. velocity) data along with valid field confirmations to reconstitute and replace the false velocity recordings with expected velocity readings for a given historical depth along the curve.

Selections for the above parameters can be constant or can change during the monitoring period. While the data analysis process is described in a linear manner, it often requires an iterative approach to accurately complete.

Data Presentation

This type of flow monitoring project generates a large volume of data. To facilitate review of the data, results have been provided in graphical and tabular formats. The flow data is presented graphically in the form of scattergraphs and hydrographs. Hydrographs are based on 5-minute averaging. Tables are provided in daily average format. These tables show the flow rate for each day, along with the daily minimum and maximums, the times they were observed, the total daily flow, and total flow for the month (or monitoring period). The following explanation of terms may aid in interpretation of the flow data table and hydrograph.

DEPTH - Final calculated depth measurement (in inches)

QUANTITY - Final calculated flow rate (in MGD)

VELOCITY - Final calculated flow velocity (in feet per second)

REPORT TOTAL - Total volume of flow recorded for the indicated time period (in MG)

FM01altB

Site Commentary

SITE INFORMATION

Pipe	Round (23.38 in H)
Silt	0.00 (in)

OVERVIEW

FM01altB functioned under normal conditions during the period Friday, October 23, 2020 to Saturday, November 28, 2020. The flow pattern at this site exhibits frequent changes in both depth and velocity throughout the day. The saw-toothed like pattern indicates the influence of pump station activity. Review of the Scattergraph shows that free flow conditions were maintained throughout the monitoring period. No surcharge conditions were recorded. Flow in this line is subcritical.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted and support the relative accuracy of the flow monitor at this location.

Site FM01altB was positioned downstream of FM02 and FM03. A flow balancing check was completed, and no problems were noted. An average net flow of 0.295 mgd was reported for the study period.

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Friday, October 23, 2020 to Saturday, November 28, 2020**, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Average	4.75	1.87	0.560
Minimum	2.23	0.97	0.100
Maximum	7.11	2.68	1.261
Min Time	11/22/2020 05:10:00	10/23/2020 03:00:00	10/23/2020 03:00:00
Max Time	11/26/2020 11:00:00	11/24/2020 08:25:00	11/08/2020 10:20:00

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions and data on the graphical reports are based on the five-minute average.

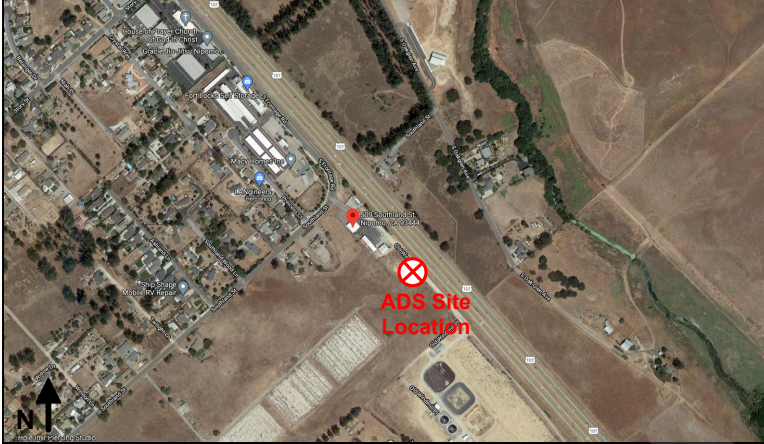
DATA UPTIME

Data uptime observed during **Friday, October 23, 2020 to Saturday, November 28, 2020** is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

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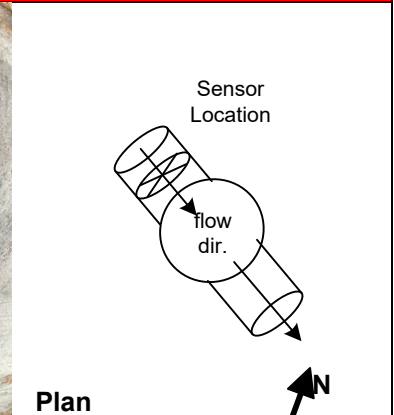
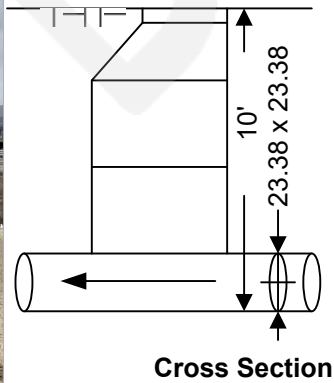
Project Name: Nipomo MKN TFM 2020		City: Nipomo		Agency: Nipomo		FM Initials: SK	
Site Name: FM01		Install Date: 10/22/20		Monitor Type: Peak Doppler			
Address/Location: 509 Southland St (Located on Old Windmill PI)				Monitor Model: Triton +			
				Data Acquisition: Manual/Wireless Collect			
				Manhole ID:			
Access: Drive		Type of System:		Pipe Height: 23.38 "			
		Sanitary <input checked="" type="checkbox"/>		Storm <input type="checkbox"/>		Combined <input type="checkbox"/>	
				Pipe Width: 23.38 "			



Investigation Information: Manhole Information:

Date/Time of Investigation: 10/22/20 @02:20pm		Manhole Depth: 10	
Site Hydraulics: Good straight through flow		Manhole Material / Condition: Precast/Good	
Upstream Input: (L/S, P/S): --		Pipe Material / Condition: VCP/Good	
Upstream Manhole: Not Investigated		Land Use: Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Trunk <input type="checkbox"/>	
Downstream Manhole: Not investigated		Oxygen: 20.9 H2S: 0 LEL: 0 CO: 0	
Depth of Flow:	4.75 " +/- 0.25"	Safety Notes: 2 man crew required and one blower is to be operated at all times.	
Range (Air DOF):	+/-		
Peak Velocity:	2.10 fps		
Silt:	0.00 Inches		

Other Information:



Installation Information		Backup	Yes	No	?	Distance
Installation Type: Standard		Trunk	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sensors Devices: Ultrasonic/Velocity/Pressure		Lift / Pump Station	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Surcharge Height: 0		WWTP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Rain Gauge Zone:		Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

Hydrograph Report

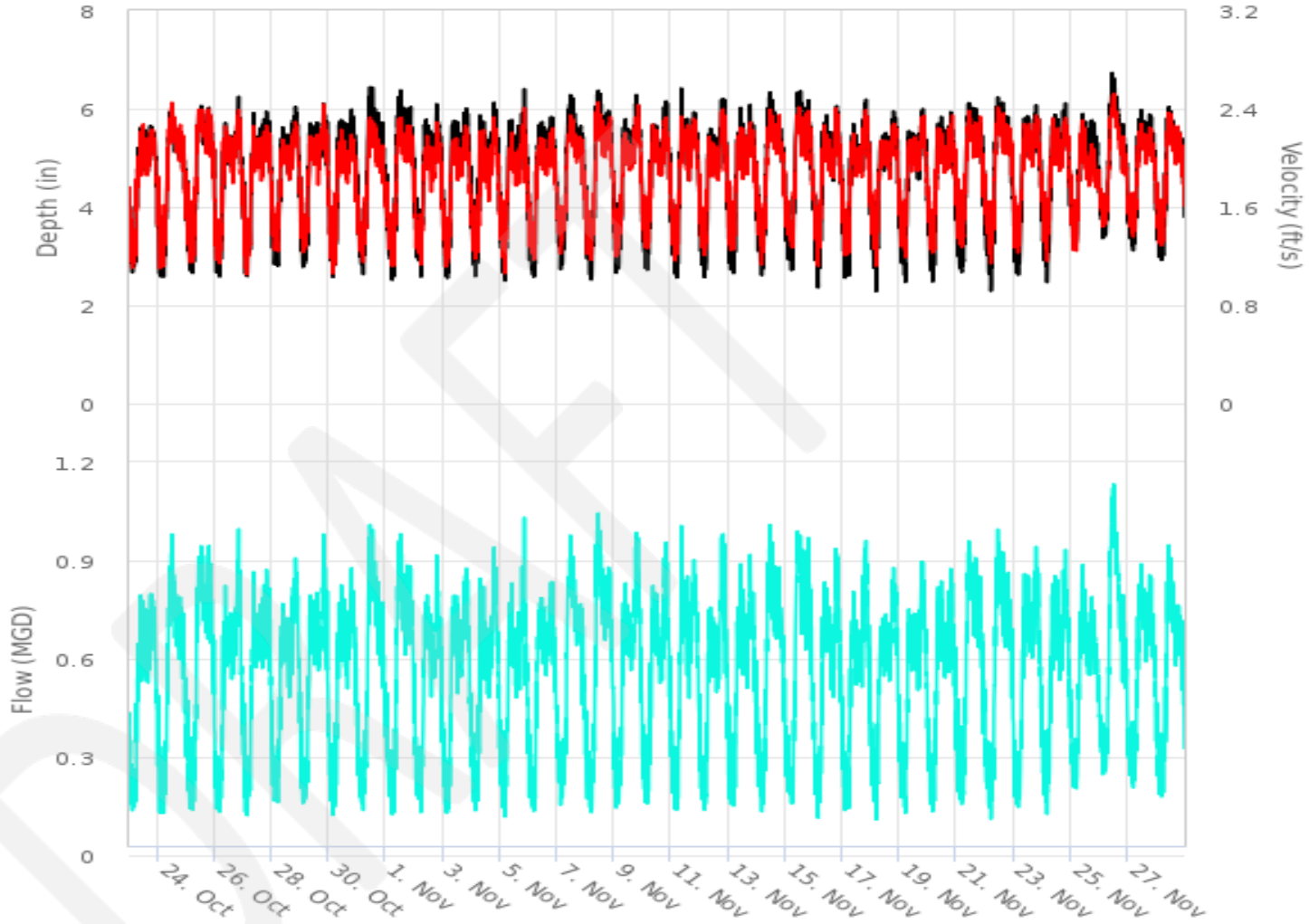
FM01altB

Flow Monitor
FM01altB

Pipe Height
23.38
in

Report Period
10/23/2020
To
11/28/2020

Legend
— DFINAL
— VFINAL
— QFINAL
— RAIN FINAL



Scattergraph Report

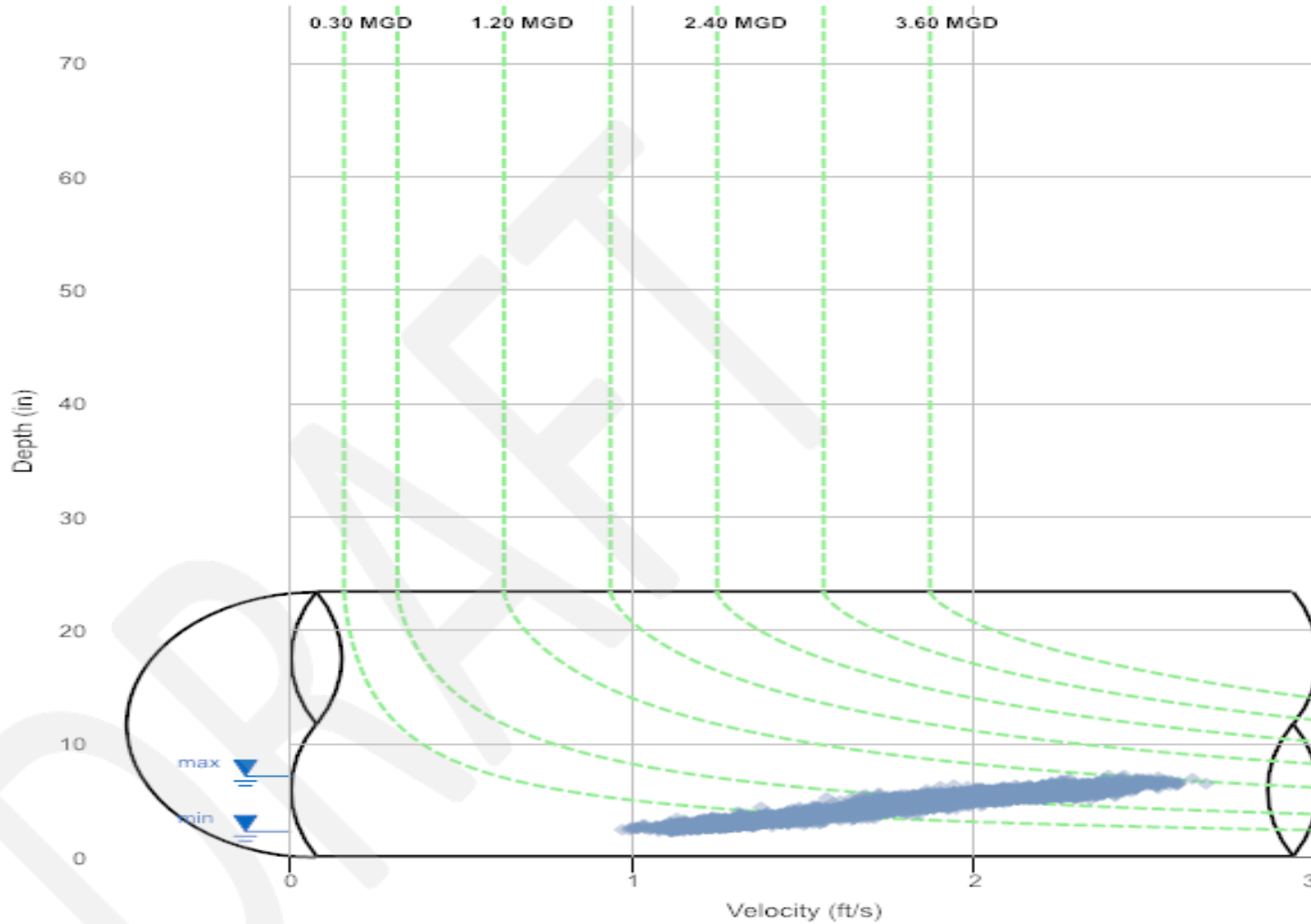
FM01altB

Flow Monitor
FM01altB

Pipe Height
23.38
in

Report Period
10/23/2020
To
11/28/2020

Legend
○ DFINAL -
VFINAL
--- Iso-Q™
▼ Min-Max Depth



Daily Tabular Report

10/23/2020 00:00 - 11/28/2020 23:59

FM01altBPipe: Round (23.38 in H), Silt0.00 in

Date	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					Rain (in)	RAIN FINAL (in)						
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total						
10/23/2020	03:05	2.37	20:35	6.10	4.61	03:00	0.97	09:30	2.47	1.84	03:00	0.100	09:30	0.963	0.526	0.526	-	-	-	-	-	-	-
10/24/2020	05:15	2.50	12:05	6.46	4.64	01:55	1.08	13:55	2.50	1.88	01:55	0.122	12:05	1.081	0.552	0.552	-	-	-	-	-	-	-
10/25/2020	05:15	2.53	11:10	6.68	4.77	06:45	1.11	11:15	2.58	1.92	05:15	0.128	11:10	1.165	0.586	0.586	-	-	-	-	-	-	-
10/26/2020	04:15	2.52	20:20	6.58	4.66	01:50	1.11	20:20	2.54	1.87	04:15	0.124	20:20	1.129	0.544	0.544	-	-	-	-	-	-	-
10/27/2020	02:05	2.49	22:00	6.27	4.76	02:05	1.01	22:00	2.38	1.85	02:05	0.111	22:00	0.990	0.555	0.555	-	-	-	-	-	-	-
10/28/2020	03:05	2.62	21:25	6.43	4.74	03:05	1.17	21:25	2.44	1.87	03:05	0.138	21:25	1.052	0.554	0.554	-	-	-	-	-	-	-
10/29/2020	02:30	2.67	19:35	6.56	4.75	02:30	1.19	19:35	2.56	1.90	02:30	0.145	19:35	1.132	0.562	0.562	-	-	-	-	-	-	-
10/30/2020	03:40	2.46	19:20	6.78	4.77	03:40	1.00	19:20	2.52	1.80	03:40	0.108	19:20	1.169	0.540	0.540	-	-	-	-	-	-	-
10/31/2020	05:10	2.57	11:25	6.95	4.83	03:45	1.13	09:50	2.54	1.83	05:10	0.132	09:50	1.216	0.565	0.565	-	-	-	-	-	-	-
11/01/2020	05:30	2.39	12:30	6.67	4.84	06:40	1.05	12:30	2.47	1.85	05:25	0.114	12:30	1.118	0.576	0.576	-	-	-	-	-	-	-
11/02/2020	05:35	2.46	17:25	6.33	4.73	05:35	1.01	10:50	2.37	1.79	05:35	0.109	17:25	0.978	0.532	0.532	-	-	-	-	-	-	-
11/03/2020	04:00	2.45	18:25	6.52	4.75	02:40	1.08	18:25	2.38	1.83	02:40	0.117	18:25	1.047	0.546	0.546	-	-	-	-	-	-	-
11/04/2020	03:20	2.53	20:30	6.50	4.74	02:30	1.08	19:10	2.45	1.82	02:30	0.122	19:10	1.059	0.541	0.541	-	-	-	-	-	-	-
11/05/2020	04:00	2.41	20:30	6.72	4.70	04:20	1.00	10:00	2.47	1.82	04:20	0.109	20:30	1.117	0.535	0.535	-	-	-	-	-	-	-
11/06/2020	04:45	2.42	19:45	6.52	4.72	04:45	1.14	19:45	2.38	1.84	04:45	0.121	19:45	1.044	0.541	0.541	-	-	-	-	-	-	-
11/07/2020	03:10	2.60	13:45	6.71	4.82	03:40	1.16	11:45	2.40	1.88	03:10	0.138	13:45	1.033	0.573	0.573	-	-	-	-	-	-	-
11/08/2020	04:55	2.42	10:20	6.93	4.87	01:40	1.04	10:20	2.64	1.90	04:55	0.120	10:20	1.261	0.597	0.597	-	-	-	-	-	-	-
11/09/2020	04:20	2.51	18:45	6.80	4.79	01:50	1.17	20:05	2.55	1.88	04:20	0.130	20:05	1.172	0.568	0.568	-	-	-	-	-	-	-
11/10/2020	04:20	2.37	20:30	6.74	4.73	04:20	1.17	19:45	2.51	1.87	04:20	0.120	19:45	1.131	0.553	0.553	-	-	-	-	-	-	-
11/11/2020	04:55	2.48	08:35	6.66	4.73	03:05	1.12	19:25	2.58	1.89	04:50	0.131	19:25	1.149	0.561	0.561	-	-	-	-	-	-	-
11/12/2020	04:10	2.49	18:15	6.69	4.70	04:10	1.18	18:15	2.54	1.88	04:10	0.130	18:15	1.155	0.551	0.551	-	-	-	-	-	-	-
11/13/2020	04:45	2.55	18:35	6.57	4.71	00:55	1.14	10:30	2.45	1.88	04:45	0.132	18:35	1.071	0.550	0.550	-	-	-	-	-	-	-
11/14/2020	04:25	2.52	14:45	6.68	4.81	04:20	1.08	11:55	2.60	1.90	04:25	0.121	11:55	1.137	0.580	0.580	-	-	-	-	-	-	-
11/15/2020	06:25	2.57	12:10	6.85	4.83	06:00	1.19	11:00	2.59	1.93	06:30	0.142	12:10	1.166	0.597	0.597	-	-	-	-	-	-	-
11/16/2020	03:25	2.27	16:20	6.57	4.70	03:50	1.08	19:40	2.49	1.89	03:55	0.107	19:15	1.054	0.553	0.553	-	-	-	-	-	-	-
11/17/2020	04:20	2.52	20:40	6.56	4.66	02:10	1.17	20:40	2.55	1.88	02:10	0.133	20:40	1.132	0.546	0.546	-	-	-	-	-	-	-
11/18/2020	04:40	2.27	19:10	6.20	4.67	05:00	1.09	18:55	2.38	1.87	04:35	0.107	19:10	0.950	0.545	0.545	-	-	-	-	-	-	-
11/19/2020	05:10	2.40	18:25	6.50	4.69	03:05	1.13	18:25	2.54	1.89	05:10	0.122	18:25	1.111	0.551	0.551	-	-	-	-	-	-	-
11/20/2020	04:00	2.45	11:20	6.46	4.64	04:00	1.14	20:35	2.43	1.87	04:00	0.122	11:20	1.046	0.538	0.538	-	-	-	-	-	-	-
11/21/2020	04:40	2.51	09:15	6.47	4.72	05:45	1.19	09:15	2.59	1.90	05:45	0.134	09:15	1.125	0.569	0.569	-	-	-	-	-	-	-
11/22/2020	05:10	2.23	14:45	6.55	4.74	05:10	1.11	11:30	2.59	1.92	05:10	0.104	11:30	1.108	0.584	0.584	-	-	-	-	-	-	-
11/23/2020	04:10	2.58	17:45	6.42	4.69	03:50	1.18	19:40	2.54	1.91	02:45	0.140	19:40	1.078	0.562	0.562	-	-	-	-	-	-	-
11/24/2020	04:25	2.40	08:25	6.47	4.71	04:25	1.15	08:25	2.68	1.92	04:25	0.120	08:25	1.165	0.563	0.563	-	-	-	-	-	-	-
11/25/2020	02:30	3.14	11:40	6.36	4.84	04:55	1.15	10:20	2.47	1.82	04:55	0.182	18:10	1.009	0.548	0.548	-	-	-	-	-	-	-
11/26/2020	05:50	3.14	11:00	7.11	5.08	05:50	1.36	12:15	2.57	1.99	05:50	0.211	11:00	1.208	0.648	0.648	-	-	-	-	-	-	-
11/27/2020	04:50	2.99	10:55	6.45	4.83	04:50	1.31	10:55	2.45	1.90	04:50	0.189	10:55	1.062	0.573	0.573	-	-	-	-	-	-	-
11/28/2020	04:30	2.80	10:50	6.43	4.71	04:30	1.24	10:50	2.53	1.90	04:30	0.162	10:55	1.091	0.557	0.557	-	-	-	-	-	-	-

10/23/2020 00:00 - 11/28/2020 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)	Rain (in)
Total			20.721	
Average	4.75	1.87	0.560	

FM02

Site Commentary

SITE INFORMATION

Pipe	Elliptical (12.5 in H x 12.75 in W)
Silt	0.00 (in)

OVERVIEW

FM02 functioned under normal conditions during the period Friday, October 23, 2020 to Saturday, November 28, 2020. The flow pattern at this site exhibits frequent changes in both depth and velocity throughout the day. The saw-toothed like pattern indicates the influence of pump station activity. Review of the Scattergraph shows that although this line was impacted by debris, free flow conditions were maintained throughout the monitoring period. No surcharge conditions were recorded. Flow in this line is subcritical.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted and support the relative accuracy of the flow monitor at this location.

Site FM02 along with FM03 was positioned upstream of FM01altB. (See FM01altB Site Commentary for Balancing Details).

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Friday, October 23, 2020 to Saturday, November 28, 2020**, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Average	2.95	1.42	0.191
Minimum	1.13	0.21	0.007
Maximum	6.74	3.00	0.926
Min Time	11/15/2020 04:40:00	11/26/2020 05:10:00	10/26/2020 03:55:00
Max Time	11/24/2020 08:05:00	11/24/2020 08:05:00	11/24/2020 08:05:00

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions and data on the graphical reports are based on the five-minute average.

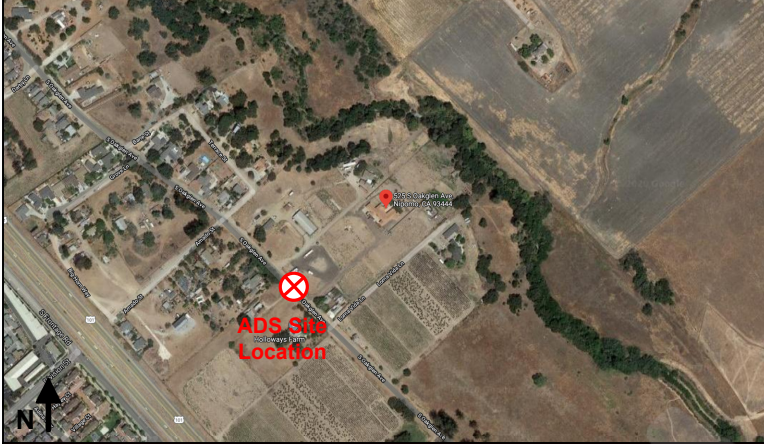
DATA UPTIME

Data uptime observed during **Friday, October 23, 2020 to Saturday, November 28, 2020** is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

DRAFT

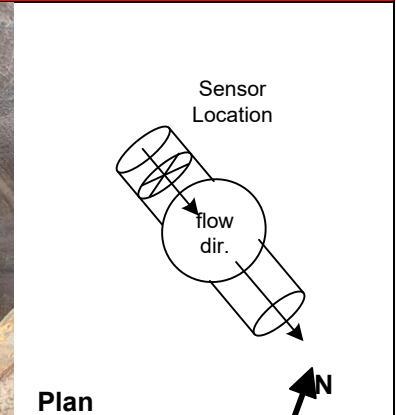
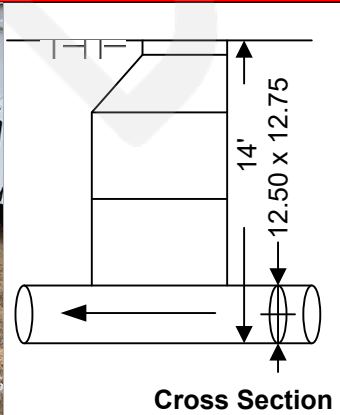
Project Name: Nipomo MKN TFM 2020		City: Nipomo		Agency: Nipomo		FM Initials: SK	
Site Name: FM02		Install Date: 10/22/20		Monitor Type: Peak Doppler			
Address/Location: 525 S Oak Glen				Monitor Model: Triton +			
				Data Acquisition: Manual/Wireless Collect			
				Manhole ID:			
Access: Drive		Type of System:		Pipe Height: 12.50 "			
		Sanitary <input checked="" type="checkbox"/>		Storm <input type="checkbox"/>		Combined <input type="checkbox"/>	
				Pipe Width: 12.75 "			



Investigation Information: Manhole Information:

Date/Time of Investigation: 10/22/20 @03:35pm		Manhole Depth: 14'	
Site Hydraulics: Good straight through flow		Manhole Material / Condition: Precast/Good	
Upstream Input: (L/S, P/S) --		Pipe Material / Condition: VCP/Good	
Upstream Manhole: Not Investigated		Land Use: Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Trunk <input type="checkbox"/>	
Downstream Manhole: Not investigated		Oxygen: 20.9 H2S: 0 LEL: 0 CO: 0	
Depth of Flow:	3.25 " +/- 0.25"	Safety Notes: 2 man crew required and one blower is to be operated at all times.	
Range (Air DOF):	+/-		
Peak Velocity:	2.10 fps		
Silt:	0.00 Inches		

Other Information:



Installation Information		Backup	Yes	No	?	Distance
Installation Type:	Standard	Trunk	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sensors Devices:	Ultrasonic/Velocity/Pressure	Lift / Pump Station	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Surcharge Height:	0	WWTP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Rain Gauge Zone:		Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

Hydrograph Report

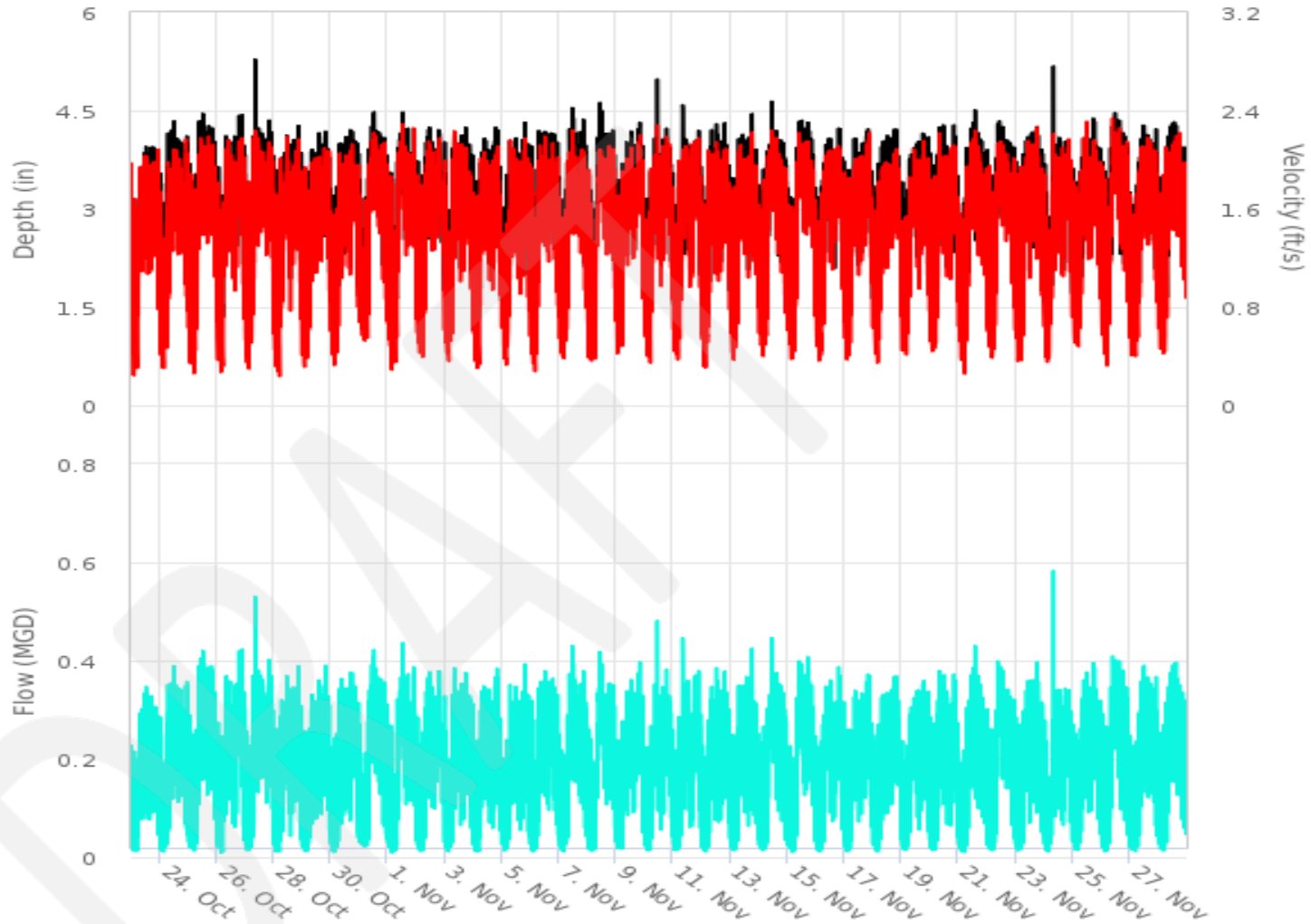
FM02

Flow Monitor
FM02

Pipe Height
12.50
in

Report Period
10/23/2020
To
11/28/2020

Legend
— DFINAL
— VFINAL
— QFINAL
— RAIN FINAL



Scattergraph Report

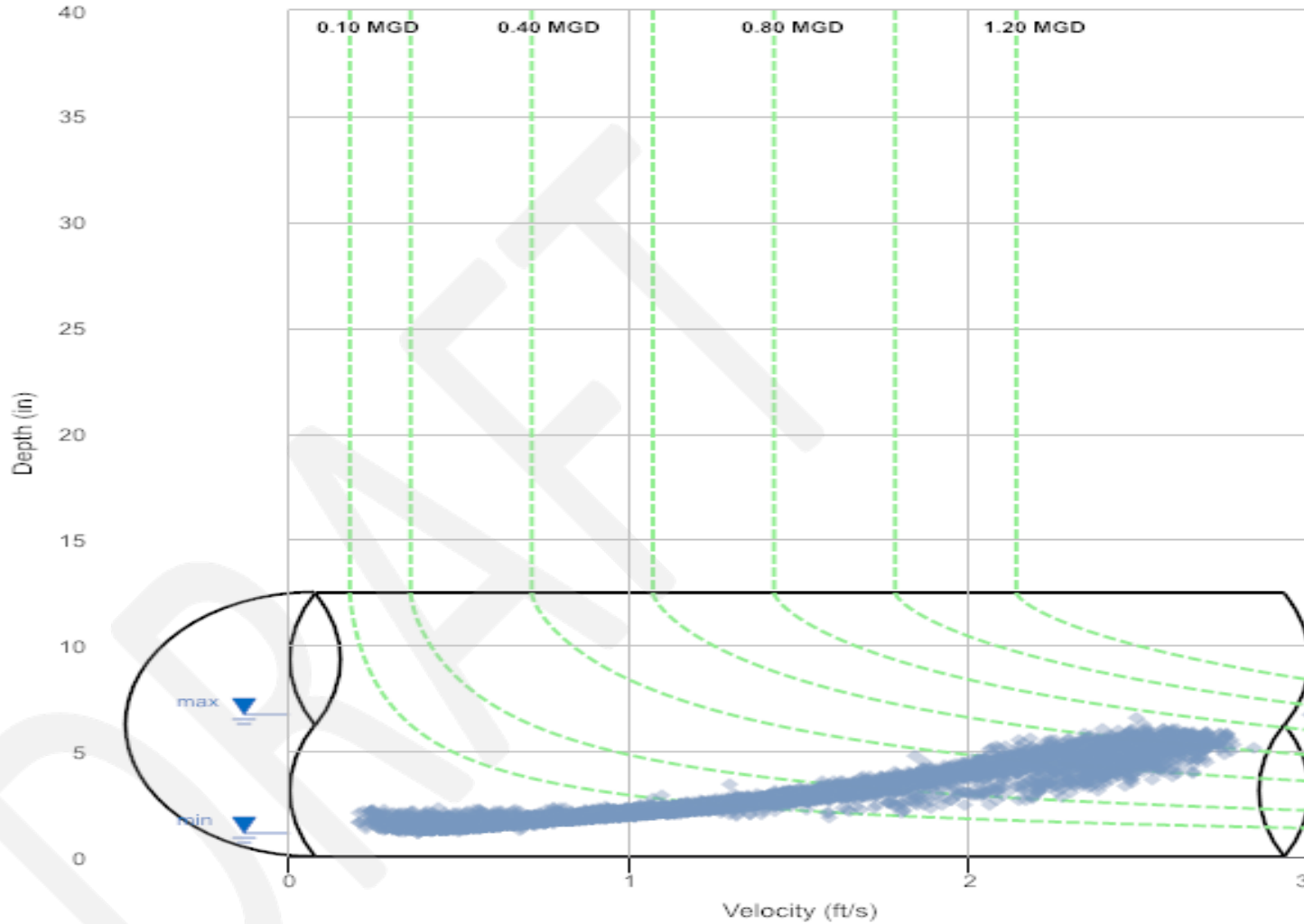
FM02

Flow Monitor
FM02

Pipe Height
12.50
in

Report Period
10/23/2020
To
11/28/2020

Legend
○ DFINAL - VFINAL
--- Iso-Q™
▼ Min-Max Depth



Daily Tabular Report

10/23/2020 00:00 - 11/28/2020 23:59

FM02Pipe: Elliptical (12.5 in H x 12.75 in W), Silt0.00 in

Date	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					Rain (in)		RAIN FINAL (in)				
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total					
10/23/2020	04:00	1.47	12:45	5.41	2.81	02:20	0.21	12:45	2.70	1.35	04:00	0.012	12:45	0.629	0.166	0.166	-	-	-	-	-	-
10/24/2020	01:25	1.41	13:35	5.97	3.00	04:00	0.23	12:55	2.71	1.38	03:55	0.009	13:35	0.689	0.192	0.192	-	-	-	-	-	-
10/25/2020	06:15	1.42	12:20	6.09	3.15	05:15	0.22	19:50	2.76	1.45	05:15	0.010	12:20	0.699	0.213	0.213	-	-	-	-	-	-
10/26/2020	04:05	1.27	19:40	6.04	2.98	03:55	0.23	18:45	2.76	1.40	03:55	0.007	18:45	0.705	0.194	0.194	-	-	-	-	-	-
10/27/2020	05:35	1.47	08:40	6.28	3.14	03:25	0.25	08:25	2.84	1.46	02:00	0.012	08:40	0.710	0.212	0.212	-	-	-	-	-	-
10/28/2020	02:30	1.38	20:10	5.82	2.99	05:10	0.21	11:00	2.70	1.38	02:30	0.009	20:10	0.644	0.189	0.189	-	-	-	-	-	-
10/29/2020	04:35	1.31	19:50	5.87	2.96	01:55	0.31	19:50	2.70	1.41	04:30	0.012	19:50	0.700	0.189	0.189	-	-	-	-	-	-
10/30/2020	02:35	1.27	20:55	5.93	2.90	03:10	0.31	18:40	2.75	1.38	03:05	0.010	20:55	0.694	0.184	0.184	-	-	-	-	-	-
10/31/2020	01:50	1.50	09:10	5.96	3.02	23:40	0.36	10:45	2.78	1.47	04:25	0.019	11:20	0.682	0.203	0.203	-	-	-	-	-	-
11/01/2020	04:55	1.31	10:05	5.93	2.93	03:30	0.29	08:05	2.74	1.42	03:30	0.009	13:45	0.672	0.192	0.192	-	-	-	-	-	-
11/02/2020	03:10	1.27	09:50	5.51	2.92	05:30	0.36	12:50	2.74	1.42	03:10	0.012	14:55	0.634	0.188	0.188	-	-	-	-	-	-
11/03/2020	03:20	1.24	18:05	6.04	2.88	03:35	0.35	08:05	2.67	1.40	03:25	0.011	18:05	0.703	0.184	0.184	-	-	-	-	-	-
11/04/2020	04:30	1.32	20:05	5.61	2.88	03:10	0.29	20:05	2.66	1.37	03:10	0.010	20:05	0.648	0.180	0.180	-	-	-	-	-	-
11/05/2020	02:30	1.30	13:10	5.53	2.91	04:00	0.28	08:10	2.59	1.36	02:30	0.010	19:50	0.609	0.177	0.177	-	-	-	-	-	-
11/06/2020	02:35	1.34	10:50	5.72	2.99	04:00	0.24	10:50	2.66	1.40	02:20	0.011	10:50	0.666	0.190	0.190	-	-	-	-	-	-
11/07/2020	03:15	1.28	09:25	5.86	3.09	03:20	0.31	11:35	2.72	1.45	03:15	0.010	12:50	0.672	0.204	0.204	-	-	-	-	-	-
11/08/2020	03:40	1.39	11:05	5.95	3.09	03:50	0.30	10:15	2.66	1.41	03:50	0.011	10:15	0.679	0.200	0.200	-	-	-	-	-	-
11/09/2020	05:15	1.34	18:10	5.81	3.00	01:25	0.35	11:40	2.62	1.47	05:10	0.014	18:10	0.658	0.195	0.195	-	-	-	-	-	-
11/10/2020	02:30	1.30	10:45	6.08	2.87	02:25	0.32	07:40	2.66	1.42	02:25	0.011	10:45	0.649	0.181	0.181	-	-	-	-	-	-
11/11/2020	01:50	1.25	08:20	5.97	2.92	03:00	0.33	17:50	2.76	1.44	03:00	0.011	17:50	0.690	0.191	0.191	-	-	-	-	-	-
11/12/2020	05:20	1.27	19:30	5.69	2.91	02:00	0.30	13:40	2.65	1.43	01:55	0.010	20:10	0.621	0.188	0.188	-	-	-	-	-	-
11/13/2020	03:25	1.19	18:30	5.59	2.91	03:20	0.34	18:30	2.75	1.43	03:25	0.009	18:30	0.669	0.187	0.187	-	-	-	-	-	-
11/14/2020	05:35	1.36	10:10	5.67	2.96	03:50	0.38	16:05	2.65	1.44	03:50	0.014	11:00	0.634	0.194	0.194	-	-	-	-	-	-
11/15/2020	04:40	1.13	17:30	5.86	3.00	05:00	0.30	17:30	2.76	1.46	04:30	0.010	17:30	0.713	0.201	0.201	-	-	-	-	-	-
11/16/2020	01:50	1.28	19:15	5.63	2.91	02:55	0.35	19:15	2.75	1.44	02:45	0.012	19:15	0.675	0.188	0.188	-	-	-	-	-	-
11/17/2020	03:25	1.26	08:10	5.64	2.92	02:25	0.36	19:25	2.66	1.43	02:25	0.011	19:25	0.633	0.185	0.185	-	-	-	-	-	-
11/18/2020	03:50	1.29	12:40	5.66	2.94	04:10	0.32	18:40	2.68	1.42	04:05	0.011	18:40	0.653	0.188	0.188	-	-	-	-	-	-
11/19/2020	03:00	1.29	20:05	5.65	2.89	04:25	0.37	11:20	2.63	1.38	03:25	0.013	20:05	0.618	0.178	0.178	-	-	-	-	-	-
11/20/2020	01:55	1.28	08:25	5.85	2.91	02:15	0.39	12:00	2.64	1.43	02:05	0.013	12:00	0.668	0.186	0.186	-	-	-	-	-	-
11/21/2020	04:05	1.28	12:05	5.79	2.90	05:25	0.25	16:50	2.69	1.41	05:20	0.010	12:05	0.668	0.185	0.185	-	-	-	-	-	-
11/22/2020	04:15	1.20	09:00	5.79	2.97	04:15	0.33	09:00	2.76	1.45	04:15	0.009	09:00	0.703	0.197	0.197	-	-	-	-	-	-
11/23/2020	02:10	1.37	17:35	5.46	2.94	05:00	0.34	11:10	2.70	1.44	02:10	0.012	17:35	0.611	0.189	0.189	-	-	-	-	-	-
11/24/2020	04:20	1.26	08:05	6.74	2.93	02:50	0.33	08:05	3.00	1.44	02:50	0.011	08:05	0.926	0.192	0.192	-	-	-	-	-	-
11/25/2020	02:00	1.31	08:55	5.83	2.93	05:10	0.45	08:55	2.74	1.46	05:10	0.014	08:55	0.705	0.194	0.194	-	-	-	-	-	-
11/26/2020	02:45	1.28	12:35	5.91	3.00	05:10	0.21	18:30	2.72	1.49	05:10	0.009	12:50	0.683	0.205	0.205	-	-	-	-	-	-
11/27/2020	05:05	1.25	12:15	5.90	2.88	01:35	0.27	17:40	2.73	1.42	05:00	0.011	12:15	0.706	0.187	0.187	-	-	-	-	-	-
11/28/2020	04:35	1.28	11:45	6.07	3.00	05:45	0.38	13:00	2.77	1.48	04:25	0.012	11:45	0.704	0.202	0.202	-	-	-	-	-	-

10/23/2020 00:00 - 11/28/2020 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)	Rain (in)
Total			7.071	
Average	2.95	1.42	0.191	

FM03

Site Commentary

SITE INFORMATION

Pipe	Round (9.88 in H)
Silt	0.00 (in)

OVERVIEW

FM03 functioned under normal conditions during the period Friday, October 23, 2020 to Saturday, November 28, 2020. The flow pattern at this site exhibits frequent changes in both depth and velocity throughout the day. The saw-toothed like pattern indicates the influence of pump station activity. Review of the Scattergraph shows that free flow conditions were maintained throughout the monitoring period. No surcharge conditions were recorded. Flow in this line is subcritical.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted and support the relative accuracy of the flow monitor at this location.

Site FM03 along with FM02 was positioned upstream of FM01altB. (See FM01altB Site Commentary for Balancing Details).

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Friday, October 23, 2020 to Saturday, November 28, 2020**, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Average	2.25	1.14	0.074
Minimum	0.92	0.31	0.005
Maximum	4.12	1.83	0.248
Min Time	11/13/2020 05:15:00	11/05/2020 04:25:00	11/05/2020 04:25:00
Max Time	11/26/2020 09:55:00	11/26/2020 09:55:00	11/26/2020 09:55:00

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions and data on the graphical reports are based on the five-minute average.

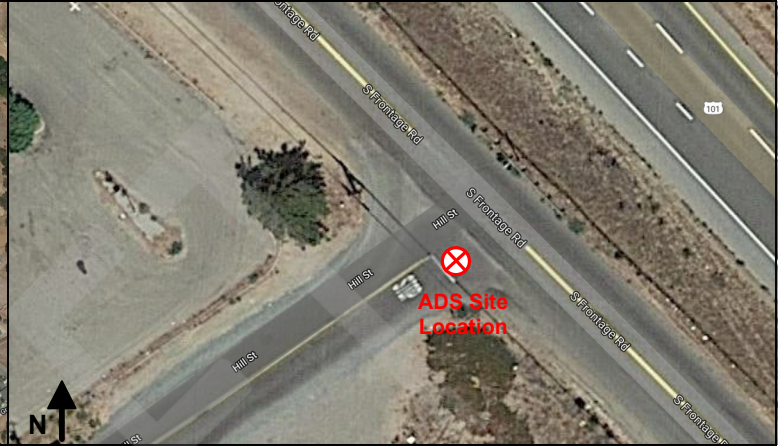
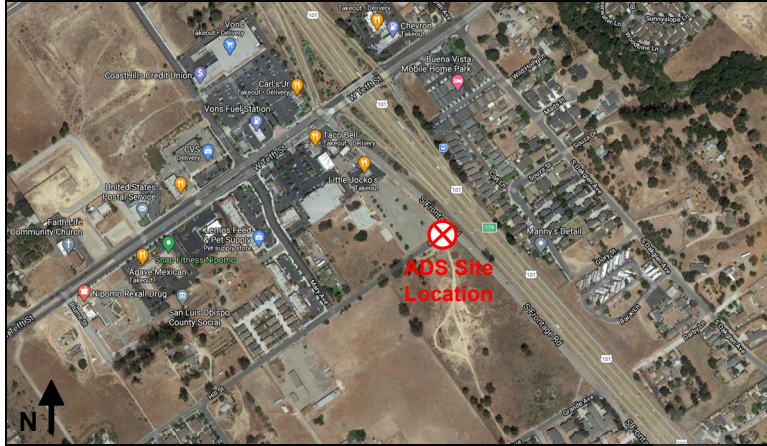
DATA UPTIME

Data uptime observed during **Friday, October 23, 2020 to Saturday, November 28, 2020** is provided in the following table:

Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

DRAFT

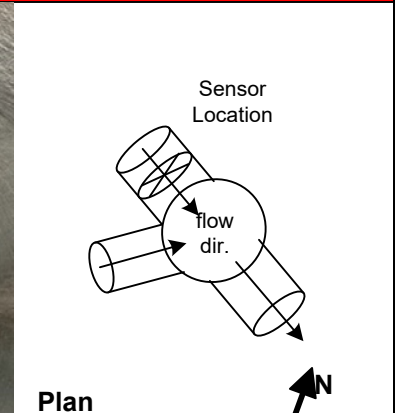
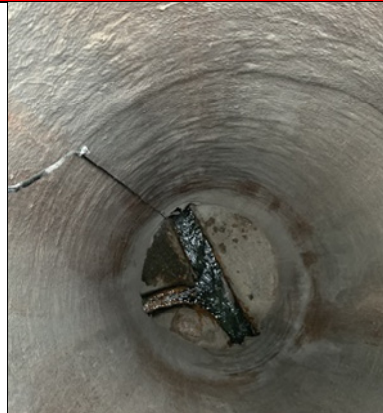
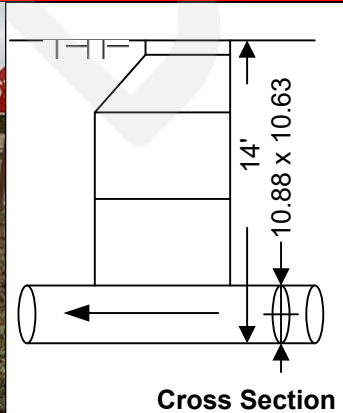
Project Name: Nipomo MKN TFM 2020		City: Nipomo		Agency: Nipomo		FM Initials: SK	
Site Name: FM03		Install Date: 10/22/20		Monitor Type: Peak Doppler			
Address/Location: Frontage Rd & Hill St				Monitor Model: Triton +			
				Data Acquisition: Manual/Wireless Collect			
				Manhole ID:			
Access: Drive		Type of System:		Pipe Height: 10.88 "			
		Sanitary <input checked="" type="checkbox"/>		Storm <input type="checkbox"/>		Combined <input type="checkbox"/>	
				Pipe Width: 10.63 "			



Investigation Information: Manhole Information:

Date/Time of Investigation: 10/22/20 @04:40pm		Manhole Depth: 14'	
Site Hydraulics: Good straight through flow		Manhole Material / Condition: Precast/Good	
Upstream Input: (L/S, P/S) --		Pipe Material / Condition: VCP/Good	
Upstream Manhole: Not Investigated		Land Use: Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Trunk <input type="checkbox"/>	
Downstream Manhole: Not investigated		Oxygen: 20.9 H2S: 0 LEL: 0 CO: 0	
Depth of Flow: 2.63 " +/- 0.25"		Safety Notes: 2 man crew required and one blower is to be operated at all times.	
Range (Air DOF): +/-			
Peak Velocity: 1.54 fps			
Silt: 0.00 Inches			

Other Information:



Installation Information		Backup		Yes	No	?	Distance
Installation Type:	Standard	Trunk		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sensors Devices:	Ultrasonic/Velocity/Pressure	Lift / Pump Station		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Surcharge Height:	0	WWTP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Rain Gauge Zone:		Other		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

Hydrograph Report

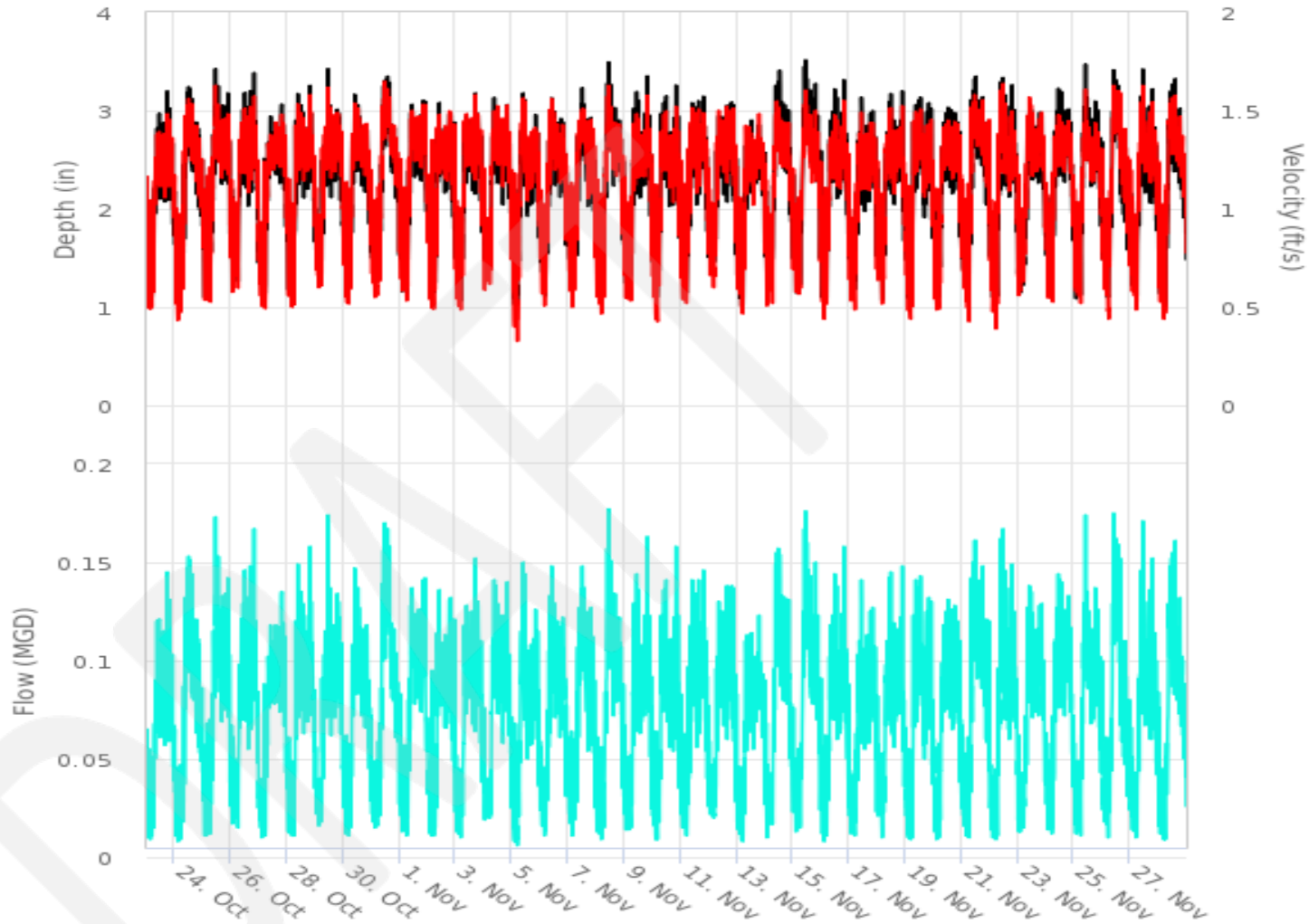
FM03

Flow Monitor
FM03

Pipe Height
9.88
in

Report Period
10/23/2020
To
11/28/2020

Legend
— DFINAL
— VFINAL
— QFINAL
— RAIN FINAL



Scattergraph Report

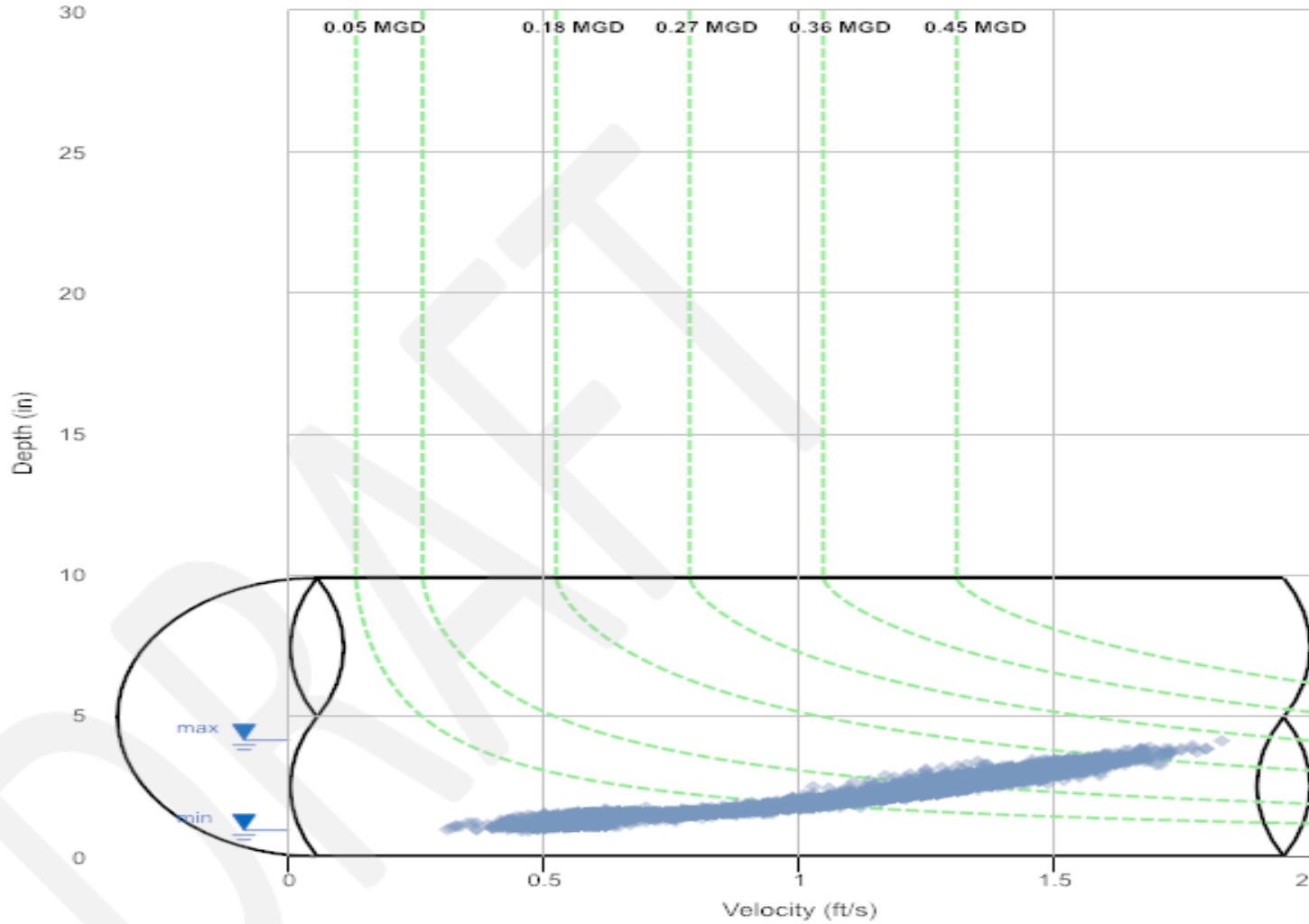
FM03

Flow Monitor
FM03

Pipe Height
9.88
in

Report Period
10/23/2020
To
11/28/2020

Legend
○ DFINAL - VFINAL
--- Iso-Q™
▼ Min-Max Depth



Daily Tabular Report

10/23/2020 00:00 - 11/28/2020 23:59
 FM03Pipe: Round (9.88 in H), Silt0.00 in

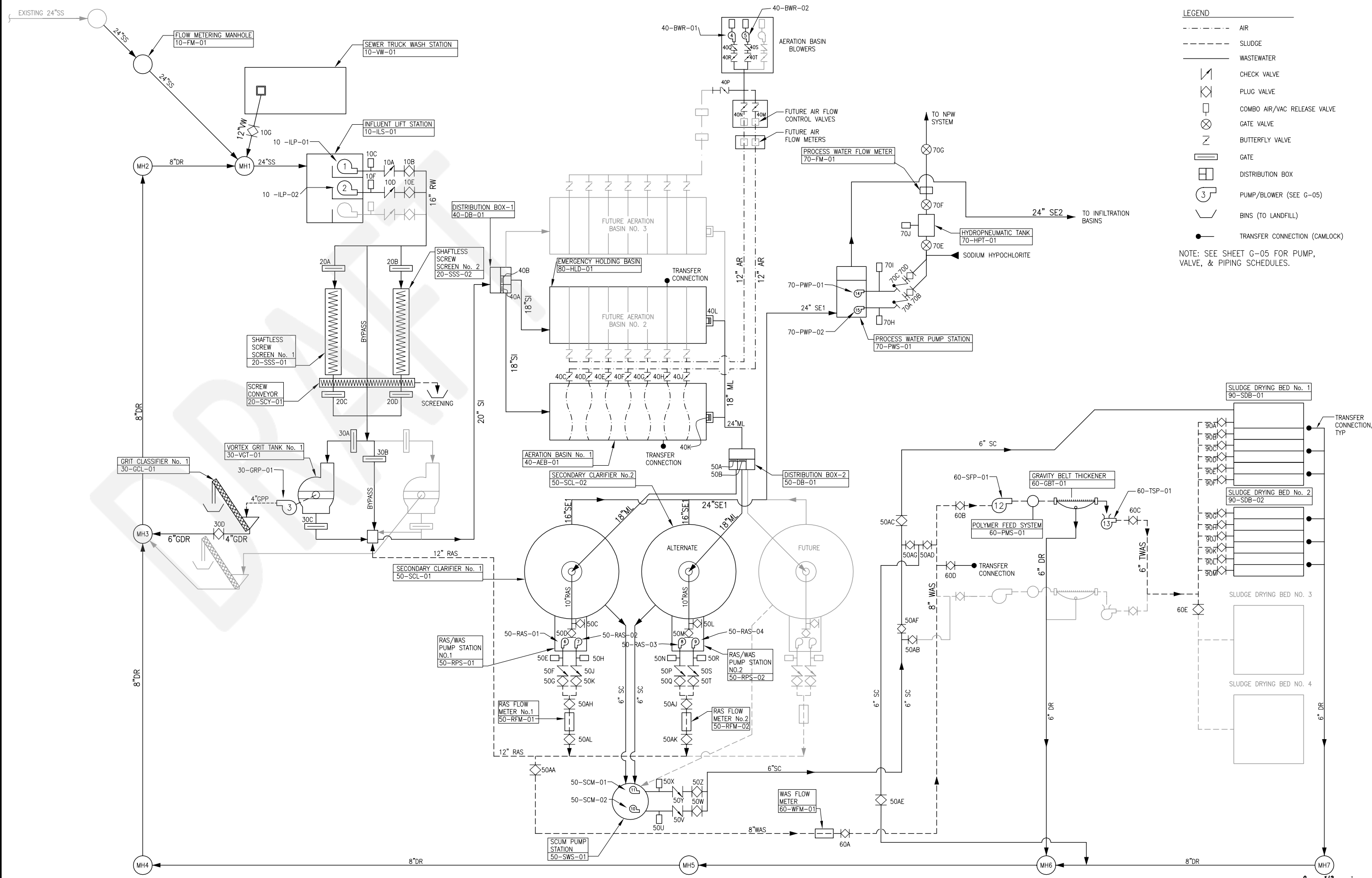
Date	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)						Rain (in)		RAIN FINAL (in)			
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total					
10/23/2020	02:30	0.93	08:50	3.54	2.18	02:30	0.37	08:50	1.64	1.10	02:30	0.006	08:50	0.182	0.069	0.069	-	-	-	-	-	-
10/24/2020	02:50	0.99	13:15	3.71	2.21	02:45	0.42	13:15	1.70	1.12	02:25	0.008	13:15	0.201	0.073	0.073	-	-	-	-	-	-
10/25/2020	01:35	1.08	13:05	3.63	2.27	06:45	0.45	10:45	1.72	1.14	03:15	0.010	10:45	0.196	0.076	0.076	-	-	-	-	-	-
10/26/2020	06:10	1.18	19:50	3.83	2.29	23:40	0.54	19:50	1.75	1.16	06:10	0.013	19:50	0.216	0.076	0.076	-	-	-	-	-	-
10/27/2020	02:30	1.04	16:25	3.74	2.27	02:30	0.48	16:25	1.70	1.14	02:30	0.009	16:25	0.203	0.075	0.075	-	-	-	-	-	-
10/28/2020	05:35	1.07	19:30	3.63	2.25	04:30	0.48	19:30	1.72	1.16	05:35	0.010	19:30	0.197	0.075	0.075	-	-	-	-	-	-
10/29/2020	03:10	1.21	10:45	3.83	2.27	03:20	0.57	10:45	1.80	1.18	03:10	0.014	10:45	0.222	0.077	0.077	-	-	-	-	-	-
10/30/2020	02:15	1.08	10:55	3.55	2.23	02:10	0.50	10:55	1.65	1.15	02:15	0.010	10:55	0.184	0.074	0.074	-	-	-	-	-	-
10/31/2020	05:05	1.09	13:45	3.72	2.32	05:05	0.49	11:20	1.78	1.17	05:05	0.010	11:20	0.210	0.080	0.080	-	-	-	-	-	-
11/01/2020	02:35	1.08	10:45	3.67	2.29	06:20	0.51	16:40	1.63	1.17	02:25	0.011	10:45	0.188	0.078	0.078	-	-	-	-	-	-
11/02/2020	03:20	0.97	19:55	3.30	2.22	05:05	0.47	19:50	1.62	1.13	03:20	0.009	19:50	0.162	0.072	0.072	-	-	-	-	-	-
11/03/2020	04:30	1.04	16:45	3.41	2.21	02:30	0.44	16:45	1.66	1.14	02:25	0.009	16:45	0.174	0.072	0.072	-	-	-	-	-	-
11/04/2020	05:20	1.11	10:05	3.51	2.25	04:00	0.52	20:05	1.69	1.16	04:00	0.012	10:05	0.183	0.074	0.074	-	-	-	-	-	-
11/05/2020	04:20	0.96	09:35	3.54	2.16	04:25	0.31	09:35	1.68	1.11	04:25	0.005	09:35	0.186	0.069	0.069	-	-	-	-	-	-
11/06/2020	04:55	1.03	09:50	3.49	2.24	03:45	0.48	09:50	1.72	1.15	03:45	0.010	09:50	0.187	0.074	0.074	-	-	-	-	-	-
11/07/2020	03:30	1.13	09:55	3.58	2.24	03:45	0.47	09:55	1.72	1.15	03:30	0.011	09:55	0.194	0.074	0.074	-	-	-	-	-	-
11/08/2020	04:10	1.02	13:40	3.80	2.27	04:25	0.45	13:40	1.72	1.14	02:50	0.009	13:40	0.210	0.076	0.076	-	-	-	-	-	-
11/09/2020	00:30	1.04	19:30	3.55	2.24	04:00	0.43	19:30	1.65	1.13	04:00	0.009	19:30	0.183	0.072	0.072	-	-	-	-	-	-
11/10/2020	03:55	1.02	20:05	3.84	2.23	02:50	0.41	20:05	1.73	1.11	02:50	0.008	20:05	0.215	0.072	0.072	-	-	-	-	-	-
11/11/2020	04:15	1.05	19:40	3.91	2.25	05:15	0.51	19:40	1.77	1.13	05:00	0.010	19:40	0.224	0.074	0.074	-	-	-	-	-	-
11/12/2020	04:35	1.45	19:25	3.73	2.27	04:15	0.57	19:25	1.75	1.17	04:15	0.020	19:25	0.208	0.075	0.075	-	-	-	-	-	-
11/13/2020	05:10	0.92	07:40	3.27	2.17	05:20	0.43	07:40	1.71	1.12	05:10	0.007	07:40	0.170	0.069	0.069	-	-	-	-	-	-
11/14/2020	01:40	1.03	09:10	3.73	2.34	02:00	0.47	10:20	1.73	1.14	02:00	0.009	10:20	0.201	0.079	0.079	-	-	-	-	-	-
11/15/2020	02:35	1.10	11:50	3.87	2.36	02:40	0.55	11:50	1.69	1.14	02:35	0.012	11:50	0.211	0.080	0.080	-	-	-	-	-	-
11/16/2020	02:40	1.00	19:35	3.61	2.23	02:40	0.40	19:35	1.70	1.10	02:40	0.007	19:35	0.193	0.071	0.071	-	-	-	-	-	-
11/17/2020	05:05	1.04	10:20	3.50	2.19	04:55	0.46	10:20	1.64	1.11	04:55	0.009	10:20	0.179	0.070	0.070	-	-	-	-	-	-
11/18/2020	04:05	1.06	10:00	3.66	2.24	04:05	0.51	10:00	1.71	1.14	04:05	0.010	10:00	0.198	0.072	0.072	-	-	-	-	-	-
11/19/2020	02:40	1.02	08:55	3.51	2.25	04:30	0.43	19:55	1.64	1.14	02:40	0.009	08:55	0.179	0.075	0.075	-	-	-	-	-	-
11/20/2020	02:35	1.03	15:10	3.31	2.24	04:45	0.43	11:25	1.53	1.14	02:35	0.009	12:35	0.151	0.073	0.073	-	-	-	-	-	-
11/21/2020	04:05	1.06	15:40	3.84	2.28	06:20	0.42	15:40	1.80	1.17	06:25	0.009	15:40	0.222	0.078	0.078	-	-	-	-	-	-
11/22/2020	00:30	1.04	10:20	3.77	2.26	05:10	0.35	11:20	1.69	1.14	05:10	0.008	10:20	0.202	0.076	0.076	-	-	-	-	-	-
11/23/2020	00:10	1.10	09:45	3.28	2.20	00:40	0.47	09:45	1.70	1.15	00:10	0.010	09:45	0.169	0.072	0.072	-	-	-	-	-	-
11/24/2020	05:05	1.08	19:25	3.84	2.33	05:50	0.49	19:25	1.68	1.15	05:50	0.010	19:25	0.208	0.078	0.078	-	-	-	-	-	-
11/25/2020	02:25	1.05	09:50	3.77	2.33	02:30	0.50	09:50	1.64	1.15	02:30	0.010	09:50	0.198	0.078	0.078	-	-	-	-	-	-
11/26/2020	05:30	1.08	09:55	4.12	2.25	05:45	0.42	09:55	1.83	1.15	05:15	0.009	09:55	0.248	0.076	0.076	-	-	-	-	-	-
11/27/2020	00:00	1.04	19:00	3.56	2.22	04:55	0.46	19:00	1.65	1.14	04:55	0.009	19:00	0.184	0.073	0.073	-	-	-	-	-	-
11/28/2020	05:50	0.98	14:35	3.69	2.22	04:45	0.44	14:35	1.73	1.14	05:55	0.008	14:35	0.202	0.075	0.075	-	-	-	-	-	-

10/23/2020 00:00 - 11/28/2020 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)	Rain (in)
Total			2.752	
Average	2.25	1.14	0.074	

APPENDIX B

DWG: P:\nipomo_csd (19996)\southland_wwf_upgrades\000_coad (2010)\Process\conforming set\General\G-04.dwg Layout Name: G-04 - Plotted by: Frontier, jim Date: 6/15/2012 - 12:59 PM
REFS: NSD-BD IMAGES: NSD LOGO-transparent_graphics_email.jpg



LEGEND

- AIR
- - - SLUDGE
- WASTEWATER
- ∇ CHECK VALVE
- ◇ PLUG VALVE
- ⊗ COMBO AIR/VAC RELEASE VALVE
- ⊘ GATE VALVE
- ∩ BUTTERFLY VALVE
- ▭ GATE
- ▭ DISTRIBUTION BOX
- ⊕ PUMP/BLOWER (SEE G-05)
- ∪ BINS (TO LANDFILL)
- TRANSFER CONNECTION (CAMLOCK)

NOTE: SEE SHEET G-05 FOR PUMP, VALVE, & PIPING SCHEDULES.

APPR DATE	12/31/2013
DESCRIPTION	SOUTHLAND WWTF IMPROVEMENTS
PROJECT NUMBER	C74757
PROJECT ENGINEER	EILEEN SHIELDS
DESIGNED	EKS
DETAIL LED	JPF
CHECKED	
APPROVED	
DATE	FEBRUARY 2012
AECOM PROJECT NO.	60183842
NSCD PROJECT NO.	
CADD STDS.	AECOM
G-04	SHEET
	4 OF 181

AECOM
AECOM Technical Services, Inc.
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NIPOMO
COMMUNITY SERVICES DISTRICT

0 1/2 1
IF THIS BAR DOES NOT
MEASURE 1" THEN DRAWING IS
NOT TO FULL SCALE

DWG: P:\nipomo_cad (19996)\southland_wrf_upgrade\000_cadd (2010)\P\meset\conforming set\General\G-06.dwg Layout Name: G-06 - Plotted by: Froelicher, Jim Date: 6/15/2012 - 1:06 PM
 XREFS: NCSD-BD IMAGES: NCSD LOGO-transparent_grypscoat_small.jpg

INFLUENT DESIGN PARAMETERS	
AVERAGE DAILY FLOW (ADF)	0.84 MGD
PEAK HOURLY FLOW (PHF)	2.43 MGD
5-DAY BIOCHEMICAL OXYGEN DEMAND (BOD ₅), 90 th %	300 mg/L
5-DAY BIOCHEMICAL OXYGEN DEMAND (BOD ₅), AVE	250 mg/L
TOTAL SUSPENDED SOLIDS (TSS), 90 th %	300 mg/L
TOTAL SUSPENDED SOLIDS (TSS), AVERAGE	250 mg/L
TOTAL NITROGEN (TN), 90 th %	60 mg/L
TOTAL NITROGEN (TN), AVERAGE	35 mg/L
EFFLUENT DESIGN PARAMETERS	
5-DAY BIOCHEMICAL OXYGEN DEMAND (BOD ₅)	20 mg/L
TOTAL SUSPENDED SOLIDS (TSS)	20 mg/L
TOTAL NITROGEN (TN)	10 mg/L

INFLUENT LIFT STATION (SYSTEM 10)	
NUMBER OF PUMPS	2
PUMP TAGS	10-LP-01 & 10-LP-02
TYPE	SCREW CENTRIFUGAL
CAPACITY (EACH)	1,700 GPM @ 30 FT
MOTOR HP	20 HP

HEADWORKS SCREENS (SYSTEM 20)	
NUMBER OF SCREENS	2
SCREEN TAGS	20-SSS-01 & 20-SSS-02
TYPE	SHAFTLESS SCREW
PEAK CAPACITY (EACH)	4.83 MGD
HEADLOSS (INCHES)	12"
MOTOR HP	1.5

HEADWORKS GRIT TANKS (SYSTEM 30)	
NUMBER OF GRIT TANKS	1
GRIT TANK TAGS	30-GRT-01
TYPE	VORTEX
PEAK CAPACITY	2.5 MGD
GRIT PUMPS	1
GRIT PUMP TAG	30-GRP-01
TYPE	SELF-PRIMING
CAPACITY	250 GPM @ 13 FT TDH
MOTOR HP	2.0 HP
GRIT CLASSIFIER	1
GRIT CLASSIFIER TAG	30-GCL-01
MOTOR HP	1.5 HP

AERATION BASINS (SYSTEM 40)	
NUMBER OF BASINS	1
BASIN TAGS	40-AEB-01
SIZE (WxL) (AT GRADE)	170 FT x 156 FT
DEPTH (AT WATER SURFACE)	11.8 FT
VOLUME	1.41 MG
MIXED LIQUOR SUSPENDED SOLIDS (MLSS)	3,223 mg/L
SOLID RETENTION TIME (SRT)	60-70 DAYS
HYDRAULIC RETENTION TIME (HRT)	1.63 DAY
BLOWERS	
NUMBER OF BLOWERS	2
BLOWER TAGS	40-BWR-01 & 02
TYPE	POSITIVE DISPLACEMENT
CAPACITY (EACH)	1954 ICFM/1738 ICFM
AERATION CHAINS	
NUMBER OF CHAINS	7
DIFFUSER ASSEMBLIES	98
DIFFUSERS	392

SECONDARY CLARIFIERS (SYSTEM 50)	
NUMBER OF CLARIFIERS	2*
TYPE	CIRCULAR
CLARIFIER TAGS	50-SCL-01 & 50-SCL-02*
DIAMETER	55 FT
SIDE WATER DEPTH	15 FT
OVERFLOW RATE (ONE CLARIFIER ONLINE)	
@ ADF	240 gpd/FT ²
@ PHF	694 gpd/FT ²
CENTER DRIVE HP (MIN)	0.5
SLUDGE COLLECTION MECHANISM	SPIRAL SCRAPER
RAS PUMPS	
NUMBER (PER CLARIFIER)	2
TYPE	SUBMERSIBLE
CAPACITY (EACH)	875 GPM
MOTOR HP	10 HP
PUMP TAGS	50-RAS-01 & 50-RAS-02 50-RAS-03* & 50-RAS-04*
*CLARIFIER 50-SCL-02, 50-RAS-03, AND 50-RAS-04 ARE PART OF BID ALTERNATE X	

SLUDGE THICKENING SYSTEM (SYSTEM 60)	
WAS FEED PUMP	
NUMBER	1
TYPE	PROGRESSIVE CAVITY
CAPACITY	0 to 120 GPM
MOTOR HP	10 HP
PUMP TAG	60-SFP-01
POLYMER SYSTEM	
METERING PUMP	
NUMBER	1
TYPE	PROGRESSIVE CAVITY
CAPACITY	3.0 GPH
POLYMER TYPE	LIQUID
TAG	60-FMS-01
GRAVITY BELT THICKENER	
NUMBER	1
CAPACITY	50 to 100 GPM
WIDTH	0.5 METER
FEED CONCENTRATION	0.5 to 1.0% TSS
THICKENED SLUDGE CONCENTRATION	4 to 8% TSS
DRIVE MOTOR	1 HP
HYDRAULIC POWER	3 HP
WASHWATER PUMP	
MOTOR	5 HP
CAPACITY	0 to 40 GPM
TAG	60-GBT-01
THICKENED SLUDGE PUMP	
NUMBER	1
CAPACITY	0 to 40 GPM
MOTOR HP	10 HP
PUMP TAG	60-TSP-01

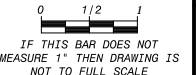
NONPOTABLE WATER PUMP STATION (SYSTEM 70)	
NUMBER OF PUMPS	2
PUMP TAGS	70-PWP-01 & 70-PWP-02
TYPE	VERTICAL TURBINE
CAPACITY	200 GPM @ 60 PSI
MOTOR HP	10
HYDROPNEUMATIC TANK	
TAG	70-HPT-01
SIZE	5,000 GAL
PRESSURE SETTINGS	
MIN	40
MAX	60

EMERGENCY HOLDING BASIN (SYSTEM 80)	
NUMBER OF BASINS	1
BASIN TAG	80-HLD-01
SIZE	150 FT x 180 FT
DEPTH (AT MAX. WATER SURFACE)	11 FT
VOLUME	1.17 MGAL

SLUDGE DRYING BEDS (SYSTEM 90)	
NUMBER OF SLUDGE DRYING BEDS	2
TAGS	90-SDB-01 & 02
NUMBER OF CELLS PER BED	6
AREA PER CELL	5,200 FT ²
TOTAL AREA	62,640 FT ²
MAXIMUM DEPTH	15"

INFILTRATION BASINS*	
NUMBER	2
TOTAL SURFACE AREA	7.76 AC
TOTAL DEPTH	8 FT
MAX WATER DEPTH	6 FT
*INFILTRATION BASINS ARE BID ALTERNATE Y	

NOTE:
 1. SYSTEM 45 INCLUDES BLOWER AND ELECTRICAL BUILDING.



PROJECT ENGINEER
 ELLEEN SHIELDS

REG. NUMBER
 C74757

EXP. DATE
 12/31/2013

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NIPOMO COMMUNITY SERVICES DISTRICT
 SOUTHLAND WWTf IMPROVEMENTS

DESIGN PARAMETERS

DESIGNED: EKS
 DETAIL: JPF
 CHECKED:
 APPROVED:
 DATE: FEBRUARY 2012
 AECOM PROJECT NO.: 60183842
 NCSD PROJECT NO.:
 CADD STDS: AECOM

G-06
 SHEET
 6 OF 181

APPENDIX C

Nipomo Community Services District
Dana Reserve Water and Wastewater Evaluation
Recommended: New 16-Inch Main on North Oak Glen Drive and Tefft Street
OPINION OF PROBABLE PROJECT COST - PLANNING

Item	Description	Quantity	Unit	Unit Price	Amount
1	Mobilization/Demobilization	1	LS	\$313,000	\$313,000
2	Stormwater Pollution Prevention Plan	1	LS	\$60,000	\$60,000
3	Environmental mitigation measures and permits	1	LS	\$40,000	\$40,000
4	Traffic Control	14,900	LF	\$10	\$149,000
5	Furnish and install 16-inch diameter AWWA DIP pipe and appurtenances within paved streets	15,200	LF	\$320	\$4,864,000
6	Furnish and install 30-inch diameter steel casing pipe via trenchless installation with 16-inch diameter AWWA DIP pipe	300	LF	\$1,800	\$540,000
7	Pipe connections to existing system (valves and tee)	13	EA	\$24,000	\$312,000
8	Install service lateral and connect to existing water meters	38	EA	\$4,000	\$152,000
9	Install air release valve	9	EA	\$5,000	\$45,000
10	Install hydrant lateral and connect to existing hydrant	10	EA	\$9,000	\$90,000
Subtotal					\$6,565,000
Administration, Engineering, and Construction Management				30%	\$1,970,000
Construction Contingency				30%	\$1,970,000
Estimated Total Project Cost (Rounded)					\$10,510,000

Notes:

1. Pipeline installation costs include pavement removal/ restoration and pipeline disinfection.
2. Service replacement based on number of parcels along frontage of pipeline alignment. Final estimate to be determined during design.
3. Number of hydrant laterals to be reconnected based on District GIS

Nipomo Community Services District
 Dana Reserve Water and Wastewater Evaluation
 Willow Road End of Line Connection
 OPINION OF PROBABLE PROJECT COST - PLANNING

Item	Description	Quantity	Unit	Unit Price	Amount
1	Mobilization/Demobilization	1	LS	\$8,000	\$8,000
2	Traffic Control	500	LF	\$10	\$5,000
3	Furnish and install 12-inch diameter AWWA C900 PVC pipe and appurtenances within paved streets	500	LF	\$250	\$125,000
4	Pipe connections to existing system (valves and tee)	2	EA	\$12,000	\$24,000
Subtotal					\$162,000
Administration, Engineering, and Construction Management				30%	\$49,000
Construction Contingency				30%	\$49,000
Estimated Total Project Cost					\$260,000
Notes:					
1. Pipeline installation costs include pavement removal/ restoration and pipeline disinfection.					

Nipomo Community Services District
Dana Reserve Water and Wastewater Evaluation
New 1.0 MG Reservoir at Foothill Tank Site
OPINION OF PROBABLE PROJECT COST - PLANNING

Item	Description	Quantity	Unit	Unit Price	Amount
1	Mobilization (5%)	1	LS	\$117,000	\$117,000
2	Earthwork	1	LS	\$100,000	\$100,000
3	Demolition and Site Preparation	1	LS	\$30,000	\$30,000
4	New 1.0 MG Welded Steel Reservoir	1000000	Gal	\$1.25	\$1,250,000
5	Tank Foundation and Anchorage	1	LS	\$250,000	\$250,000
6	Disinfection Booster Facility	1	LS	\$200,000	\$200,000
7	Piping and Valves	1	LS	\$300,000	\$300,000
8	Electrical (Allowance)	1	LS	\$100,000	\$100,000
9	Instrumentation and Controls (Allowance)	1	LS	\$100,000	\$100,000
Subtotal					\$2,447,000
Administration, Engineering, and Construction Management				30%	\$735,000
Construction Contingency				30%	\$735,000
Estimated Total Project Cost (Rounded)					\$3,920,000

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Nipomo Community Services District
 Dana Reserve Water and Wastewater Evaluation
New 0.5 MG Reservoir at Joshua Road Pumping Station
 OPINION OF PROBABLE PROJECT COST - PLANNING

Item	Description	Quantity	Unit	Unit Price	Amount
1	2016 Cost Estimate	1	LS	\$2,500,000	\$2,500,000
2	ENR Adjustment				\$471,693
Subtotal					\$2,971,693
Administration, Engineering, and Construction Management				30%	\$892,000
Construction Contingency				30%	\$892,000
Estimated Total Project Cost (Rounded)					\$4,760,000
Notes:					
1. Construction cost opinion was escalated from Jan 2016 estimate to September 2021 using the ENR-CCI LA cost index (Jan 2016 = 11,115.28 to Sep 2021 = 13,212.48).					

Nipomo Community Services District
Dana Reserve Water and Wastewater Evaluation
Alternative: New 16-Inch Main from Foothill Tanks to Sandydale
OPINION OF PROBABLE PROJECT COST - PLANNING

Item	Description	Quantity	Unit	Unit Price	Amount
1	Mobilization/Demobilization	1	LS	\$254,000	\$254,000
2	Stormwater Pollution Prevention Plan	1	LS	\$60,000	\$60,000
3	Environmental mitigation measures and permits	1	LS	\$40,000	\$40,000
4	Traffic Control	13,200	LF	\$10	\$132,000
5	Furnish and install 16-inch diameter AWWA DIP pipe and appurtenances within paved streets	13,500	LF	\$320	\$4,320,000
6	Furnish and install 30-inch diameter steel casing pipe via trenchless installation with 16-inch diameter AWWA DIP pipe	300	LF	\$1,800	\$540,000
7	Pipe connections to existing system (valves and tee)	2	EA	\$24,000	\$48,000
8	Install air release valve	5	EA	\$5,000	\$25,000
Subtotal					\$5,419,000
Administration, Engineering, and Construction Management				30%	\$1,626,000
Construction Contingency				30%	\$1,626,000
Estimated Total Project Cost (Rounded)					\$8,680,000
Notes:					
1. Pipeline installation costs include pavement removal/ restoration and pipeline disinfection.					

Nipomo Community Services District
 Dana Reserve Water and Wastewater Evaluation
Offsite Wastewater Collection System Improvements
 OPINION OF PROBABLE CONSTRUCTION COST - PLANNING

Item	Description	Quantity	Unit	Unit Price	ENR Adjustment	Amount (Rounded)
1	Mobilization/Demobilization	1	LS	\$93,920	1.09	\$103,000
2	Stormwater Pollution Prevention Plan	1	LS	\$60,000	1.09	\$66,000
3	Environmental mitigation measures and permits	1	LS	\$40,000	1.09	\$44,000
Upgrade Frontage Road 15-in Gravity Sewer Main						
4	15-in Gravity Sewer	3500	LF	\$250	1.09	\$955,000
5	Precast Manholes w/Coating	12	EA	\$20,000	1.09	\$262,000
6	Laterals	5	EA	\$3,000	1.09	\$17,000
7	Traffic Control/Regulation	3500	LF	\$12	1.09	\$46,000
8	Pavement Repair (Full Lane Width)	1	LS	\$147,000	1.09	\$161,000
9	Abandon Existing Sewerline & Manholes	3500	LF	\$10	1.09	\$39,000
Upgrade Frontage Road 18-in Gravity Sewer Main						
10	18-in Gravity Sewer	1200	LF	\$280	1.09	\$367,000
11	Precast Manholes w/Coating	4	EA	\$20,000	1.09	\$88,000
12	Laterals	10	EA	\$3,000	1.09	\$33,000
13	Traffic Control/Regulation	1200	LF	\$12	1.09	\$16,000
14	Pavement Repair (Full Lane Width)	1	LS	\$52,000	1.09	\$57,000
15	Abandon Existing Sewerline & Appurtenances	1200	LF	\$10	1.09	\$14,000
Subtotal						\$2,268,000
Administration, Engineering, and Construction Management				30%		\$681,000
Construction Contingency				30%		\$681,000
Estimated Total Project Cost (rounded)						\$3,630,000

Notes:

- Lateral replacement based on number of parcels along frontage of pipeline alignment. Final estimate to be determined during design.
- Construction cost opinion was escalated from July 2019 Blacklake Consolidation Study Engineering Report (MKN) to September 2021 using the ENR-CCI LA cost index (June 2019 = 12113.16 to Sep 2021 = 13212.48).

Nipomo Community Services District
Dana Reserve Water and Wastewater Evaluation
Wastewater Treatment Plant Improvements
Basis for Unit Process Costs (Planning-Level)

OPINION OF PROBABLE CAPITAL COST

Item	Description	Unit	Unit Price	Quantity	ENR Adjustment*	Amount
GRIT REMOVAL SYSTEM						
1	Grit Removal Equipment	EA	\$162,000	1	1.28	\$207,800
2	Civil	LS	\$73,000	1	1.28	\$93,600
3	Structural	LS	\$97,000	1	1.28	\$124,400
4	Electrical	LS	\$9,000	1	1.28	\$11,500
5	Instrumentation	LS	\$4,000	1	1.28	\$5,100
<i>Subtotal</i>						\$442,400
BIOLAC WAVE OXIDATION SYSTEM - BASIN						
1	BioLac Equipment	EA	\$628,000	1	1.28	\$805,600
2	Civil	LS	\$86,000	1	1.28	\$110,300
3	Structural	LS	\$179,000	1	1.28	\$229,600
4	Electrical	LS	\$18,000	1	1.28	\$23,100
5	Instrumentation	LS	\$3,000	1	1.28	\$3,800
<i>Subtotal</i>						\$1,172,400
BIOLAC WAVE OXIDATION SYSTEM - BASIN 3						
1	BioLac Equipment	EA	\$628,000	1	1.28	\$805,600
2	Civil	LS	\$344,000	1	1.28	\$441,300
3	Structural	LS	\$179,000	1	1.28	\$229,600
4	Electrical	LS	\$18,000	1	1.28	\$23,100
5	Instrumentation	LS	\$3,000	1	1.28	\$3,800
<i>Subtotal</i>						\$1,503,400
BLOWER BUILDING						
1	Civil	LS	\$89,000	1	1.28	\$114,200
2	Structural	LS	\$267,000	1	1.28	\$342,500
3	Electrical	LS	\$286,000	1	1.28	\$366,900
4	Instrumentation	LS	\$140,000	1	1.28	\$179,600
<i>Subtotal</i>						\$1,003,200
SECONDARY CLARIFIER						
1	Clarifier Equipment	EA	\$203,000	1	1.28	\$260,400
2	RAS/WAS Pump Equipment	EA	\$33,000	2	1.28	\$84,700
3	RAS/WAS Flow Meter	EA	\$11,000	1	1.28	\$14,100
4	Scum Pump Equipment	EA	\$69,000	1	1.28	\$88,500
5	Civil	LS	\$440,000	1	1.28	\$564,400
6	Structural	LS	\$740,000	1	1.28	\$949,200
7	Electrical	LS	\$39,000	1	1.28	\$50,000
8	Instrumentation	LS	\$25,000	1	1.28	\$32,100
<i>Subtotal</i>						\$2,043,400
SLUDGE THICKENING SYSTEM						
1	Sludge Thickening Equipment	EA	\$255,000	1	1.28	\$327,100
2	Flow Meter	LS	\$9,000	1	1.28	\$11,500
3	Civil	LS	\$93,000	1	1.28	\$119,300
4	Structural	LS	\$77,000	1	1.28	\$98,600
5	Electrical	LS	\$28,000	1	1.28	\$35,900
6	Instrumentation	LS	\$16,000	1	1.28	\$20,500
<i>Subtotal</i>						\$612,900

Cost opinions were estimated by averaging bids from the District's 2012 Southland Wastewater Treatment Improvements Project. Construction cost opinion was escalated from May 2012 to September 2021 using the ENR-CCI LA cost index. May 2012 (10300.05) and Sep 2021 (13212.48) values were used to escalate estimated cost to present value.

SLUDGE DEWATERING SCREW PRESS

1	Screw Press, Building, Structural, Mechanical, Electrical, and Instrumentation	EA	\$1,037,022	1	1.10	\$1,135,900
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Cost opinions were estimated by averaging bids from the District's 2020 Southland Wastewater Treatment Facility Dewatering Screw Press Project. Construction cost opinion was escalated from September 2020 to September 2021 using the ENR-CCI LA cost index. September 2020 (12062.34) and Sep 2021 (13212.48) values were used to escalate estimated cost to present value.

Nipomo Community Services District
Dana Reserve Water and Wastewater Evaluation
Wastewater Treatment Plant Improvements Under Future Permit Requirements
OPINION OF PROBABLE CONSTRUCTION COST - PLANNING

Planning Level Project Cost - Southland WWTF Improvements to Meet Existing Demands with Dana Reserve					
Item	Description	Quantity	Unit	Unit Price	Amount (Rounded)
1	Mobilization (5% of Items 2 through 9)	1	LS	\$474,700	\$475,000
2	General Site Grading and Paving (4% of Items 4 through 9)	1	LS	\$293,172	\$294,000
3	General Site Civil (10% of Items 4 through 9)	1	LS	\$732,930	\$733,000
4	Influent Lift Station Pump Improvements	1	LS	\$50,000	\$50,000
5	New Grit Chamber System	1	LS	\$442,400	\$443,000
6	New Aeration Basin #2 and #3	1	LS	\$2,675,800	\$2,676,000
7	New Blower Building and Blower System Improvements	1	LS	\$1,504,800	\$1,505,000
8	New Clarifier and RAS Pumping Improvements	1	LS	\$2,043,400	\$2,044,000
9	New Sludge Thickening System	1	LS	\$612,900	\$613,000
10	New Screw Press	1	LS	\$1,135,900	\$1,136,000
	Subtotal				\$9,969,000
	Construction Contingency			30%	\$2,991,000
	Engineering, Administrative, and Construction Management Allowance			30%	\$2,991,000
				Total	\$15,960,000

ENR (LA) September 2021 = 13212.48

Jennifer Guetschow

From: cynthia bodger <theabodger@gmail.com>
Sent: Monday, August 1, 2022 10:35 AM
To: Jennifer Guetschow
Subject: [EXT]Dana

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Frim-
To: cynthia bodger
745 Sandydale Drive Nipomo

There is really only one major problem with the proposed Dana Reserve Development. Its slated to be built in the wrong place. Initially that sounds crazy but when one opens up their mind to the potential benefits of building elsewhere, it becomes an incredibly compelling concept. The following considers just a few of the many reasons why that is true.

Developing the currently proposed site involved destroying the most desirable and unique habitat in Nipomo. Look at the property on Google maps and then zoom out. Canada Ranch should be preserved as it is to be the centerpiece of the town, like a small scale version of New York's Central Park. It is a priceless piece of property that should be protected and reserved for future generations to enjoy.

From a rational zoning perspective the proposed location is abysmal. It is surrounded on three sides by 1 to 5 acre rural properties. None of the people in those neighborhoods wants to live next to a high density development.

Moving the development to the other side of the freeway could act as a catalyst to reinvigorate old town Nipomo.

Moving the development to the other side of the freeway would also have the benefit of a large amount of space for future expansion that might include businesses that would provide jobs. That would help the problematic EIR finding of a substantial increase in the number of vehicle miles traveled commuting to job rich SLO from job poor Nipomo.

It has been said that the proposed location is wonderful because it is convenient to the High School--which is only about a 1000 feet away. It would be great if teenagers could walk to school or for students at the High School to walk to the Cuesta Satellite Campus. The problem is to do that would require sprinting across the 101 freeway and jumping some fences. Move the development to the other side of the 101 and it solves that along with many other problems.

Speaking of traffic, anyone familiar with this area knows that the traffic situation is already awful. Weekends and peak periods on Tefft can approach gridlock. The proposed development is for 1,289 housing units plus a variety of commercial buildings. However, that does not factor in ADUs. The evolving housing laws sent down from Sacramento now allow any single family residence to be converted into a triplex. There is a push to further modify the law to permit a fourplex on any SFR lot. If the total amount of potential traffic from the Dana Reserve was combined with several other future residential developments in the vicinity, it would create an untenable traffic situation along with a high level of both air and noise pollution.

The pollution from the thousands of people living or visiting Dana Reserve is just one of many related negative impacts. Higher population density is associated with increased crime, higher insurance rates, health issues such as miscarriages, along with a plethora of mental disorders. Our goal should be for a kinder, gentler society.

Driving into Nipomo on the 101 from the south the town is less than impressive. First you are greeted by the stench of the sewage treatment plant. As the smell dissipates you are then treated to some of the least inspired and most poorly planned architecture to be found in the County. So it is ironic that amount a mile past Tefft the landscape changes to beautiful vistas of trees and open spaces--vistas that would be destroyed by the Dana Development.

Directly adjacent to the Northeast corner of the proposed development are some of the most impressive groves of eucalyptus to be found anywhere. They are magnificent and being protected and maintained by the landowners. Next door is even more impressive with thousands of mature oak trees that have thrived there for hundreds of years yet are slated to be ripped up and replaced with tract houses and apartment buildings. Why? Because there is money to be made. Which is fine. We all need money. Yet, it is important that County residents understand how things work.

Large plots of farmland near Nipomo are typically sold for five to ten thousand dollars an acre. If that same land could be subdivided into five acre parcels and zoned for a single family residence its value soars to over one hundred thousand dollars an acre. Single acre vacant residential lots can be worth half million dollars or more. High density developments can be worth a million per acre. (And if the goal is to put as many people as possible into the smallest possible footprint, build skyscrapers and create even more value).

Its all about location and zoning. The County Board of Supervisors has the power to rezone land in the County. This goes a long way towards explaining why people make large donations to County Supervisor candidates. It might also help clarify why a person or group would spend over one hundred thousand dollars for a recount of a SLO County Board of Supervisor election.

It also help people understand why smart elected officials can negotiate with developers to get perks for the County like parkland, a lot to build a police station and or a fire station.

Which leads us to the most important point of politics and land use. The County Board of Supervisors may make the decision as to what to permit or rezone however they are elected officials. The decisions they make are supposed to represent the will of the people they serve. That is a concept that is too often forgotten. Unfortunately sometimes politicians or civil servants also forget and develop condescending attitudes because they think they know more than constituents, when in fact, they just have a different perspective.

This is relevant with regard to Dana Reserve because much of the presentation regarding the Reserve seems to not be considering the perspective of the resident's of Nipomo. They tout the benefits of quicker access to the new Willow interchange as if that is the only way residents of the area will be able to realize a cure to the current convoluted traffic layout. That is not true. Eminent domain would allow the County to solve the problem in an optimal fashion by extending the frontage road from the Swap Meet to Willow. A strong leader could step forward and propose such a solution. The same is true of the new Fire Station which could be placed in an optimal location instead of taking whatever happens to be offered by a developer.

As for the Dana Ranch, there must be one or more politicians in the County that could suggest or even help negotiate a land swap to move the high density residential project slated to destroy Canada Ranch to a lower density location that's in a place that will not cause such a huge amount of ecosystem damage and at the same time eliminate a traffic/pollution/zoning disaster that Nipomo would regret forever.

In Emily Creel's presentation on the EIR she made it clear that there are some insurmountable issues that cannot be mitigated. More alternatives need to be formulated, discussed and more information disseminated. There is plenty of time to do this right. You can't rush a project of this magnitude.

There are lots of concerned, inquisitive people in Nipomo that have worked for many years so that they could live in Nipomo. It is a beautiful and special place that deserves to be protected. Working together we can all help that dream to be realized.

Please confirm receipt of this email.

jguetschow@ca.slo.ca.us

Version 2

Dan and Alyssa Peterson
781 Ridge Road
Nipomo, CA 93444

July 31, 2022

Department of Planning and Building
ATTN: Dana Reserve/Jennifer Guetschow
976 Osos Street, Room 300
San Luis Obispo, CA 93408
jguetschow@co.slo.ca.us

RE: Dana Reserve Project

Dear Ms. Guetschow,

“The impacts from the Dana Reserve Project will **certainly** ~~not~~ overcome the social and economic benefits of the project.” We have not written this phrase exactly as it was stated in the letter we received, but the statement we were told to include seemed to include a typo that caused it to state the opposite of what was intended. The negative impacts of this project far outweigh any suggested benefit. The project seems only to benefit the developer in the form of income, the county in the form of new property tax revenue and to some extent the potential new residents that don’t know Nipomo as it is now. Overall, the approval of this project seems rooted in greed rather than the best interest of Nipomo residents. There is no benefit to any of the current residents of Nipomo.

We have been residents in the county for nearly 20 years, and have been residents of Nipomo for nearly 10 years. We chose Nipomo because of the rural, small-town feel, the open land that still existed with its beautiful oak trees and native landscape, and its lack of traffic and congestion. We moved into our house on Ridge Road in 2017 due to its location away from any large congested neighborhoods and its vicinity to the open areas around it. We also consciously chose to purchase a house that already existed instead of open land to build on so as not to add to the population of Nipomo solely because we do not want to change the way it is. The idea of a 4500+ resident housing development being built at the end of our road (touching Hetrick) is deeply distressing as it will be changing Nipomo and our immediate neighborhood into exactly what we were trying to escape when we moved here.

Increasing the population of Nipomo by 4500+ people will have an enormous and negative effect on the town’s roads and resources. According to the census, the population increased by 1468 people in the ten years between 2010 and 2020 (an 8.8% increase). If the Dana Preserve Project is approved, the population will be increasing by 24.75% from the Dana Project alone, not to mention the other already approved homes being built in Trilogy and other individual plots of land. This is a huge increase in population that will greatly affect the current residents of our town. Turning onto Willow or Pomeroy from our neighborhood and navigating Tefft to

get to the grocery and hardware store and gas stations is already difficult as the roads are not even suitable for the population that already exists in Nipomo. In addition to the traffic and congestion our roads will experience, the water levels in the town will continue to drop. The Key Wells Index has been in the "severe" category for the last eight years and has dropped steadily for the past three years in a row. Adding 4500+ residents will certainly cause that to continue dropping and is hard to see this as anything but irresponsible when we're already stuck in a severe water level situation.

In addition to the atmosphere and resources of the town and our immediate neighborhood, we are greatly concerned about the impact it will have on our daughter's education. With 4500+ residents moving within the same school system, the schools our now-2-year-old daughter will attend will be much more impacted, leading to less individualized attention to each student and a degree of disorganization and lack of infrastructure while trying to adjust to the extra students. The ratings for the Nipomo public schools are already on the lower end of the scale, and adding the stress of more students will only make progress in the right direction more difficult.

We ask that you please consider all of these points and the many more that the other residents of Nipomo will share. If this project is approved, the rural small town feel and open land with all of the beautiful oak trees and native plants will be turned into asphalt and concrete and houses filled with people that will make our roads more even more difficult to travel, our shops more difficult to access and our already critically low water level even lower. That is not the Nipomo that the current residents moved to and not the place we want to continue to live and raise our families.

Thank you very much for your attention.

Sincerely,

Dan Peterson and Alyssa Peterson

cc: Lynn Compton, County Board of Supervisors
district4@co.slo.ca.us

Jennifer Guetschow

From: danstocks <danstocks@charter.net>
Sent: Sunday, July 31, 2022 10:05 PM
To: Jennifer Guetschow
Cc: District 4
Subject: [EXT]Dana Reserve Concerns

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

In my opinion there are several issues with the proposed Dana Reserve. The present infrastructure in Nipomo cannot support such large growth. Already in the mornings and weekend afternoons Tefft Street is at a standstill from Mary to the 101 Interchange. A few years ago, it was deemed the most congested intersection in the county. Some re-aligning and improvements have been done since then but it is still far from being noncongested. The North Frontage Road needs to be four lanes throughout to handle the present traffic plus the additional traffic this project will create. With the Frontage Road ending at Juniper all the traffic is going to have to turn on Juniper. Which is another road that cannot handle additional traffic. Some will turn again on Mary and some will continue down Juniper to Pomerory. To handle the additional traffic Juniper should be widened to four lanes, at least until Mary. Mary should be widened to four lanes with turn lanes between Juniper to Tefft. Even with the roads widened to four lanes, there still is going to be congestion because of all the intersections. The developer in his statements says he wants to ease traffic congestion by continuing the frontage road all the way to Willow. Continuing the frontage road to Willow will be nice for his development but the development will definitely compound an already congested Tefft as well as increase the traffic on the residential streets adjacent to his project. It seems a more viable option for the county, and one that would decrease the traffic on Tefft, would be to add a new freeway interchange halfway between Willow and Tefft. Also, with the expanded roadways there needs to be sidewalks and bike lanes added on all these roads. On the north side of the project is Cherokee Place. Presently it is a dead-end dirt road. This road is going to connect the North Frontage Road to Hetrick. It sounds like this road is going to be paved and is not meant to carry traffic. It will. It is going to one of the main roadways to enter/exit the project from the northwest. The plan for this road is to just pave it. It needs to be a full two lanes with sidewalks and a bike lane.

The developer is touting how recreation fits into his development plan. There needs to be recreation access from the surrounding areas for the residents in the development as well as the residents living next to the development. Presently my wife and I walk down Cherokee Place because there is not any traffic on it. We want to be able to continue to safely walk on it. Without a sidewalk this will be dangerous. We want to be able to walk to all the new amenities this development will provide. All the above road improvements should be in place prior to the start of the project. It is not the existing resident's fault that a large development is proposed. Therefore, they should not be penalized for its implementation. Road infrastructure needs to be in place before the project begins.

Looking at the plan there does not appear to be enough on street parking for the number of houses being built. The high-density housing is just orange blobs on the plan that do not show how the housing is going to be placed nor the parking. The cluster housing shows the houses and the cluster roads which seem to be like the PUDs in the Five Cities. There is not enough parking for these residents. With the average family having 2 cars per household, I would propose that every residence should have a minimum of one additional parking space on the street besides what they can fit in their garages. Even the houses on the smaller lots need more on street parking. If you go and drive through the neighborhood of the development across the street from Jocko's down Thompson towards the high school, you will see how that area was developed without enough parking. I have a friend that lives in that neighborhood that must park on Thompson sometimes because there is not enough on street parking. Let's not repeat that problem.

Nipomo High School at capacity. Where are the high school students in this development going to go to school? Nipomo? When the school at capacity, adding that many new students will have a negative impact on the students/staff already there. The EIR states that the high school is 0.2 miles from the development. Which it is true if you could fly there. Unfortunately, direct access is blocked by a freeway, so they are going to either go to Tefft adding to the congestion or go to Willow. Again, there are no sidewalks along these busy roads so walking along them is not safe. It is too far for students to realistically walk. Same with elementary age school children. Where are they going to be going to school? There is room at Lange Elementary for 85 more students. What if there are (probably there will be) more than 85 elementary age children in this development? With schools running at or near capacity, there needs to be solutions in place before construction starts.

There is a park in the middle of the development. The developer wants the Quimby fees waived and does not want to maintain the park. The County Parks doesn't want to maintain it either. The other "Pocket Parks" and facilities will be maintained with homeowner association fees. How affordable is affordable housing when there are HOA fees in addition to mortgages? If the county does not maintain the park, then how much more will the HOA fees increase? Or will they say it is too expensive to have a park and just get rid of it? Since when are drainage basins considered parks?

In the EIR there is a section about water. There is going to be much water infrastructure improvement needed for this project to happen. Hopefully, the developer will need to bare the burden of this cost. It would not be fair to existing residents to pay for the water infrastructure for this project. The other large developments in Nipomo (Trilogy, Black Lake, Cypress Ridge) have had to install water recycling for their projects. This development's plan is to put in pipes to the edge of their property and say, oh well it's not our responsibility to go any farther. That is not a plan. The developer needs to develop a plan that uses the water on site at the pocket parks, park and other common areas or develop a plan that returns it to NCSD.

How can a development of this size be approved in the such a severe drought? Our own governor stood at Lopez Lake urging all Californians to cut water usage by 35%. Yet in Nipomo there seems to be a water surplus even though the NCSD has sent several letters to its customers urging them to conserve water. Depending on a city in a different county for water from its aquifer is not responsible. Even though it is contracted to be sent to Nipomo, if water in Santa Maria gets scarce you can bet they are going to serve their residents first and say sorry Nipomo. Has there been a comprehensive study done on Santa Maria's aquifer and how much is there? What are Santa Barbara County's development plans? Tying yourself to a different county makes you subject to their needs. Bad planning. Just the water needed for this project, should be enough to sideline it until other water sources are developed in SLO County.

There is an oak woodland ordinance in SLO County that was initiated because of the Justin Vineyard clearcutting of oak woodlands. This is the same type proposal. This is exactly why the ordinance was enacted. Please do not allow the removal of 3943 of the 5128 Coast Live Oaks on this property. The developer saying that preserving a piece of property not near the development, not accessible by the public, that is already too steep to develop is of equal importance. I say it is not. It already cannot be developed so preserving it from development is moot point. Burton Mesa Chaparral in San Luis Obispo County already not common. Destroying 36 acres of this limited resource does not make sense. If the developer wants to develop this parcel the they should mitigate it with preserving an adjacent piece of property on the mesa that contains 3943 oak trees and 36 acres of Burton Mesa Chaparral.

I have lived in the South County for over forty years and have seen the development. I have raised five children here and love this area. The social and economic benefits of this project do not even come close to the impacts. Thank you for giving me the opportunity to voice my concerns about the Dana Reserve. I would appreciate any feedback.

Sincerely,

Dan Stocks

From: Sandy Christiansen <mrschristiansen2012@gmail.com>

Sent: Sunday, July 31, 2022 10:16 PM

To: Jennifer Guetschow

Subject:[EXT]Dana Reserve - We Oppose

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or

links.

Dear Ms. Guetschow,

We oppose the Dana Reserve Development Plan and wish to have our concern and opposition recognized. Our basic concerns include the following:

Traffic - ~4800 new residents in such a small space is going to create havoc on local traffic, particularly during commute times and school start/stop times. Ten Oaks, despite what local politicians claim, already has an excessive amount of traffic during those times...please note the traffic survey the county conducted on Ten Oaks was during Covid in July of 2020 so it does not reflect our "normal" traffic load. Additionally, the corner of Glenhaven and Hetrick is a hairpin turn, and very dangerous. Additional traffic is only going to make that turn even more treacherous. Please consider closing Hetrick/Glenhaven at the hairpin turn and opening Hetrick all the way through to Pomeroy so that the Pomeroy to Willow shortcut via Ten Oaks is no longer necessary. Opening Hetrick and closing Glenhaven eliminates the need to come to Ten Oaks.

Additionally, these homes are being proposed/marketed as being beneficial to workers and that residents would not need to contribute to traffic...that they can guarantee they would reduce vehicular trips. This is preposterous. The ratio of jobs per capita in Nipomo is lower than any other town in the county, and we are on the border of Santa Barbara county. If you build homes for workers here, they will have to commute. And they will be closer to jobs in Santa

Maria than in our own county. If these homes are truly for the "working class", then they should be built where the jobs are...further north, in the middle of the county! Otherwise, you're just housing Santa Maria's work force. It makes no sense, and it will definitely create more traffic on both the city streets and the highway.

Light, Noise and Air Pollution - the development plan is too dense, and will illuminate our night sky, and bring added noise and air pollution. Please require a large setback and extra tall natural screen along the western boundary against Hetrick and reduce the number of homes.

Devaluation of real estate in adjacent neighborhood - our homes on Ten Oaks are worth \$1M+ and all sit on approximately one acre or more. The new residences are dense housing, even the "larger" homes, and are not of like kind to the adjacent neighborhood. This will devalue our homes. While I understand this is a "not in my backyard" argument, the devaluation of our neighborhood will impact Nipomo as a whole. Please significantly reduce the number of homes and require larger lots so that they are of like kind to the surrounding established neighborhoods.

Water requirements in severe drought - given the current state of our State with regard to water use and mandates due to drought, we do not trust the agreement with Santa Maria to be enough of a guarantee that we will not be in a shortage when these new homes are added. Contracts are broken all the time and the water supply this project is relying upon does not even come from the same county. Santa Barbara county has no strong reason to support the water demands when severe shortages become an issue. They will break the contract and supply Santa Barbara county residents first.

Electrical grid stress - the addition of 1,289 all electric homes will bring more brown outs to our area. We all know PG&E has severe issues already. Please reduce the amount of homes to reduce the strain on our electrical grid and keep us all powered up.

Stress on emergency services and infrastructure - More people to service means we need more Sheriff, Fire, Paramedics, etc. They are already stretched very thin. Please reduce the number of new residences. With a 25% increase to our population with only one development, the town is not ready to support the residents. We currently only have one grocery store, and it is already overtaxed and understocked...try stopping by for milk on a Sunday afternoon. We are already underserved, please don't make it worse! And PLEASE do not put a fire or police station in the development!

Devastation to Flora and Fauna - we are not botanists or arborists, but we do love our oaks and native plant life. We believe the DEIR is filled with half truths and glossing over the real devastation that will happen to the Dana Reserve and how it will impact our wildlife and Nipomo as a whole. The plan, as it currently stands, will exterminate federally protected native plants that cannot be replaced and KILL approximately 4,000 "protected" oaks without proper mediation. The mediation plan bases the "preservation" off of 197 oaks, not 4,000, and it will be in another location across the freeway...none of this makes sense. For those of us that also own many of these large OLD oak trees (ours are estimated to be about 300 years old!) and do everything in our power to make sure they continue to live long healthy lives, it makes no sense that the developer is allowed to destroy SO many! We cannot even begin to fathom what level of destruction of local wildlife habitat and the wildlife itself this will bring. It is heart wrenching. Please do not devastate the landscape so drastically. Please reduce the development.

It seems that this project is a pipe dream filled with all sorts of hollow promises and glosses over the real damage that will be done. How does it make any sense at all to increase the population of Nipomo by 25% in ONE project that is on only 288 acres. Who would ever think that is a good idea? This project is much too large for the space, does not fit the community character or needs, and brings multiple types of devastation to our community. We implore you to please take these things into serious consideration and require the developer to make some drastic changes to the existing plan.

Thank you for your consideration,

Dave and Sandy Christiansen

Members of the Nipomo Action Committee

Homeowners on Ten Oaks Way

Jennifer Guetschow

From: David Richards <drwa6aiw@gmail.com>
Sent: Saturday, July 30, 2022 6:56 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve Project

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Dear Jennifer Guetschow,

I wanted to provide to you my comments about the Dana Reserve Project plan. I am concerned about the size of the project, the number of people that it brings into our town, and the effect on traffic and the rural feel of our neighborhood. I live on Thompson near Nipomo High School and have seen the increase in traffic since Willow was extended to Thompson. I have a vision of what Nipomo and Thompson Avenue will be like after adding that many housing units, and it is not a happy one. I saw one estimate that the population of Nipomo would increase by 25%! And what a shame it would be to lose that many oak trees! I would rather have a smaller development that retains the rural, ranch feel of our town, perhaps larger lots that incorporate the oak trees, rather than cutting many of them down. The off-site area that would be used to mitigate the loss of plants and wildlife is not the same type of property and does not exactly make up for the loss. I know developers like to make the most on their investment, and that usually means the most housing units they can get the permits to build. However, they move on, and the neighbors who had their neighborhood developed have to live with the impact. I would like to limit the impact this development will have on our small town.

Thanks for listening.

David Richards
449 N Thompson Avenue
Nipomo, CA 93444

Jennifer Guetschow

From: Dolores Howard and Roberto Le-Fort <lefortsorganiccrops@gmail.com>
Sent: Monday, August 1, 2022 9:33 AM
To: Jennifer Guetschow
Subject: [EXT]Comments on Draft EIR for Dana Reserve Specific Plan

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Dear Ms. Guetschow,

I am writing to you to express my deep concerns about the draft EIR for the Dana Reserve Specific Plan. I believe that the project as proposed is much too big for the site and, as the Draft EIR shows, will mean significant and unavoidable impacts to biological, air quality, and aesthetic resources. The alternatives proposed and possibly other alternatives, need to be studied much more deeply than what the Draft EIR covers, in order to find solutions to the serious impacts that the project will have on the health of our county. Some of my concerns are listed below in the form of quotes, some in bold, and a few comments of mine, in italics:

Aesthetics

4.1.1.3 Primary View Corridors (pages 4.1-6 to 4.1-7)

Scenic corridors are view areas, or “viewsheds,” from public roads and highways that have unique or outstanding scenic qualities. Principal travel corridors are important to an analysis of aesthetic features because they define the vantage point for the largest number of viewers. The California Department of Transportation (Caltrans) has not officially designated any routes within the vicinity of the Specific Plan Area as scenic highways. **However, the Caltrans Scenic Highways Map shows US 101 as “Eligible” for designation as a scenic highway. In addition, the County of San Luis Obispo General Plan considers US 101 as a candidate scenic corridor.** The County has adopted Highway Corridor Design Standards along US 101 that address residential and related development; a portion of the Specific Plan Area frontage along US 101 is mapped within the County’s Highway Corridor Design Standards area. **US 101 carries an average of approximately 65,000 vehicles per day through Nipomo and past the Specific Plan Area (Caltrans 2017).** *These are vehicles that carry people that live and work in this county as well as visitors to this county or individuals that may or may not visit our county as a result of what they see from the freeway. This project should not be designed to have such a negative visual impact on all of us that travel by, and in fact, the visual impact of this project is inconsistent with the plans and policies of our county, as listed below. The Draft EIR should be revised and recirculated to address alternatives that would not be inconsistent with these plans and policies that are written to protect the special qualities of our county.*

1) County of San Luis Obispo General Plan Conservation and Open Space Element

GOAL 2. The natural and historic character and identity of rural areas will be protected. The intent of this policy is to preserve the rural and historic visual character of the county.

Preliminary Consistency Determination: Potentially Inconsistent. The project would *inherently change the visual character of the site and surroundings through the introduction of commercial, institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial landform alteration.*

2) Policy VR 2.1 Develop in a manner compatible with Historical and Visual Resources. Through the review of proposed development, encourage designs that are compatible with the natural landscape and with recognized historical character, and discourage designs that are clearly out of place within rural areas. The intent of this policy is to preserve the rural, scenic, and historic visual character of the county.

Preliminary Consistency Determination: Potentially Inconsistent. The project would be *inconsistent with the existing rural visual character of the site and surrounding natural landscape* through the introduction of commercial,

institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial landform alteration.

3) Policy VR 2.2 Site development and landscaping sensitivity. Through the review of proposed development, encourage designs that emphasize native vegetation and conform grading to existing natural forms. Encourage abundant native and/or drought-tolerant landscaping that screens buildings and parking lots and blends development with the natural landscape. Consider fire safety in the selection and placement of plant material, consistent with Biological Resources Policy BR 2.7 regarding fire suppression and sensitive plants and habitats. The intent of this policy is to preserve existing natural landforms and native vegetation to maintain the rural, scenic, and historic visual character of the county.

Preliminary Consistency Determination: Potentially Inconsistent. Although the project site would preserve the existing oak ridge, it would ***severely alter the existing native vegetation and natural landforms of the remainder of the site with the introduction of commercial, institutional, and residential development; the removal of over 4,000 mature oak trees;***

4) Framework for Planning (Inland) Planning Principles, Policies, and Implementing Strategies Principle 1: Preserve open space, scenic natural beauty, and natural resources. Conserve energy resources. Protect agricultural land and resources. The intent of this policy is to protect existing visual quality and character.

Preliminary Consistency Determination: Potentially Inconsistent. Although the project would preserve the existing oak ridge, the project would ***inherently change the visual character of the site and surroundings through the introduction of commercial, institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial sensitive habitat loss and landform alteration.***

5) Framework for Planning (Inland) Planning Principles, Policies, and Implementing Strategies Policy 1. Maintain rural areas in agriculture, low-intensity recreation, very low-density residential uses, and open space uses that preserve and enhance a well-defined rural character. The intent of this policy is to preserve the rural character of the county.

Preliminary Consistency Determination: Potentially Inconsistent. Although the Specific Plan Area is planned for development in the County's existing General Plan, and the project would preserve the existing oak ridge, the project ***would inherently change the visual character of the site and surroundings through the introduction of commercial, institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial sensitive habitat loss and landform alteration.***

6) County of San Luis Obispo Land Use Ordinance 22.10.095 – Highway Corridor Design Standards D. 5. Project Design and processing – Discretionary permit applications. Minor Use Permit approval is required for projects subject to Subsection D.4 that are unable to meet the requirements for a Zoning Clearance in Standards D.4.c through D.4.h. Minor Use Permit and any Conditional Use Permit applications that may otherwise be required by this Title shall include a visual analysis that is prepared by a registered architect, landscape architect, or other qualified individual acceptable to the Environmental Coordinator. The visual analysis shall be utilized to determine compliance with the intent of D.4 and the following: a. ***Locate development, including access roads, in the least visible portion of the site consistent with the protection of other resources, as viewed from Highway 101, unless mitigated to insignificant levels.*** Use existing vegetation and topographic features to screen development from view as much as possible. b. Minimize grading for both structures and roads that would create cut and fill slopes visible from Highway 101. c. Minimize building height and mass by using low-profile design where applicable. Minimize the visual impacts of buildings by using colors that blend with surrounding natural colors and/or screen the building from view. d. Provide landscaping to screen and buffer both road and building development with native or drought resistant plants, including the extensive use of trees and large-growing shrubs. e. Use of minimal signage is encouraged. Locate signs that are subject to a discretionary land use permit so that they minimize interference with important public views from Highway 101, such as those listed in the preamble to this section. The intent of this policy is to require visual impact assessments for residential development within the US 101 corridor for the purpose of preserving visual quality and character.

Preliminary Consistency Determination: Potentially Inconsistent. *The project would inherently change the visual character of the site and surroundings through the introduction of roads, commercial, institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial landform alteration within highly visible locations as seen from US 101.* Mitigation Measure AES/mm-3.1 would require implementation of a Visual Screening Zone along the length of the project site adjacent to the required utility easement and US 101, for the purpose of reducing visibility of the development and minimizing visual impacts to the vegetated visual character of the site and its surroundings as seen from the highway. *The proposed landscaping would, by necessity, be more urban in appearance and would likely take several decades to provide meaningful restoration of the vegetative character and quality of the site.*

7) South County Inland Area Plan South County (South) Sub-area Guideline: Retain land in open space in new land divisions that will preserve oak woodlands, riparian and other important biological habitats, and historic place surroundings. The intent of this policy is to maintain the scenic, historic, and biological qualities of the county's open spaces.

Preliminary Consistency Determination: Potentially Inconsistent. Although the project would preserve the existing oak ridge, the project would *inherently change the visual character of the site and surroundings through the introduction of commercial, institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial sensitive habitat loss and landform alteration.*

8) Primary Goals 4. The rural character and heritage of South County with a strong sense of identity and place. The intent of this policy is to preserve the rural visual qualities of the South County planning area.

Preliminary Consistency Determination: Potentially Inconsistent. Although the project would preserve the existing oak ridge, the project would *inherently change the visual character of the site and surrounding landscape through the introduction of commercial, institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial landform alteration.*

9) 6. The long-term sustainability of natural resources as growth occurs with sensitivity to the natural and built environment. The intent of this policy is to maintain a long-term balance between development and the natural environment.

Preliminary Consistency Determination: Potentially Inconsistent. Although the project would preserve the existing oak ridge, the project would *inherently change the visual character of the site and surrounding landscape through the introduction of commercial, institutional, and residential development; the removal of over 4,000 mature oaks ; and substantial landform alteration.*

Greenhouse Gas Emissions/Air Quality/Transportation

There is significant and unavoidable impact in Vehicle Miles Traveled in the proposed project, as seen in the Draft EIR sections on Air Quality, Greenhouse Gas Emissions and Transportation. As climate change accelerates, now is not the time to have these kinds of impacts. In addition, there are several inconsistencies with County plans and policies in these areas, as found in the Draft EIR.

County of San Luis Obispo General Plan Conservation and Open Space Element Policy AQ 1.2 Reduce vehicle miles traveled. Require projects subject to discretionary review to minimize additional vehicle travel. The intent of this policy is to reduce VMT on a project-by-project basis.

Preliminary Consistency Determination: Potentially Inconsistent. Buildout of the DRSP *would result in an increase in overall VMT and VMT per employee even with implementation of Mitigation Measure TR/mm-3.1.*

There is an Inconsistency with the Sustainable Communities Strategy as well in the Greenhouse Gas Emissions section, relating to: Infill Development and Location Efficiency 8. Support mixed-use and infill development near existing transit services and activity centers. (Ongoing) This strategy is focused on reducing VMT, and ultimately GHG, criteria air pollutant, PM, and TAC emissions by promoting coordinated planning efforts that focus on development of mixed-use communities and multimodal transportation systems, coupled with transportation demand strategies.

Preliminary Consistency Determination: Potentially Inconsistent. The DRSP proposes a mix of residential, commercial, and open space uses outside of the existing Nipomo URL. The Specific Plan Area is located adjacent to the Nipomo URL in an area planned for growth, including expansion of transit service, and is generally surrounded by existing residential development; **however, the project does not propose infill development and does not promote location efficiency.**

The Dana Reserve Specific Plan proposes to create negative consequences, including adding to the Jobs-Housing imbalance, as well as poor solutions to affordable housing, public services and recreation. The serious and long-term picture of climate change requires a much more thoughtful response to alternatives that would avoid the significant impacts to air quality, aesthetics, oak woodland and other biological resources, some of which are unique to very few parts of the world. Better alternatives need to be addressed in a revised Draft EIR for the Dana Reserve Specific Plan.

Thank you for the opportunity to comment on this,

Dolores Howard
Creston resident



Jennifer Guetschow

From: Diana Daugherty <djd46@msn.com>
Sent: Monday, August 1, 2022 12:11 PM
To: Jennifer Guetschow
Subject: [EXT]Nipomo reserve

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

I hate to see the “big money “ conglomerates be able to gobble up the beautiful landscape here. How do they expect to furnish water to the new households?
San Luis County should be ashamed for letting money come before the environment. Isn't there someone who will stand up?
I am ashamed!
Diana Daugherty
A property pentimento Nipomo for 36 years

Sent from my iPhone

From: Elizabeth Kavanaugh
Sent: Monday, August 1, 2022 10:25 AM
To: Jennifer Guetschow
Subject: Question before completing response to DEIR

Hello Jennifer,

I hope you are having a nice summer. I am having a good time, staying local going to the beach a lot and few concerts here and there.

I am reviewing the Draft EIR and I have a couple of simple questions that I hope you can help me with that will help me better respond to the DEIR

- 1) What size is the Neighborhood Park site minus the day care site and the drainage ways and basin?
- 2) Can you please confirm that the applicant is planning on offering raw land for neighborhood park site? If not what improvements are proposed?

That is all for now. I am sorry for the last day submittal, I thought responses were due August 15. My bad.

Thank you,

Elizabeth Kavanaugh

Planner

(p) 805-781-4089

(cell) 805-540-9231

(f) 805-781-1102

ekavanaugh@co.slo.ca.us

COUNTY OF SAN LUIS OBISPO

PARKS AND RECREATION DEPARTMENT

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www.slocounty.ca.gov

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San Luis Obispo, CA 93401



Phone: (805) 544-1777
Email: info@ecoslo.org
Online: www.ECOSLO.org

Protecting and preserving San Luis Obispo County's natural environment since 1971

To Whom It May Concern,

As a representative of the Environmental Center of San Luis Obispo (ECOSLO), I am writing in regards to the Draft Environmental Impact Report (DPEIR) SCH#2021060558 for the Dana Reserve Specific Plan. ECOSLO is greatly concerned about the potential significant and unavoidable impacts of this Project. The proposed 1,289 residential units and 110,000-203,000 sq. ft. of commercial development on a 288-acres on the Nipomo Mesa would bring with it numerous significant and unavoidable impacts while pushing forward with what we consider to be environmentally irresponsible development practices.

Chief among the impacts listed in the DEIR are the significant and unavoidable impacts to special-status plant and wildlife species. The proposed removal of 3,943 oak trees within the Project area would impact 21.7 acres of coast live oak forest and 75.3 acres of coast live oak woodland (97 acres total). Even with the proposed mitigation the DEIR still notes that the removal is, *"a significant net loss of oak trees and acreage of oak woodlands in the county."* The same can be said of the project's impacts to the Burton Mesa Chaparral. The Burton Mesa Chaparral is one of the rarest natural communities throughout San Luis Obispo county, and one that is rapidly disappearing on the Nipomo Mesa. As with the proposed removal of oak trees, the DEIR notes that even with the mitigation put forward, *"the limited availability of off-site mitigation parcels and the limited on-site opportunities to restore and maintain the ecological integrity of this ecosystem, potential impacts would be significant and unavoidable."* But these are not the only impacts ECOSLO is concerned about. The DEIR also lists significant and unavoidable impacts to Air Quality, Greenhouse Gas (GHG) Emissions, Land Use, Population and Housing, Transportation, and Growth-Inducement.

While ECOSLO understands the importance of increased housing supply, we firmly believe that this Project does not meet the principles of what we consider to be responsible development. The proposal is not focused on limiting urban sprawl, respecting historic and cultural resources, and reducing our impact on the natural world. Of the alternatives put forward in the DEIR, ECOSLO supports moving forward with the Environmentally Superior Alternative of Alternative 3, the Residential Rural Cluster Subdivision alternative. While it may not meet the County's housing supply goals, it would reduce impacts related to Biological Resources, GHG Emissions, Land Use and Planning, Population and Housing, and Public Services.

Residents of San Luis Obispo County should not have to choose between increasing suburban sprawl and affordable housing, and we are disappointed that this Project asks that we do so once again. We hope that the County takes these concerns into account and thank you for your time and attention to this matter.

Regards,

Grant Helete, Community Organizer
ECOSLO - Environmental Center of San Luis Obispo

Jennifer Guetschow

From: Eric Greening <dancingsilverowl@gmail.com>
Sent: Saturday, July 30, 2022 6:12 AM
To: Jennifer Guetschow
Subject: [EXT]Eric Greening comments on Dana Reserve DEIR

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Hello!

Thank you for the opportunity to review and comment on the Dana Reserve DEIR. Given the massive size of the document, and that I know that comprehensive comments are coming from others on some of my greatest areas of concern (California Native Plant Society on Biological Resources, for example), which include oak mitigation, water supply, and greenhouse gas emissions, I will focus here on impacts to our transportation system, and particularly to impacts on those who depend on public transit.

Before I get to this, however, in the process of recognizing that the most recent large project in the area with significant environmental impacts was the construction of the Willow Road Interchange and related circulation improvements, I feel moved to ask for an assessment of the cumulative impacts of the two projects not only on the transportation system but on oak woodlands and habitat fragmentation. On the latter issue, I would ask for an honest assessment of the success to date of the biological mitigation measures, particularly those relating to the replacement of the lost oak woodland. To what extent have the promised outcomes of these mitigation measures been achieved or not achieved, and what lessons does this information hold for our realistic expectations of those intended for the Dana Reserve Project, and for ways to possibly make them more effective and reliable.

To include a longer time frame in the evaluation of such mitigation measures, I would also ask for an honest assessment of the effectiveness or lack thereof of the mitigation measures for the replacement of the many trees taken for the Coastal Branch of the State Water Project. How many of the replacement trees are actually living today? What implications does this information hold for the effectiveness of measures intended to replace the losses?

Getting to issues of public transit, we are hampered by the nature of a one-time approval of a development project; it is hard to prescribe ongoing efforts through such a process, so it is typical, as here, that transit mitigations, as with this DEIR, take the form of one-off efforts such as creation of new transit stops and shaded parking spaces at Park and Ride lots. The problem with depending on such measures to provide for the incremental service needs such a project would create is that the greatest constraint to the needed service is the lack of OPERATING resources. Service levels on the Regional Transit Authority, including its Route 10 which passes through Nipomo in connecting Santa Maria, the Five Cities, and San Luis Obispo, have fallen in the wake of the pandemic, with no near-term prospect of their restoration. In fact, future service CUTS, rather than improvements, are most likely in the near term, due to a serious driver shortage and to a change in the definition of an "Urban Area" by the US Census which could cost the region millions of dollars in operational funding we now receive--see the staff report for Item F-1 on the agenda of the August 3rd meeting of the San Luis Obispo Council of Governments for details! It is unlikely that present or near-future financial resources, or the time in the schedules (adding travel time to a transit route adds labor expense as well as travel time for other passengers) could accommodate the new transit stops called for in this DEIR.

Nipomo has always been a difficult place for the meeting of the needs of the transit-dependent. A little over a decade ago, more than 500 requests for better fixed-route transit service in Nipomo were received through the Unmet Needs process, and were found "reasonable to meet," but no successful service resulted due to the attenuated form of the community. The Dana Reserve Project, being off-center from what passes for a nucleus of Nipomo, would not improve that situation; meanwhile, the developing economic recession, coupled with high fuel prices and massive spikes in the

price of used cars can be expected to significantly increase the number of people and households that would be transit dependent.

I would urge the DEIR to go into greater depth on the REAL transit needs (which should include incorporating by reference the just-approved update of the Coordinated Social Services Public Transportation Plan for San Luis Obispo County) and to require mitigation measures that meet the real and growing needs, even if it means requiring that a substantial ENDOWMENT FUND be created to support ongoing operational needs.

Thank you for the opportunity to comment!

Eric Greening

Jennifer Guetschow

From: Eric U <ericu35120@gmail.com>
Sent: Monday, August 1, 2022 1:08 AM
To: Jennifer Guetschow
Subject: [EXT]EIR--Dana Reserve Specific Plan

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Jennifer Guetschow, To Whom It May Concern,

The proposed Dana Reserve Specific Plan should be halted primarily because its impacts are far greater than the social and economic benefits of the project. First, the dense tract development does not fit with the rural nature of our community. A lot of design elements and window dressing has been put into this project to make it sound and seem like something that would be fitting (equestrian trails, architectural designs, etc.), but as you are likely aware the underlying goal of those proposing this project is to make millions of dollars for the developers while enticing planners with an exchange of potential tax dollars and a hope for more housing. We need you to see sharply through and about this dense project that is not consistent and not compatible with the area and good planning principles.

Good land planning should take into account the gestalt or the bigger picture of the people and places that make up the community. Decimating an area of oak woodland is not respectful, please protect the existing oaks as they are and the habitat that they create. You know--and our oak ordinance validates--that these oaks and the resulting oak woodland habitat took time to grow, they have intrinsic value, and a development of this size and density is not properly mitigating its impacts upon the oaks and 5 other Class I impacts to Biological Resources including the Burton Mesa caharral and possibly the Pismo Clarkia.

Recently I had the opportunity to travel throughout many counties and cities in California and the coast of Oregon. Over and over I was impressed with the appreciation and protection of the natural elements that make up those regions. It was this love, respect and intermingling with nature that made those places worth living and worth visiting. On my way back home I traveled through areas that were not gifted with natural resources or the natural resources were removed. In those places, no one cared to be there. The word and image of barren, dry hills come to mind. And where there were developments there still was no *real* sense of place or of hope/energy of the community. Natural habitat attracts humans just as it does wildlife, it brings a certain sustainability, a value, a beauty and something that cannot be replaced--economically and especially socially (care and appreciation of other animals and natural resources...it is this care for another that is especially helpful to encourage/inspire us to sustain this democracy in divided times). Yet, if land planning is not adjudicated well, that which took so long to create is easily destroyed. A loss of great magnitude occurs to humans and animals, devastating more than our awareness manages. Developers are tempted to ignore this, but you have been entrusted to uphold principles of good land planning and to ensure that guidelines are met and ideally surpassed. I'm sure you have seen and felt the loss of areas that were poorly planned and what has become of the region. The word cruel comes to mind, devoid of hope for any remedy. Many of us in the community go to work every day--just as I imagine you do--to create something of worth, of beauty, of value, something worthy of enduring. Not for today and tomorrow but for an inspired and sustained future that we know little about. We each have benefited from those who have worked similarly before us, many of whom respected and protected nature for us to appreciate. Nature sustains us, those 3,400 oak trees and the wildlife that they provide sustain us. It is what makes areas liveable and loveable, and in the big picture it is what *really* makes areas economically and socially valuable and viable.

I have many significant concerns, some which remain unmitigated, these concerns outweigh any social and economic benefit from the project in its current form. Please send the project back for revision because I deserve better, the community of Nipomo deserves better than: **traffic** accidents and Pomeroy's death turn, traffic density, **noise** in a rural natured area, **views and wildlife habitat of oak woodland** destroyed, **lot sizes** and high density are not compatible and

consistent with the nature of the acreage lots in the area, **air pollution and further jeopardizing the pulmonary health of Nipomo's citizens**, seawater intrusion, **water supply/severe drought** and thirst, **Key Wells Index shows a declining water level, not adequately addressing CEQA requirements**, the **burden of housing goals placed on the small rural nature of the Nipomo community**, the **false and disrespectful mitigation measures to "offset" oak removal and wildlife habitat** in our area by the developer. The proposal is not equivalent and not nearly mitigated. Send this project back, do not let the developer despoil the land with this overly ambitious project that is clearly not consistent or compatible with nature and the nature of our community.

Respectfully,
Eric Urbain



Date: 8/1/2022

To: Jennifer Guetschow

From: The Healthy Communities Work Group

RE: Dana Reserve Specific Plan - Draft Program Environmental Impact Report

COALITION PARTNERS:

Bike SLO County
Cal Poly State University
Caltrans District 5
City of San Luis Obispo
Community Action Partnership of SLO County
First 5 San Luis Obispo County
Independent Living Resource Center, Inc.
People's Self-Help Housing
Rideshare – Safe Routes to School
Smart Share Housing Solutions
SLO Council of Governments
SLO County Departments:
 Air Pollution Control District
 Board of Supervisors
 Health Commission
 Public Health
 Environmental Health
SLO County YIMBY
SLO Legal Assistance Foundation

Dear Jennifer Guetschow,

The Healthy Communities Work Group is a collaboration between public health officials, local planning and transportation officials, community-based organizations, academia, and community members, working to improve health through community design. We provide research and evidence-based recommendations from a health perspective on proposed land use projects, ordinance and general plan amendments, and special projects.

The Healthy Communities Work Group has reviewed the Draft Program Environmental Impact Report (Draft PEIR) for the Dana Reserve Specific Plan, a proposed residential and commercial project to provide up to 1,289 single- and multi-family units located in Nipomo. HCWG strongly supports the Dana Reserve Specific Plan to increase accessible and affordable housing and provide designated paths for non-motorized users; both of which are identified as key priority areas in the 2019 SLO County Community Health Improvement Plan update.¹

RESOURCES:

[Data Dashboard, SLO Health Counts](#)

[Community Health Improvement Plan](#)

[Building Healthy Communities: Residential Checklist](#)

HCWG supports the project's objectives to increase affordable housing unit production and allowance of Accessory Dwelling Units. These objectives increase the likelihood of quality housing at a range of affordability levels. Lack of housing availability and affordability negatively impacts physical and mental health. Access to affordable housing enables residents to use their income on basic needs such as food and medical care, which can improve residents' health outcomes. HCWG has several project recommendations to further promote community health.

Criteria pollutants and greenhouse gas emissions may be generated during the proposed development. According to the Draft PEIR, such emissions may surpass acceptable thresholds and impacts would be "significant and unavoidable."² HCWG supports mitigation measures AQ/mm-3.1 - 3.3., which could reduce most construction and long-term operational emissions. HCWG further recommends electrification of all household appliances and installation of heat pumps in all residential units to serve as mitigation measures against long-term operational emissions.

HCWG is concerned about low-income housing units' proximity to highway 101, as serious adverse health effects are associated with long term exposure to traffic pollution. A 2017 California Air Resources Board publication suggests that people living as far as 1,000 feet from freeways may be susceptible to the effects of traffic pollution.³ HCWG strongly recommends the installation of

high efficiency air filters within each unit to reduce possible effects from poor air quality.

The Draft PIER states the proposed development may result in a cumulatively considerable impact to transportation and traffic. Such residual impacts would be “significant and unavoidable.”² HCWG supports mitigation measures TR/mm-3.1, which could reduce emissions related to transportation and circulation. Implementing designated trails for non-motorized users encourages more active forms of transportation, such as walking and bicycling. Engaging in active transportation can reduce daily CO2 emissions associated with travel, as well as improve individual wellbeing.⁴ HCWG supports bicycle racks being provided in open space, commercial, and residential development areas.

Thank you for the opportunity to review this project.



Kealoha Ghiglia, REHS
Chair, Healthy Communities Work Group

¹SLO Health Counts (2019). *Community Health Improvement Plan*. Retrieved April

19th:https://www.slohealthcounts.org/content/sites/slodph/SLO_County_Community_Health_Improvement_Plan_2018-2023.pdf

² County of San Luis Obispo.(2022). *Dana Reserve Specific Plan Environmental Impact Report, Executive Summary*.

<https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Planning-Projects/Dana-Reserve-Specific-Plan/Draft-Program-Environmental-Impact-Report/0-Executive-Summary.pdf>

³ California Environmental Protection Agency. California Air Resources Board.(April 2017). *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways*.

⁴ Brand et al.(2021). The climate change mitigation effects of daily active travel in cities. *Transportation Research Part D: Transport and Environment*, 93(102764), <https://doi.org/10.1016/j.trd.2021.102764>

Jennifer Guetschow

From: HEIDI ELLIS <team-e@pacbell.net>
Sent: Saturday, July 30, 2022 10:19 AM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve Project

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

I am writing to express my concern over the proposed Dana Reserve Project, a planned project developing 288 acres in the unincorporated county community of Nipomo.

After reading the Draft Environmental Impact Report (DEIR), I have substantial concerns. The non-mitigable issues that concern me most are:

- **Catastrophic wildfire/Lack of Emergency Preparedness:** while Section 2.2.1.2.1 of the DEIR addresses offsite traffic improvements. However, there is nothing planned to mitigate the lack of safe and expedient egress for Nipomo community members in the event such as a catastrophic wildfire. An additional 1289+ vehicles in addition to vehicles of existing community members seeking hurried egress on poorly maintained single lane roads (and one double lane highway) in Nipomo will make it impossible to reach safety for those forced to evacuate due to fire and/or other disaster and result in the high probability of loss of life.
- **Traffic:** there is no infrastructure in place that will support or accommodate increased traffic as a result of this project. Traffic to and from Nipomo has increased significantly over the past 5 years, adding more strain to our already overstrained and poorly maintained transportation infrastructure in South County is not beneficial to the county as a whole.
- **Water:** Nipomo, as well as the entire state of California, has suffered drought conditions for nearly a decade. We are currently in severe drought status.
There is not water available for an additional 2500+ residents.
In addition, our existing water plan was established to disproportionately over charge and under serve residents of Nipomo who are already on the lower end of the median income scale for San Luis Obispo County residents.
- **Land Planning:** Multiple elements of this project are out of alignment with the South County area plan, including how this land was intended to be developed.
- **Biological Impacts:** There will be severe biological impacts should this project be green-lit, including the loss of 3,948 native California oak trees, irreparable loss of federally endangered species and native habitats.

After reading the Draft Environmental Impact Report (DEIR), I have substantial concerns. The non-mitigable issues that concern me most are:

- **Catastrophic wildfire/Lack of Emergency Preparedness:** while Section 2.2.1.2.1 of the DEIR addresses offsite traffic improvements. However, there is nothing planned to mitigate the lack of safe and expedient egress for Nipomo community members in the event such as a catastrophic wildfire. An additional 1289+ vehicles in addition to vehicles of existing community members seeking hurried egress on poorly maintained single lane roads (and one double lane highway) in Nipomo will make it impossible to reach safety for those forced to evacuate due to fire and/or other disaster and result in the high probability of loss of life.

- Traffic: there is no infrastructure in place that will support or accommodate increased traffic as a result of this project. Traffic to and from Nipomo has increased significantly over the past 5 years, adding more strain to our already overstrained and poorly maintained transportation infrastructure in South County is not beneficial to the county as a whole.

- Water: Nipomo, as well as the entire state of California, has suffered drought conditions for nearly a decade. We are currently in severe drought status.

There is not water available for an additional 2500+ residents.

In addition, our existing water plan was established to disproportionately over charge and under serve residents of Nipomo who are already on the lower end of the median income scale for San Luis Obispo County residents.

- Land Planning: Multiple elements of this project are out of alignment with the South County area plan, including how this land was intended to be developed.

- Biological Impacts: There will be severe biological impacts should this project be green-lit, including the loss of 3,948 native California oak trees, irreparable loss of federally endangered species and native habitats.

The very limited social and economic benefits of the Dana Reserve Project do not outweigh the significant, irreparable impacts to the community of Nipomo. As a resident of Nipomo, I ask that this project be denied until such time that the impacts to our community are able to be substantially mitigated. The residents of Nipomo deserve better.

July 30, 2022

Heidi Ellis

Team-e@pacbell.net

Sent from my iPhone

July 31, 2021

This letter addresses the oak tree mitigation portion of the Dana Reserve Specific Plan. I request that this be entered into the public record and that each question within my letter be addressed thoroughly.

1. Two prior county approved oak mitigation projects close to the current proposed Dana Reserve Project (Willow Road Extension Oak Tree Mitigation and the Mesa Meadows Oak Mitigation) had significant issues. Both mitigations were implemented in sub-optimal locations, had significant installation and maintenance problems, and were inconsistently managed and monitored. This is documented in the County's report (1) for the Willow Road Extension. The Willow Road Extension met the qualitative mitigation targets by the very narrowest of interpretations, and met quantitative measures only through costly rescue efforts by the County, and in the case of the Mesa Meadows phase one Osage Road mitigation the project has grossly sub-standard implementation and monitoring and a failure to meet or properly measure the mitigation criteria (2). These are not the only examples within the county of poor performance by the county's own standards. Please account for these errors and disclose for the public records how the prior mitigation projects performed both qualitatively and quantitatively. Please state what has changed about the County mitigation program that will apply to this current proposed project?
2. Does the county oak tree mitigation program account for our up-to-date understanding of the roll of mature oak trees in carbon sequestration? How does this project account for the loss of the essential role of carbon sequestration for the removal of heritage oak woodland, given that replacement planting even if successful will not be at the current levels for over one to two hundred years? The amount of carbon sequestration per mature tree and per acre of woodland is higher than we previously understood, see reference (3). Do the county's policies attend to current urgency of timelines and targets for carbon emissions reduction? If so, how is this addressed in the environmental mitigation component of this project? Will the county commit to sending its staff to the upcoming 8th annual California Oak symposium in San Luis Obispo Oct. 31-Nov 3 presenting the latest science to help direct policies for protection and mitigation? Will our elected official attend? The developer is also encouraged to attend. Let's learn together and improve this project design. The link is listed below (4). Also the organization includes study references demonstrating this important connection and assisting with calculations (5): Please address specifically how you will include calculations of impacts to measure the loss of carbon storage with the removal of the oak woodlands in this project.
3. The understory of the Oak woodlands and remnants of Burton Mesa Chaparral have remained surprising intact and have returned with a persistence I could not have imagined despite deliberate and concerted efforts by prior owner(s) to eradicate it. (6) Science continues to discover more about how much cooperation between trees and associated understory plants takes place. Many burls of the Shagbark Manzanita (*Arctostaphylos purissima rudis*), survived the tractor blade, as did some of the unique narrow endemic Nipomo Mesa ceanothus (*Ceanothus impressus* var. *nipomensis*). There are other unique species—which are now very hard to find on the Nipomo mesa due to development impacts—that still exist on this property, such as Sand Almond, and of course the Pismo clarkia, sadly only a remnant of a once more abundant, special status plant. I estimate within the current woodlands some 40% of the original density from the 90s had returned. Unfortunately, much of the Burton Mesa Chaparral has been cleared from the open field areas and native grasses disappeared long ago. These species become more and more rare—and current science emphasizes the relative importance of the understory for both oak health and habitat. Explain how the disturbed understory will be addressed in mitigation. The design has insufficient border between the Oak woodland remnant that remains in the current version of the plan and a buffer area that will support restoration of Burton mesa chaparral. A foremost national expert of the the Oak Understory and Maritime

Chaparral species lives in Nipomo, I recommend he be consulted to review the mitigation specific to these components. (7)

4. The current project must be re-designed with less density to protect as much of the dense Oak woodlands as possible and to protect a larger swath of buffer area around the oak woodland to protect both the trees and to provide space to protect and mitigate for losses of the Burton Mesa Chaparral and Oak. Also the project re-design should make a real effort to preserve the scattered oaks, which will provide bird habitat and give some ambiance to the new development. These changes to the plan are essential to preserve existing habitat for the many species of flora and fauna that currently reside and depend on the oak woodland community. Importantly, your EIR includes “species observed or have the potential to occur in the project area”. Well done including this list— this speaks to both the habitat potential, as well as the seed bank and future potential for species to return. As noted above, so much intentional eradication efforts have taken place— the species that remain and can return are a testament to the importance of value of this site biologically. The EIR report reports the minutia of what will be lost, and existing techniques and measures that are seriously inadequate to mitigate for these losses. Plead in your EIR in plain language for the layperson, and for our elected officials and those who read this document in the future, what this version of the plan sacrifices. Make a strong recommendation for a project redesign that prioritizes the growing importance of our Oak Woodlands at this critical time in our history.

Herb Kandel
776 Inga Road, Nipomo

NOTES:

- (1) Jan 2020, Annual Monitoring report for the Willow Road Extension/101 Interchange Oak woodland Habitat Project at the Dana Adobe Historic Park, Page 21— The county no longer is monitoring this project. The 2020 number of oaks in the lower two categories of vigor ranking was 52%. The project has completed its supplemental irrigation phase. In the first years of the project the oak mortality loss was 58%. The report states, “Mitigation efforts were derived with limited institutional knowledge of Oak Woodland restoration, inexperienced contractors, multiple issues with water quantity and delivery, drought and other contributing factors.” Only by a costly County funded replanting of the losses and infrastructure and staff investment has the number of surviving oak met the absolute minimum quantitative standard. The probability of droughts ahead, and the absence of oaks at this location historically create ongoing risks for the success of this mitigation.
- (2) I was personally approached to assist the developer of the first phase of the Mesa Meadows project, in 1999 where heritage oaks and well established Burton mesa Chaparral were slated for removal. As part of that mitigation, a local girl scout troop was paid \$500 and volunteers were engaged in the plantings along the steep graded bank of Osage road and near the current location of the Caesar Chavez Native Garden. I was among those volunteers. I regret my involvement, but bore witness to severe disfunction in the County Mitigation program at that time. Less than 10% of the original planting survived.
- (3) The Minnesota Extension demonstrated a single 24 inch tree sequestered 846 pounds of carbon during its growing season. And an acre of woodland during just one month stored 18.4 tons of carbon during May peak season and additional 3.9 tons in September. In May, this woodland stored 18.4 tons of carbon per acre. By September, it sequestered an additional 3.9 tons of carbon per acre. This carbon sequestration amount is equivalent to:
 - The greenhouse gas emissions from 32,000 miles driven by a typical passenger vehicle.

- The CO2 emissions from 1,200 gallons of gasoline.
- And the CO2 emissions from charging 1.5 million smartphones.
- Source: <https://extension.umn.edu/news/2021-tree-and-woodland-carbon-capture-challenge-results>
- Additional resources demonstrating connections on California woodland and the role of carbon sequestration.

(4) <https://ucanr.edu/sites/oaksymposium/>

(5). <http://climate.calcommons.org/article/carbon-sequestration>

(6). I took photos of the property in the 1990s when the density was much higher. Multiple efforts at clearing, including with tractor blading very close to trees was even unsuccessful. This clearing was in anticipation of a plant survey for a prior development proposal. I spoke with the prior owner respectfully suggesting management practice consistent with his ranching uses. His written response was, “when you write me a check for 6 million dollars you can manage the scrub brush any damn way you please.”

(7). Dave Fross, author California Native Plants for the Garden.

Jennifer Guetschow

From: Herb Kandel <herbkandel@gmail.com>
Sent: Monday, August 1, 2022 11:46 AM
To: Jennifer Guetschow
Subject: [EXT]Re: Comments on Draft EIR for Dana Reserve Specific Plan

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Ms. Guetschow,

Following are additional comments to the Draft EHR for the proposed Dana Reserve development.

Currently, Mitigation for oak trees does not differentiate mitigation requirements for the size of the tree, known as "DBH" (diameter at breast height). That is, a 3 or 6 inch diameter tree is replaced at the same ratio as a 3 foot or a 6 foot diameter tree. The multiple benefits of the larger trees are exponential, habitat provision, carbon sequestration, aesthetics, etc. This oversight should be corrected in the requirements for mitigation.

The scope of this project relative to cumulative impacts comes along once every 20 years. Many of the regulations and tools for development considerations are built for smaller impact projects. Some of the measures and tools for regulation and mitigation are not ready for the challenge of this project. For example, the Public Works department most often seeks in its planning a new road to minimize incidental impacts to a few trees here or there. The impacts of emissions during construction focus on dust abatement and some but inadequate look at fossil fuel emissions. A project of this size and scope requires stepping back to look at our inadequate piecemeal approaches to planning, permitting and mitigation.

Planning and public works should include current scientific understanding and a systems analysis to look holistically at the project's impacts that take into account aspects including but not limited to:

1. Cumulative climate impacts from the project;
2. Project redesigns to meet these holistic standards, e.g. retain existing oak woodland canopies
3. Accounting for measurable impacts of the delay time from species removal to implementation of mitigation measures.
4. Documenting prior local habitat losses within the area to look at trends of impacts and loss to specifically assess regional impacts;
5. Identification of habitat corridors that still exist and where offsite mitigations have the most impact.
6. A comprehensive plan for mitigation banking should be initiated.

This project calls upon us to initiate the relevant planning tools to meet the scope of this project.

This project is not ordinary, and these times are not ordinary-- we need to improve our tools and assessment. If anything good may come from this proposal, it will require improved and up to date approaches.

Sincerely,

Herb Kandel
776 Inga Rd
Nipomo

On Sun, Jul 31, 2022 at 11:44 PM Herb Kandel <herbkandel@gmail.com> wrote:

Dear Jennifer Guetschow,

Please find my attached comments for the public record with comments and questions referencing the draft EIR for the Dana Reserve Specific Plan.

Please let me know that you received it,

Thank you!

Herb Kandel
776 Inga Rd.
Nipomo,

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Please let me know that you received it,

Thank you!

Herb Kandel
776 Inga Rd.
Nipomo,

Holly Sletteland
4849 See Ranch Ln
Templeton, CA 93465

July 30, 2022

Jennifer Guetschow
Department of Planning & Building
976 Osos Street, Room 300
San Luis Obispo, CA 93408

Subject: Draft Environmental Impact Report (DEIR) for the Dana Reserve Specific Plan (PLN-1118, SUB2020-00047, LRP2020-00007, ED21-094)

Transmitted via email: jguetschow@co.slo.ca.us

Dear Ms. Geutschow,

Although I am not a resident of Nipomo, I am a long-time resident of San Luis Obispo County and was dismayed to learn about the proposed Dana Reserve development. I participated in the county effort to craft an ordinance to protect native trees over 20 years ago, advocating for mandatory rather than the voluntary restrictions on tree removals that were ultimately adopted. I was also active in the more recent undertaking to pass an ordinance to protect oak woodlands in 2017 in response to public outrage over thousands of oak trees being clear-cut by Justin Vineyards to make way for a vineyard. And yet here we are again, just 5 years later, with a proposal to cut thousands of oak trees over more than 100 acres to make room for new houses and businesses.

The DEIR correctly notes that the proposed project is inconsistent with many county goals and policies and will result in a large number of significant and unavoidable adverse impacts on the environment, including oak woodlands. Of key concern to me, is the fact that the project directly conflicts with several Biological Resource (BR) goals found in the Conservation and Open Space Element including:

- Goal BR 1 Native habitat and biodiversity will be protected, restored, and enhanced
- Goal BR 2 Threatened, rare, endangered, and sensitive species will be protected
- Goal BR 3 Maintain the acreage of native woodlands, forests, and trees at 2008 levels

The project is designed to destroy, rather than protect, native habitat and diversity. It calls for the removal of 1,073 oak trees from coast live oak forest, 2,676 from coast live oak woodland, and another 194 from Burton Mesa chaparral and grassland habitats for a staggering total of

3,943 trees. This is a significant loss in acreage of native oak woodland, forest and trees not only for Nipomo, but for the county as a whole. Moreover, an additional 750 trees are at risk of having their Critical Root Zone (CRZ) damaged by construction activity. The remaining trees left standing will be threatened by indirect impacts from the project as well, such as new insects and pathogens, urban runoff, and recreational activities.

There is no appropriate way to mitigate such a monumental loss of oak trees and their associated habitat in the near term. Although the EIR summary states that the no-net loss requirement for oak woodland and oak forest will be satisfied if the applicant permanently protects, enhances, restores, and/or recreates habitat at a 2:1 ratio, this really make no sense to me. Almost 4000 oaks and their associated ecological services will be obliterated at the site if the project is allowed to proceed. Conserving oaks on another property 2 miles away that doesn't support the same suite of sensitive species is not going to change that. If the trees at the mitigation site are not under imminent threat of destruction, it seems to me we end up with a net loss because the trees at the mitigation site would be there regardless of whether there is a conservation easement over them or not. Planting replacement trees doesn't adequately mitigate the loss either, because young saplings can't substitute for the habitat value or services provided by mature oaks for decades. This is especially true of trying to mitigate the loss by planting oaks as street trees. This sort of mitigation may have been reasonable when we weren't in the midst of a biodiversity crisis and a climate emergency, but it doesn't make sense anymore. We don't have centuries, or even decades, to wait for nature's resilience. If the county is serious about enforcing a policy of no net-loss of oak woodlands, it should require projects to avoid them and leave the trees standing.

Beyond the threats to the oaks themselves, the forest and woodland provide irreplaceable habitat for a wide array of sensitive plants and animals. Although some of the impacts to sensitive plants may be able to be successfully mitigated, residual impacts to CRPR 4 and Watch List plants will be significant and unavoidable. The DEIR also suggests that many of the residual impacts to wildlife would be less than significant with mitigation, although I would beg to differ. Individual animals are bound to be missed during surveys to relocate them out of harm's way during construction, inevitably reducing the population and shrinking the gene pool of already sensitive species. And much of the habitat for both sensitive plants and animals at the site will be destroyed forever. The DEIR also neglected to mention that oaks are a keystone species, sustaining a much richer diversity of species than other trees. In addition to the vertebrate species mentioned in the DEIR, oaks host more insects than any other tree species, including a whopping 532 species of caterpillars, a critical source of food for birds and other wildlife.ⁱ Insects have declined by 40% across the globe, with a third of them ranked as endangered.ⁱⁱ

The DEIR also noted that construction of the project, as well as subsequent vehicle miles travelled (VMT) and energy use by residents occupying the dwellings will create significant and unavoidable adverse impacts in Greenhouse Gas Emissions (GHG). However, there is no mention of the huge loss of carbon sequestration currently provided by the oak woodlands or the amount of carbon that will be released by cutting the trees. Like all plants, oaks fix atmospheric carbon dioxide (CO₂) through photosynthesis and store its carbon in their tissues. Timothy J. Fahey, professor of ecology at Cornell University estimated “An approximate value for a 50-year-old oak forest would be 30,000 pounds of carbon dioxide sequestered per acre”ⁱⁱⁱ. Beyond that, Douglas Tallamy notes in the *Nature of Oaks* “Oak contributions to below-ground carbon sequestration are also noteworthy. Like oak tissues above the ground, oak root systems are massive and built from carbon. But what makes oaks a particularly valuable tool in our fight against climate change is their relationship with mycorrhizal fungi: mycorrhizae make copious amounts of carbon-rich glomalin, a highly stable glycoprotein that gives soil much of its structure and dark color. Oak mycorrhizae deposit glomalin into the soil surrounding oak roots throughout the life of the tree. Every pound of glomalin produced by oak mycorrhizae is a pound of carbon no longer warming the atmosphere, and glomalin remains in soil for hundreds, if not thousands, of years. These factors rank oaks among our best options for scrubbing carbon from the atmosphere and storing it safely in soil throughout the world’s temperate zones.”^{iv}

Having identified numerous significant impacts, a range of alternatives aimed at avoiding or substantially reducing the impacts were considered in the DEIR. It was determined that a Residential Rural Cluster (Alternative 3) was the Environmentally Superior Alternative because it would best reduce the number and extent of significant environmental impacts and meet more of the project’s primary objectives. The analysis of Alternative 3 states “the ability to cluster residential uses would allow the site to be developed in a way that would avoid and minimize impacts to sensitive biological resources...Buildout of the site would be reduced due to the lower density of clustered residential development, which would ultimately reduce the amount of impacted oak woodland”. While this reasoning *sounds* plausible enough and *may* be true, the lack of specificity concerning how many oaks would be spared makes it impossible to evaluate. How is the public to determine the veracity of this statement without knowing how many units would actually be built and where they would be clustered on the property? The original project proposes to remove almost 4,000 mature oak trees on the site, covering approximately 100 acres. How many trees over how many acres in what parts of the property will be removed for a clustered development?

It seems to me we have to go back to the drawing board. The developer’s preferred alternative should be rejected due to the overwhelming number of negative impacts. If

they still want to proceed, they should be required to bring forth a new proposal that is better suited for the site, preserves oak forest / woodlands and will greatly reduce the other adverse impacts identified in the DEIR for a future environmental review.

Sincerely,

A handwritten signature in black ink, appearing to read "Sally S. L. L.", is positioned below the word "Sincerely,".

Works Cited

ⁱ Smithsonian Migratory Bird Center Lepidoptera Index dataset; *Smithsonian's National Zoo*, 19 Jan. 2017, nationalzoo.si.edu/migratory-birds/data-access. Accessed 29 July 2022.

ⁱⁱ Davies, Dave. "The World's Insect Population Is in Decline — and That's Bad News for Humans." NPR.org, www.npr.org/sections/goatsandsoda/2022/02/24/1082752634/the-insect-crisis-oliver-milman.

ⁱⁱⁱ Fahey, Timothy J, et al. "Forest Carbon Storage: Ecology, Management, and Policy." *Frontiers in Ecology and the Environment*, vol. 8, no. 5, June 2010, pp. 245–252, 10.1890/080169.

^{iv} Tallamy, Douglas W. *NATURE of OAKS : The Rich Ecology of Our Most Essential Native Trees*. S.L., Timber Press, 2021.



Coastal San Luis Resource Conservation District

1203 Main Street, Suite B, Morro Bay, CA 93442
805-772-4391 | www.coastalrcd.org

July 31, 2022

Ms. Jennifer Guetschow, Project Manager
County of San Luis Obispo
Department of Planning and Building
San Luis Obispo, CA 93401

RE: Dana Reserve Specific Plan Draft Environmental Impact Report

Dear Ms. Guetschow:

The Coastal San Luis Resource Conservation District (CSLRCD) is a special district in San Luis Obispo County that provides information, support, and technical and engineering services to landowners and government agencies in the southwestern portion of San Luis Obispo County. We appreciate the opportunity to comment upon the Draft Environmental Impact Report (DEIR) on the Dana Reserve Specific Plan and project in Nipomo.

We will leave to others comments on the technical details of the project and its impacts as discussed in the DEIR. We are primarily concerned with two areas of impact of the project: these are the impacts upon the oak woodlands of the project site, and on the water supply. Our review leads us to suggest that a smaller project at that site could still accomplish many of its goals while conserving most of the site and its valuable habitats.

Loss of Oak Woodland and Associated Habitat is Excessive. County policies call for protection of the oak woodlands of the Nipomo area, yet this project proposes to destroy some 4,000 oak trees and associated habitat, including a rare local vegetation type known as Burton Mesa chaparral, in order to develop several hundred tract lots on the project site. We find such a vast gap between existing County policies and what is proposed to be very disappointing. While some losses may be unavoidable, it would appear that they could be much reduced and possible to mitigate for on-site with a project with a smaller footprint.

Having worked for years on habitat enhancement and restoration in the Oceano Dunes area, CSLRCD has first-hand knowledge of the challenges inherent in such efforts, especially as the scale of those efforts grows. In the case of Dana Reserve, the losses of the oak woodland and the so-called Burton Mesa chaparral would be extremely difficult to mitigate: such mitigation would require locating, purchasing, and successfully establishing an entirely new ecosystem somewhere on the Nipomo Mesa, presumably using propagules from the project site or at least nearby. We believe this to be unrealistic; a more reasonable and logical approach would be to preserve as much of the oak woodland and

associated habitat as possible on-site, and utilize other portions of the property for mitigation, which would be at a much smaller scale.

Water Issues. The DEIR appears to say that water is not really an issue for the project, as the Nipomo Community Services District (NCSD) would be the purveyor of water to the site, and it can purchase water from a supply in the Santa Maria area. The DEIR goes on to argue that the discharge from the local water treatment facility would help to recharge the local groundwater basin, so that there is no net loss of water to the basin as a result of the project. We are uncertain of this, and suggest further evaluation of this claim. This is because some years ago, CSLRCD was asked to look into a situation where a property owner along Nipomo Creek east of Highway 1 was seeking permission to draw water from the creek for use on his crops. A site visit showed that the creek had significant flow, which suggested strongly that water from the treatment facility (which was across the highway from the property in question) was percolating into the soil, hitting an impermeable or poorly permeable subsoil, and running eastward atop that layer but still underground, and surfacing in Nipomo Creek.

The Nipomo groundwater basin has been declining for years, and is considered to be in serious overdraft. We believe that further evaluation of the ultimate fate of water imported for the project is prudent and in the best interests of the Nipomo community.

Recommendations. It is recommended that the DEIR further evaluate the alternatives to the project to more carefully determine whether a smaller project can meet the goals stated therein while conserving the majority of the site.

Thank you for the opportunity to comment on the DEIR for this project.



Jackie Crabb, Executive Director
Coastal San Luis Resource Conservation District
1203 Main St., Ste. B
Morro Bay, CA 93442

Jennifer Guetschow

From: Jamie Cortez <jc40p@yahoo.com>
Sent: Sunday, July 31, 2022 12:47 AM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Reject the Dana Reserve development based on the traffic impacts alone. The southbound traffic during the work week coming home is bad enough. Another thousand plus cars from these homes is not going to help us. Reject Dana Reserve please!

Jennifer Guetschow

From: Sea Mystic <ladyseamyst@gmail.com>
Sent: Saturday, July 30, 2022 2:11 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve Project Concerns

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

To whom it may concern, while I have used a template of someone much more succinct than I, it is by no means to be imparted as giving less weight to the itemized concerns regarding this project. I have been a long time resident of Nipomo beginning in 1994 as a high school student living on Kent Street to my current residence of over 8 years on Tefft St.

The recent Tefft fire could have been a catastrophic failure and many lives would have been lost had there been a large scale project like the Dana Reserve built there without abundant means of escape.

Thank you for your consideration of mine and many others desire to preserve the safety of our community.

Jessica Wallace

I'm writing to express my concern over the proposed Dana Reserve Project, a planned project developing 288 acres in the unincorporated county community of Nipomo.

After reading the Draft Environmental Impact Report (DEIR), I have substantial concerns. The non-mitigable issues that concern me most are:

- **Catastrophic wildfire/Lack of Emergency Preparedness:** while Section 2.2.1.2.1 of the DIER addresses offsite traffic improvements. However, there is nothing planned to mitigate the lack of safe and expedient egress for Nipomo community members in the event such as a catastrophic wildfire. An additional 1289+ vehicles in addition to vehicles of existing community members seeking hurried egress on poorly maintained single lane roads (and one double lane highway) in Nipomo will make it impossible to reach safety for those forced to evacuate due to fire and/or other disaster and result in the high probability of loss of life.
- **Traffic:** there is no infrastructure in place that will support or accommodate increased traffic as a result of this project. Traffic to and from Nipomo has increased significantly over the past 5 years, adding more strain to our already overstrained and poorly maintained transportation infrastructure in South County is not beneficial to the county as a whole.
- **Water:** Nipomo, as well as the entire state of California, has suffered drought conditions for nearly a decade. We are currently in severe drought status. There is not water available for an additional 2500+ residents. In addition, our existing water plan was established to disproportionately over charge and under serve residents of Nipomo who are already on the lower end of the median income scale for San Luis Obispo County residents.

- **Land Planning:** Multiple elements of this project are out of alignment with the South County area plan, including how this land was intended to be developed.

- **Biological Impacts:** There will be severe biological impacts should this project be green-lit, including the loss of 3,948 native California oak trees, irreparable loss of federally endangered species and native habitats.

The very limited social and economic benefits of the Dana Reserve Project do not outweigh the significant, irreparable impacts to the community of Nipomo. As a resident of Nipomo, I ask that this project be denied

until such time that the impacts to our community are able to be substantially mitigated. The residents of Nipomo deserve better.

Jennifer Guetschow

From: Jose Gomez <jose_gomez_93444@yahoo.com>
Sent: Sunday, July 31, 2022 12:14 AM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve Project - Reject please

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Please reject the Dana Reserve Project of 1200 plus housing units for the following reasons:

- Current lack of Police protection from the Oceano South Station. The EIR mentions that the Station would need to hire 21 deputies to meet the needs of the Nipomo area.
- Dana elementary is currently at 94% capacity without the addition of 1200 plus housing units. Nipomo High is currently at 145% capacity without the addition of 1200 plus housing units.
- The EIR omits the word "draught" and appears to ignore the current and future impact.

Jennifer Guetschow

From: Julie Pinizzotto <pinizzottoj@yahoo.com>
Sent: Sunday, July 31, 2022 9:28 PM
To: Jennifer Guetschow
Subject: [EXT]Public Comment Opposing the Dana Reserve Development Project

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Dear Jennifer Guetschow ,

I came to live in Nipomo from Tustin, CA and left the area because I had to watch the Irvine Company systematically destroy the beauty of Orange County with overdevelopment. They spared nothing! No tree, no plant, no animal. I watched as they mowed down mature avocado trees for homes. Avocado trees which could have been incorporated in the landscape. I moved to San Luis Obispo County because of the slow growth and the consideration for maintaining the integrity of the county. I am currently working in the Finance Department of the City of San Luis Obispo, and love our county. Our County has charm like no other in California. We think differently here. Everything has always been done with thoughtfulness and excellence.

As a resident of Nipomo for 15 years, I would like this opportunity to express my opposition to the Development of the Dana Reserve. "Up to 1289" residential units is TOO MANY for the 1/2 mile space. This large of development will overwhelm the resources available to Nipomo, and also destroy habitat to hundreds of animals which make Nipomo, Nipomo! Hundreds of beautiful oak trees being destroyed along with endangered plants and animals.

Since the Trilogy project went in, traffic on Teft is horrible. Nipomo residences want to keep Nipomo rural! Please take seriously the voices of the residences of Nipomo, and stop this project or at the very least reduce the number of units to be built on this space, and consider working into the plan the oak trees so the wildlife will not be displaced or destroyed.

There can be a solution which the developers and Nipomo residence can agree upon which will keep Nipomo's old town charm and respect the residence and all life in this area.

My hope for this San Luis County is integrity in all it's dealings, slow and smart growth which is considerate and represents our wonderful county well. Let us work together to keep this county beautiful in every way.

Thank you for your hard work.

Sincerely,
Julie Pinizzotto
750 Amber Way
Nipomo, CA 93444

Jennifer Guetschow

From: Ken Marschall <marschallken@gmail.com>
Sent: Sunday, July 31, 2022 5:37 PM
To: Jennifer Guetschow
Cc: District 4; Carla
Subject: [EXT]Dana Reserve Project

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Jennifer Guetschow, Department of Planning and Building

My family and I are residents of Nipomo, and our address is 551 Miles Oak Ln, Nipomo, CA 93444. We strongly believe the social and economic benefits of the Dana Reserve Project will not outweigh the impacts of this project for a number of reasons. Please reconsider this project and develop alternatives which do not have a severe impact on our environment and natural resources in Nipomo.

Project Concerns:

Biological Resources:

Six Class I impacts to Biological Resources are identified in the Draft EIR: Impacts to special status plant and wildlife species; impacts to watch list plant species; loss of 35 acres of Burton Mesa chaparral; loss of 75 acres of oak woodland and 21.7 acres of oak forest (categorized as 2 impacts, including loss of 3,948 oak trees); and cumulatively significant impacts. We believe the Draft EIR fails to address these adequately; there may be additional Class I impacts, such as to Pismo Clarkia, in which mitigation measures for replanting has not been successful in the past.

Allowing Burton Mesa chaparral mitigation outside SLO County, or even off the Nipomo Mesa, is inadequate mitigation, considering these habitats are not adjacent other the project site.

The developer is not environmentally responsible because he is preserving the oaks in the middle of the project site, and buying a hill top parcel (Dana Ridge) with oak trees. Neither of these locations are really developable, and the Dana Ridge is not an appropriate mitigation site for loss of oaks and Oak Woodland (Impacts BIO 15 and 18 in the DEIR). If this project is approved as is, in the future, developers will continue to clear large swaths of trees in prime habitat for oaks and other sensitive species, in favor of undesirable locations on the fringes of where oaks can survive, leading to a total net loss of oaks in the county. This will undermine the existing Oak Tree Ordinance for all future developments to come in the county and cause the loss of this sensitive and very important community within the county.

There is a way to reduce the impacts to onsite oaks and rare plants and habitats, look at additional alternatives where housing is reduced. This project is overly packed with homes, to the detriment of the biological resources on-site.

Reduce the overall amount of houses in each neighborhood, maintain linkage of the native habitats left onsite. Pick Alternative 3, have the county provide maps and additional rationale for Alternatives 2, 4, and 5, or formulate other alternatives that reduce the overall amount of homes and necessitate a smaller project.

Land Planning:

In the EIR it's stated that "The County's South County Area Plan includes an outline for future development of La Canada Ranch on the project site, which identified the following land uses in order of priority:

open space uses,

industrial park(s) retail uses,

commercial retail uses, and residential areas.

The prioritization of these land uses show that preservation of on-site oak woodlands and development of job-generating commercial and industrial uses were intended to be the primary focus of future development on-site for La Canada Ranch."

This project does not follow the South County Area Plan. The preservation of the oaks trees and open spaces uses was to be the first priority in types of uses. If we were to follow the south county plan, Alternative 3 is the most beneficial alternative and reduces the overall class 1 impact for oak woodlands, which was the conservation priority per the County. Additionally, it would focus on rectifying the jobs/housing unbalance within Nipomo, vs increasing this imbalance with the current project.

Despite Planning Commissioner Don Campbell saying neighboring houses on acreage should “get over” having high density housing immediately adjacent to their properties during the July 14th public meeting, there are real concerns from neighbors on these lots when the zoning for the neighboring property is proposed to be changed from Rural Residential (RR) to Single Family (SFR) or Multi Family Residential (MFR) zoning.

Neighbors adjacent to this project have roosters, chickens, horses and cattle, despite Don’s comments that this area “is not AG”, these residences are allowed these animals in certain densities on their land. Unfortunately, new families moving into these SFR and MFR lots may not be so understanding of these animals. In many cases, the only space between these lots is a 15 ft setback with an equestrian trail. Although this equestrian trail is an amenity of the project, the buffer will not be enough to prevent the future conflicts that will occur between these lots with drastically different zoning on the other side. We need to see a redesign of the development plan to include less housing along the perimeter of the neighborhoods in order to mitigate this zoning discrepancy.

This model of viable commercial sites within the mixed use space has not worked locally. Trilogy is one example. Fifteen years later Shea is still trying to find a workable solution for the land that was proposed to be a hotel, and other amenities/businesses (and we are speaking about an experienced developer). Dignity Health and an investment firm office are the only takers so far. The Dana Reserve project developer described the mixed use buildings to be exactly what Trilogy promised to its home buyers. How will that look if the developer sells these amenities only to have them fall through? Especially since this project already has a housing/jobs imbalance. Additionally, the flex commercial area is small in comparison to the rest of the development. Nipomo has been classified within the EIR as a “housing rich area” and the the “South County Area Plan” identified an industrial park and retail uses as the secondary priority, however, this land use is woefully small compared to the housing proposed. Alternative 3 better aligns with this plan, but alternatives not included within the EIR include smaller areas of development would be better suited for this parcel.

Water:

The EIR itself states that although water allocations from the NCSA should exceed buildout of the project, “the specific timing of buildout of the DRSP is not currently known and the reliability of future water supply is uncertain due to the potential for prolonged periods of drought and increasing water demands due to population growth.”

In the project’s own EIR, they are concerned that the drought will exceed the stage V drought analysis, so much so that in order for the developer to develop each stage, water allocations will have to be deemed sufficient or development will be paused.

However, despite all the work to bring water into the new development, a solid water recycling line plan to supplement water resources was not developed for this project. If we build a new development in a water parched area, we should include all water saving measures at our disposal, not just leave it to chance that the developer will do it when the time comes. A water recycling plan for the community and recycled water line should be included in the project as was included for trilogy and Cypress Ridge.

Public Facilities:

The EIR states that Nipomo High School is already at capacity and buildout of the Specific Plan Area would further contribute to this exceedance, which would impact the experience for all existing Nipomo residents.

Additionally, this development is within the Lange Elementary boundary, which doesn’t have the capacity for all students expected to attend, so the EIR states its likely all of these students will need to go to Nipomo Elementary. This school is on the other side of the freeway, and it's likely that this will cause additional backup on either North Frontage and Tefft or Thompson as most kids will be picked up and dropped off. The EIR consultant stated during the July 14th call that Lucia Mar Unified School District (LMUSD) had concerns about this plan, but that fees mitigated this concern under CEQA. However, additional alternatives to this development plan, which would reduce the overall amount of homes on-site would help to alleviate LMUSD’s and existing residents’ concerns.

Although the development of a park in the middle of the development seems like an amenity, County Parks comments in the EIR state that “the proposed park site is too small and encumbered with drainage features that should not count

toward acres used for park land” with regards to the CEQA analysis.

Additionally, the developer requested that a Quimby Fee credit for conveyance of the park land to the County be waived. However, County Parks stated that “a waiver of Quimby Fees would mean the long-term maintenance of the park would not be adequately accommodated.”

How can we let a developer propose a park, then not help pay for the long term maintenance? If Quimby fees are not paid, does the developer expect that long-term maintenance of the park will be paid out of HOA fees as discussed in the Dana Reserve Specific Plan? How does this affect the costs incurred by the affordable housing residents on-site?

Affordable Housing:

With regard to affordable housing, there are many amenities within the development that are proposed that would be beneficial. However, these amenities come with a cost. As stated in the Dana Reserve Specific Plan, HOA’s would be used for long term maintenance of facilities.

As we know, HOA fees typically go up over a period of time. Add in the requirements for long term maintenance of pocket parks, central park, and equestrian trail as well as all electric homes to mitigate GHG and air emissions, there may be many hidden costs for those residents we are hoping to provide this housing to, so much so, can we say that the operating costs of these houses will be affordable?

Additionally, it’s stated that the starting cost range for these homes will be \$600k. In the July 14th Kristina Simpson-Spearman had concerns over who this development would house with that starting price.

Transportation:

All of the amenities for Nipomo are accessed by using Tefft st. This project’s access to Willow Road and the extension of North Frontage will do little to ease the traffic flowing to Tefft street as the additional 4,500 plus new people to Nipomo need these same services. The Nipomo Swap Meet on North Frontage road causes huge backups on Mary street and Tefft as people enter and exit on Sundays, so much so that additional enforcements on that day are needed just to keep all traffic flowing on Tefft street. There are no additional improvements planned for North Frontage which doesn’t currently have a bike lane and has limited walkability due to poles and hydrants located within the sidewalk. Amenities along this road should be improved to accommodate lowered vehicle miles travelled (VMT) and increase walkability and bike ability as part of adherence to the South County Area Plan.

The increased traffic from this development will cause safety hazards at the Project’s entry and exit to Pomeroy, which currently has no designed stoplight. Hazards will also occur at Camino Caballo’s entry and exit to Pomeroy, which has limited visibility and is difficult to access due to speeding cars. Same issue at Pomeroy and Sandysdale. A fatality in 2019 on the blind curve highlights the safety concerns with additional traffic for residents trying to turn left onto their street without a dedicated left turn lane. Improvements at these intersections should be incorporated into the plan.

As stated in the EIR, the majority of people in Nipomo commute north or south on Highway 101 to work. This large development is only going to exacerbate the backup on 101 as it is inevitable that the head of household jobs needed to afford the 600k starting price for these new homes will not be made up with the likely low paying service jobs created by this project. Unfortunately for Nipomo, Cal Trans deemed this area too rural for improvements on this section of highway.

In Summary, do not let a developer get away with an overly ambitious project that has 6 significant class 1 impacts, the social and economical benefits do not outweigh the negatives.

Best regards,

Ken Marschall
Resident of Nipomo

Jennifer Guetschow

From: Kenneth Dalebout CA-Arroyo Grande <kenneth.dalebout@commonspirit.org>
Sent: Monday, August 1, 2022 2:28 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve - Draft Environmental Impact Report

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Jennifer Guetschow

I write in support of the further development of the Dana Reserve project. The need for housing in San Luis Obispo County is undeniable. Additional housing addresses several issues that are present on the Central Coast and in San Luis Obispo County. While this is a wonderful place to live, many that live here struggle to advance their standard of living. The fact that the cost of housing is high compared to wages has been published for several years. One part of the housing cost solution is the development of more housing. And, more housing is needed that will allow local residents to upgrade from renters to homeowners, and from starter to dream homes. The Dana Reserve specifically and compassionately addresses this need through emphasis on home pricing and preference for local residents.

Similarly, many of our local businesses struggle to recruit new talent to the area. These businesses include healthcare, specialized manufacturing, agriculture and small businesses. An element of that struggle to retain talent is the cost of living and a significant component of the cost of living is housing. A greater supply of workforce housing will allow the retention and recruitment of talented contributing residents in the County. In healthcare, we experience the same issue. We struggle to retain a workforce that, while they enjoy the Central Coast, they can work elsewhere at the same wage, for a much lower cost of living and the promise of homeownership. There are shortages of certain types of critical workers in the hospitals and other care settings. So while housing shortages create business difficulties, it also can have a direct impact on the health of the community. Abundant, quality housing is essential to a healthy community.

The covenants in the Dana Reserve plan directly improve the long-term health of the community as related to housing through the increase in the number of affordable workplace housing units, and also the planned preference for local residents.

Another benefit is to the Nipomo community. The Dana Reserve adds needed infrastructure in terms of traffic flow that is caused by a lack of circulation options for the Tefft corridor. While housing may add more cars, the proposed infrastructure improvements will undoubtedly be sufficient to address the demands of the additional housing, but also the current stagnant traffic issues that have no current solution. The Dana Reserve will assist with easing traffic jams and limited traffic ways, which will undoubtedly be an improvement for public safety. The additional parks, accessible open space, and pleasing aesthetics are positives for a healthier community.

While all developments have some potentially negative impact on the current community, the benefits of additional affordable housing, access to public open space, improved infrastructure and economic stimulus are clear benefits that will be generated by the Dana Reserve for Nipomo and San Luis Obispo County.

Ken Dalebout

Administrator

Arroyo Grande Community Hospital

805-473-7600

Kenneth.Dalebout@dignityhealth.org

Caution: This email is both proprietary and confidential, and not intended for transmission to (or receipt by) any unauthorized person(s). If you believe that you have received this email in error, do not read any attachments. Instead, kindly reply to the sender stating that you have received the message in error. Then destroy it and any attachments. Thank you.

Jennifer Guetschow

From: Kevin Buchanan <kevaustinbuch@gmail.com>
Sent: Monday, August 1, 2022 2:11 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve Specific Plan - Draft Environmental Impact Report

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

SLO County YIMBY (Yes in My Backyard) would like to submit the following comments, originally published in The Tribune on July 18th, in regards to the Dana Reserve Specific Plan.

<https://www.sanluisobispo.com/opinion/readers-opinion/article263493523.html>

Actions have consequences. And, as we're learning, so does inaction. SLO County cities have shown mostly inaction and lack of urgency in proposing and enacting solutions to the growing housing crisis over the last decade. Sure, it's easier to build an ADU. And with SB9, cities have begrudgingly accepted duplexes (within many restrictions) into some more neighborhoods. But new home production in SLO County cities remains inadequate, which means that old homes become expensive homes. New homes that do get built usually don't serve low or moderate incomes. And there aren't enough of them to reduce demand and prices for old homes, which is one reason subsidized housing is also important.

But, the wishful thinking of a revised and expanded inclusionary housing ordinance in SLO, (increasing the affordability requirement from 3% to 10%) is more likely to reduce building, and provide fewer funds for subsidized homes, than a more lax policy with more broad based funding would. 10% of few new homes is less than 3% of many more new homes that could be built with fewer disincentives. Consider this, if you will, the "thoughts and prayers" response of our local leaders to a housing crisis. Doubling down on already failed policies that haven't produced enough homes (market rate or subsidized) for decades.

With this inaction, we inevitably get to the consequences. Dana Reserve, a sprawling greenfield project on 288 acres with 4,000 oak trees, would bring 1,289 new homes to the county. These are homes that, ignoring other factors, are certainly needed. But where? SLO County cities and residents have consistently asked for homes to be built anywhere but near them. So this must be the place, I guess?

In 2020, San Luis Obispo adopted a Climate Action Plan, which "establishes a community-wide goal of carbon neutrality by 2035" and "also focuses on using resources more effectively." The city's website clarifies that "The City is committed to the 'action' part of 'climate action.'" Nowhere in this "action" plan does it account for the destruction of trees (a carbon sink), increased tailpipe emissions from more commutes to and from Nipomo, and the inefficient use of water and other resources in building more sprawl into our coast's open spaces rather than in cities like SLO. Housing policy is climate policy. Real climate action necessitates more homes closer to where people need to be.

Arroyo Grande - Nipomo's nearest SLO County neighbor and South County's largest job center - has abysmally failed to meet its housing production goals for the last decade. Again, a predictable outcome when affordable designs like duplexes, triplexes, and smaller apartment buildings are illegal or onerous to build in the majority of the city. AG's mayor recently claimed that she'd like to build more homes so that her own kids don't need to move out of state, but asserted that she needs to balance that interest with the concerns of "people who have made investments here." For a city - like many in our county, with crumbling roads, insufficient budgets, and declining school enrollment - forcing new homes, workers, students, and taxpayers elsewhere doesn't seem like it has worked out to be a good investment strategy.

One of the most common concerns raised about Dana Reserve, or really any development in our county, is that of

traffic. “Traffic is already impacted!” “Where will the cars park?” “We’re turning into LA!” Predictable concerns of a region who - just like Los Angeles - has chosen to push all new development to the fringes, with car-dependent transportation planning, doomed to fail at both transportation and housing. Local leaders claim we don’t have the density for transit, while at the same time they prevent that moderate density because we need space for the cars that people drive due to the lack of adequate transit or bike infrastructure.

If we don’t want to become a sprawling, traffic burdened place, the best way to do that is not to shut down any and all development of new homes, but to embrace incremental development in our existing cities. NIMBYism led to predictable consequences in the problems we now face with housing, traffic, and infrastructure. NIMBY says, “Don’t build here, build somewhere else” and naively thinks the problem is solved. YIMBY says, “Don’t build somewhere else, build here” and works to build cities that meet people’s needs.

SLO County YIMBY believes abundant housing can and should be built where it’s needed - near jobs, schools, and services. In different shapes and sizes to meet the needs of current residents and future residents as they age, start new jobs, or build families. Where productive places can build wealth by building homes for our kids who want to stay here, and parents who want to see their kids and grandkids grow up. More homes within our cities is good policy - for the climate, for our children, for transportation, and for our infrastructure. Building in cities like Arroyo Grande, Grover Beach, Pismo Beach, San Luis Obispo, Atascadero, and Paso Robles means we truly can use our resources more efficiently and effectively to provide homes while improving quality of life for all.

Kevin Buchanan
Lead Organizer, SLO County YIMBY
<https://www.slocoyimby.org/>

From: Kimberley Victor <victors2000@att.net>

Sent: Monday, August 1, 2022 8:50 AM

To: Jennifer Guetschow

Subject:[EXT]Dana Reserve

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links.

Nipomo should slow down and re-visit all projects on the books. To say that a project has been on the path for ten years was fine 25 years ago. This is a new world. Our climate is changing right before our eyes. What was done in the past no longer applies. All projects that have to do with water use has to be dealt with as we did with environmental issues (EIR) in the past moving forward. Pumping more water out of the ground is not the answer moving forward. What happens when we over pump our ground supplies and saltwater intrusion happens. A contract agreed upon as little as a couple of years ago has to be revisited with a projected study of scenarios from best to worst case before any medium to large project should move forward. We cannot endanger the residents of south county for the benefit of a small portion of us. This project has to be reduced or put on hold.

Thank you,

Kimberley & Darrell Victor

665 Sequoia Ln., Nipomo

Jennifer Guetschow

From: Kitt Jenae <hoofmessages@gmail.com>
Sent: Saturday, July 30, 2022 4:26 PM
To: Jennifer Guetschow
Subject: [EXT]RE: Dana Reserve development PLEASE RECONSIDER!!!!!!

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

With the Dana Reserve development increasing the population of Nipomo by 26% in an area of 1/2 a square mile HOW can this be considered?

Our local services and infrastructure cannot handle such a sudden increase, despite what politicians have promised!!!!!!

Tefft is a mess now! HOW can Nipomo add 4800 more residents be even considered????? LUDICROUS!!!!

Add the the areas DROUGHT situation, Consider the FACTS AND RIPPLE EFFECTS!

I sure resonate LOUDLY with the July 7, 2022, article titled "Build or preserve?", an opinion piece just posted in the New Times San Luis Obispo.

WHAT are they in fact "reserving" or "preserving")?

PLEASE return to the prior top development priorities of "open space uses within the oak woodlands."

Replacing 4,000 200-year-old oaks with 4,000 tree saplings does NOT mitigate the loss of 2.25 million pounds of carbon dioxide sequestered by these trees every year.

Nipomo may need more affordable housing, but this project FAR EXCEEDS the number of housing units specifically projected or planned for in local and regional county planning documents. Nipomo's jobs/housing imbalance will get significantly worse with the creation of 1,441 new dwelling units!

And the environmental impact report (EIR) found that this project is potentially INCONSISTENT with more than 30 existing land use plans, policies, and regulations adopted for the purpose of avoiding environmental effects.

Sincerely,

Kitt and Nora Jenae

Nipomo, CA

805 931 0115



San Luis Obispo Local Agency Formation Commission

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City Member

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David Watson
Public Member

STAFF

ROB FITZROY
Executive Officer

BRIAN A. PIERIK
Legal Counsel

IMELDA MARQUEZ
Analyst

Morgan Bing
Clerk Analyst

TO: JENNIFER GUETSCHOW, COUNTY OF SAN LUIS OBISPO

FROM: ROB FITZROY, EXECUTIVE OFFICER *RF*

DATE: AUGUST 1, 2022

SUBJECT: DRAFT EIR - DANA RESERVE SPECIFIC PLAN

Thank you for the opportunity to provide comment on the Draft EIR for the Dana Reserve Specific Plan. Our July 21, 2021 Notice of Preparation letter identified various considerations for incorporation into the EIR. In addition, at the July 21, 2022 Study Session held by LAFCO, several legally required factors were presented and discussed, these can be found in the LAFCO Policy and Procedures document available on our website. These findings were also transmitted via email on January 11, 2022. LAFCO must make findings per government code section 56668 during its decision-making process, and as a Responsible Agency will rely, in part, on the information in the EIR to do so.

At the July 21, 2022 Study Session, the Commission expressed concern about the sustainability and ongoing availability of water for the project. It is understood Nipomo Community Services District (NCS D) would provide water to the site via its legal entitlements, infrastructure, and obligations to purchase water from the City of Santa Maria, as documented in the Draft EIR. However, what is not clear is the status of the water reliability of the source of the water from the City of Santa Maria and the Santa Maria Groundwater Basin itself. Presumably water would be sourced from the Santa Maria Groundwater Basin, but it is also possible the supply may come from other sources such as surface water from Twitchell Reservoir. The EIR should expand on this and discuss the reliability of the sources(s), and per factor in government code section 56668 (L) describe adequacy and availability of water supply for the project.

We look forward to ongoing coordination. Thank you.

SLO Planning Commission
c/o Jennifer Guetschow; jguetschow@co.slo.ca.us

I am writing to express my concern regarding the Proposed Dana Reserve Project, a development project that will develop 288 acres in the Unincorporated County Community of Nipomo.

After reading the Draft Environmental Impact Report (DEIR), the Unmitigatable Significant Class 1 issue which concerns me most is (circle item/highlight or write in your greatest concern):

- Housing (imbalanced housing vs job creation, which also increases traffic)
- Transportation (increase traffic, impacts on many roads throughout Nipomo)
- Air Quality
- Greenhouse Gas Emission
- Land Planning (multiple elements of the project are out of alignment with the south county area plan, including how this land was intended to be developed vs the present project)
 - Biological impacts (3,948 oak trees to be removed, federally endangered species to be removed, special habitats to be removed)
 - Write in other issues of concern (i.e Water, public services) not determined to be a class 1 issue in the EIR

Water & public services

* AGAIN, Nipomo is bringing \$ to the county of SLO, but \$ is not coming back to the Nipomo community. The limited social and economic benefits of the Dana Reserve Project will not outweigh the many significant impacts of the project. As a citizen of Nipomo, I ask that this project be denied until revised to such an extent that the impacts of the development are greatly decreased. We owe it to Nipomo to present a project that does not significantly decrease the quality of life for existing residents and retains the natural beauty of the land given to Captain Dana in 1837.

DATE: 7-31-22 SIGNED: Gaura R. Adler
email: jlahler93@gmail.com

*copy this letter into your word processing program.

Highlight or circle your concern from list.

Date/Sign/add email.

Copy and paste into your email program.

send to jguetschow@co.slo.ca.us

OR

mail to: Department of Planning and Building

ATTN: Dana Reserve/Jennifer Guetschow

976 Osos Street, Room 300

San Luis Obispo, CA 93408

MUST BE RECEIVED BY AUGUST 1

Jennifer Guetschow

From: Lila Henry <henrylila42@yahoo.com>
Sent: Monday, August 1, 2022 4:39 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Dear Ms. Guetschow,

Here are some objections to the Dana Reserve Plan as it is described in the EIR.

The area that the Dana Reserve will occupy is currently zoned Rural Residential which would accommodate 38 houses. This project would rezone the area to its specifications, which is for 1,289 units. This density goes against all the South County Development plans currently in place. It changes a rural neighborhood into a small city which poses many problems.

There is a basic conflict in the concept of this development. One the one hand, they will not include any stores that conflict with downtown Nipomo. Then all shopping traffic has to go to downtown. They think that extending the North Frontage Road out to Willow will take care of traffic concerns. North Frontage Road leads on to Mary St. to access Tefft. If you have ever been at that intersection on a Sunday afternoon when the Swapmeet and Flea Market get out you know that it is almost impossible to get through. Adding, say, another 300 cars is impossible. (300 equals less than a fourth of the proposed units. Actually units could have 2 cars per house.)

There are nine Class I: Significant and unavoidable impacts. They are all in areas significant to quality of life in Nipomo.

BIO Impact 4: The project could directly and indirectly impact CRPR 4 and Watch List plant species, including California spineflower, sand buck brush, and sand almon

BIO Impact 20: The project would have cumulatively considerable impacts related to biological resources

GHG Impact 3: The project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases

GHG Impact 5: The project would result in a cumulatively considerable impact to greenhouse gas emissions

LUP Impact 10: The project would result in cumulative impacts associated with

inconsistency with goals and policies identified within the County of San Luis Obispo General Plan Conservation and Open Space Element, Framework for Planning (Inland), Land Use Ordinance, and South County Area Plan regarding preservation and no net loss of sensitive biological resources and preservation of rural visual character

PH Impact 1: The project would induce substantial unplanned population growth in the

Nipomo area

PH Impact 5: The project would result in a cumulatively considerable impact related to substantial and unplanned population growth

TR Impact 9: The project would result in a cumulatively considerable impact to

transportation and traffic

GI Impact 1: The project would result in substantial growth inducement associated with the proposed project's population as well as the potential to induce additional spatial, economic, or population growth in a geographic area.

There are also areas they consider to be mitigable that are not. The mitigation proposed for Clarkia has been proven to not work. The mitigation for cutting down 3,948 oak trees and "preserving" trees in another location where they are not even threatened is illogical.

I am sure many comments have mentioned water. The plan says it is bringing in water from Santa Maria, and Santa Maria gets state water. The whole state in a drought. State water is by no means assured to Santa Maria.

The plan says it is to provide housing for median income people in SLO county. According to census.gov \$25,000 is median income for the county. With that salary if you put \$10,000 down and have a good credit rating the bank says you could qualify for \$100,00 - \$150,000 loan. Even if you make \$40,000 you would not qualify for \$600,000 loan, which is what a "median income" house would be selling for in Dana Reserve. \$40,000 is starting pay for a teacher in SLO county. This is not to mention people working for minimum wage, \$31,200/year.

Would Dana Reserve consider putting in tiny houses for homeless people?

This project should revert to rural residential and drop the proposal of providing middle income housing, which it doesn't even accomplish.

Sincerely,
Lila Henry
henrylila42@yahoo.com

Recd: 8/1/22

Linda Shelby 1782 Tricogy

SLO Planning Commission
c/o Jennifer Guetschow; jguetschow@co.slo.ca.us

I am writing to express my concern regarding the Proposed Dana Reserve Project, a development project that will develop 288 acres in the Unincorporated County Community of Nipomo.

After reading the Draft Environmental Impact Report (DEIR), the Unmitigatable Significant Class 1 issue which concerns me most is (circle item/highlight or write in your greatest concern):

- Housing (imbalanced housing vs job creation, which also increases traffic)
- Transportation (increase traffic, impacts on many roads throughout Nipomo)
- Air Quality
 - Greenhouse Gas Emission
 - Land Planning (multiple elements of the project are out of alignment with the south county area plan, including how this land was intended to be developed vs the present project)
- Biological impacts (3,948 oak trees to be removed, federally endangered species to be removed, special habitats to be removed)
 - Write in other issues of concern (i.e Water, public services) not determined to be a class 1 issue in the EIR

WATER!

The limited social and economic benefits of the Dana Reserve Project will not outweigh the many significant impacts of the project. As a citizen of Nipomo, I ask that this project be denied until revised to such an extent that the impacts of the development are greatly decreased. We owe it to Nipomo to present a project that does not significantly decrease the quality of life for existing residents and retains the natural beauty of the land given to Captain Dana in 1837.

DATE: 7/27/22 SIGNED: Linda Shelby
email: lshelby805@gmail.com

*copy this letter into your word processing program.

Highlight or circle your concern from list.

Date/Sign/add email.

Copy and paste into your email program.

send to jguetschow@co.slo.ca.us

OR

mail to: Department of Planning and Building

ATTN: Dana Reserve/Jennifer Guetschow

976 Osos Street, Room 300

San Luis Obispo, CA 93408

MUST BE RECEIVED BY AUGUST 1

Jennifer Guetschow

From: Lou Anne Lockwood George <l.lockwood@sbcglobal.net>
Sent: Monday, August 1, 2022 12:02 AM
To: Jennifer Guetschow
Cc: Lou George; Clyde George
Subject: [EXT]Fwd: Dana Reserve Development EIR

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>
> We are writing to state our disapproval and related concerns about the proposed Dana Reserve Development (EIR).
>
> Our family has lived on a 1-acre rural lot in nipomo since 2003. We do not have a fancy home, our kids went to Nipomo schools, we ride horses and are part of the local community.
>
> The past few years we have already experienced increasing problems
> with traffic congestion, extensive water use reduction requirements due to sustained drought conditions, and electrical brownouts due to electricity overuse by our local and neighboring community.
>
> Now a developer with deep pockets and apparent political clout is proposing to cut down over 3000 oaks trees, disturb natural habitats and local wildlife to build an incredibly population dense housing development that will literally increase the population of Nipomo by 26% in one fell swoop with no need to mitigate the absolutely foreseeable problems that will be created such as even greater road congestion and commuter traffic, congested access to local resources of all kinds and extensive added water usage just to name a few.
>
> Not sure why Nipomo is being targeted to be the County wide solution to the need for more housing for local workers. Especially since a majority of the proposed new residents won't be working in Nipomo but more likely will be commuting to Santa Maria or SLO or elsewhere in the two counties.
>
> Building a park and walking trails and a satellite college location
> (bringing still more traffic) does not make up for sitting in morning traffic for 15-20 minutes to make what should be the 5 minute drive from our home to the freeway every morning or having the currently dark night sky lit up with street lights from a huge housing development.
> In case you did not know this, Nipomo is a community that holds the viewing of the night sky to be of great value.
>
>
> Thank you for your consideration of our concerns.
>
> Lou Anne and Clyde George
> 490 Lantana Street
> Nipomo, Ca
> 93444
> 805 705-6215
>
>
>
>
> Sent from my iPhone

Concerns regarding the Dana Reserve Specific Plan:

The following is in sympathy for all the Nipomo Citizens who thought they were buying rural homes and acreage in Nipomo to have or eventually have a quiet retirement environment:

I'd like to begin by referring you to the Introduction, page one of the Dana Reserve proposal document submitted in April 2021, 1.9 Implementing Ordinances/Plans paragraph #1.8.q.f. San Luis Obispo County Design Guidelines, in the document for the Dana Reserve Specific Plan. The San Luis Obispo County Design Guidelines document created in 1998 to preserve the rural environment (1. Conservation of Resources and the Environment and 2. Distinction Between Urban and Rural Areas) is no longer applicable in the way it was intended. "Since the DRSP will provide its own design direction to inform the design and planning of future development, the County's Design Guidelines document will not be applied in the review of development projects within the DRSP area." While the Dana Reserve Specific Plan includes several commendable efforts to maintain the rural environment, when all is said and done it will look like other carefully designed housing and commercial projects in the City of San Luis Obispo, a mini urban community next to rural properties. This dense housing, 1,289 dwellings on approximately 184 acres and commercial building projects on approximately 22 acres, will not blend in with the surrounding community.

Yes, there is a housing shortage, especially an affordable housing shortage in San Luis Obispo County, but why can't that goal be accomplished without significantly changing the character of the rural environment the residents of Nipomo still enjoy today?

The Dana Reserve Project has excellent solutions to mitigate increased traffic: Offering residents high speed internet to encourage work from home, an onsite market and restaurants, a daycare center, two transit stops and a park and ride lot and bike lanes. The problem is that most people in rural America and small cities depend on (are attached to) their cars, even for short distances. How many people currently use the SLO County bus service? Will those services bring people in Nipomo to where they work? (Should we consider an in town bus service, maybe a trolley, in Nipomo?)

How many people in the City of San Luis Obispo routinely ride bikes to work or school? We can create more bike lanes in Nipomo or any part of the County for that matter, but if they aren't protected bike lanes, you will see very few children using them. Is the County of San Luis Obispo also willing to invest in necessary additional infrastructure to help make using alternative transportation a success?

The EIR presentation addressed some of the water concerns (future supply and cost to those already paying for water related services in Nipomo, but did not go into enough detail. (I went on the Santa Maria Water website and could not find adequate updated information related to this.) One thing that was not addressed is how reliable is purchasing water from Santa Maria. Do we have current statistics for drought years and water needed? As the cost of purchasing water over time will increase how will residents in subsidized/affordable housing be able to afford the service?

Thank you for your consideration.

Maria Diets-Stover
556 Riviera Circle
Nipomo, CA 93444

Jennifer Guetschow

From: Maria Sanchez <m_sanchez_805_ca@outlook.com>
Sent: Sunday, July 31, 2022 10:03 PM
To: Jennifer Guetschow
Subject: [EXT]DR - Water study

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Do I understand correctly that the same contractors who performed a study for the Dana Reserve developer referenced in Appendix I of the EIR also performed an "independent" study for NCSD? This seems inappropriate.

Will Proposition 218 be used for existing NCSD customers to approve the \$19mil costs estimated for the thousand homes?

Did the Appendix I expected water usage estimates reflect current rates of water usage by NCSD customers?

Is there a long-term contract in place with the City of Santa Maria past 2026 that will provide a long-term water to NCSD?

I am not convinced the current Dana Reserve project has thoroughly worked through these issues, at least not at the scale proposed. I oppose this project based on the EIR.

Jennifer Guetschow

From: Mark Mesesan <markmesesan@hotmail.com>
Sent: Saturday, July 30, 2022 8:10 AM
To: Jennifer Guetschow
Subject: [EXT]Opposition to Dana Reserve Project

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Ms. Guetschow:

I am a Nipomo resident and am writing to express my opposition to the proposed Dana Reserve development project in Nipomo.

After considering the contents of the Draft Environmental Impact Report, I have significant concerns about the following impacts that will negatively affect our community:

1. Density of housing - it's just too great for the space and will negatively affect the attractive rural characteristics of our community
2. Transportation - increases in local traffic will negatively affect the attractive rural characteristics of our community
3. Air quality - it already is poor very often in this area due to blowing silica sand from the nearby Dunes; additional motor vehicles and traffic will compound the problem
4. Land planning - this development was ill-conceived and is out-of-step with the characteristics which make Nipomo an attractive place to live. It's more than Not In My Backyard. It's about change that will negatively change and impact Nipomo in perpetuity
5. Water - it just does not make sense to move forward with a development project like this at a time when water availability is such a significant concern, with no sign of improvement due to global warming

Community concerns like mine must outweigh the development objectives of the Dana Reserve Project. I respectfully request that you take action to prevent this project from moving forward.

Sincerely,

Mark Mesesan
873 Via Seco
Nipomo, CA 93444
435-830-7068

Jennifer Guetschow

From: Mary Van Ryn <maryvanryn@yahoo.com>
Sent: Sunday, July 31, 2022 9:55 AM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Hi,

I oppose the location of the Dana Reserve project for a variety of reasons.

1. The destruction of native oak trees and other flora and fauna on the west side. It's irreplaceable.
2. Increased traffic - this has been a problem for years. I raised 3 children here, and spent hours in traffic... it was infuriating.
3. Concern over water - we need to be smart with the usage of water.
4. We are already dealing with increased population problems in our neighborhood from the counties lack of code enforcement (it has been a challenge that we are finally getting help with, but we are far from done). We have people renting sections of land to conduct businesses that increase noise pollution and the density of people. I didn't move onto 3 acres to have neighbors renting to multiple people to conduct their businesses. We have many problems here already.
5. We have old Town Nipomo that would benefit from a new development on the east side. There's plenty of land available that does not require the destruction of thousands of oak trees. It would also revitalize the area.
6. An east side development could include a cultural area that includes a museum and park dedicated to our beginnings.
7. Nick Tompkins, with good intentions, didn't bother finding out what the residents felt about this development.
8. We deserve to live the rural life.
9. We deserve to live the life we moved here for.
10. Nick wants a legacy, then I suggest he honors our town and its future.
11. TURN the Dana Reserve into a county park. That would be the best solution.
12. We should have more community gardens close to areas where there are housing without yards. .
13. Better transportation for residents to get around town.

We have alot of problems in Nipomo, but what stands out most to me, is the decades of the Board of Supervisors controlling our town. They've ruined it with golf courses and homes no resident in Nipomo wants to live in or can afford.

Thank you in advance,

Mary van Ryn

[Sent from Yahoo Mail on Android](#)



August 1, 2022

VIA EMAIL

Jennifer Guetschow
County of San Luis Obispo
976 Osos Street, Room 300
San Luis Obispo, CA 93408
Email: jguetschow@co.slo.ca.us

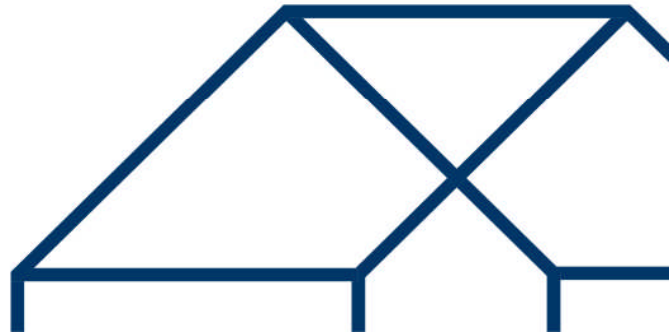
RE: Dana Reserve Specific Plan DEIR

Dear Ms. Guetschow:

We appreciate the opportunity to provide comments regarding the Draft Environmental Impact Report on the Dana Reserve Specific Plan. Californians for Homeownership is a 501(c)(3) organization devoted to using legal tools and the courts to address California's housing crisis. We are writing in support of the County's efforts to address the housing crisis by facilitating the development of housing within its borders—an effort that will be furthered by its approval of the Dana Reserve Specific Plan.

For several decades, California has experienced a significant housing access and affordability crisis. In recent years, this crisis has reached historic proportions. As a result of the housing affordability crisis, younger Californians are being denied the opportunities for homeownership and housing security that were afforded to previous generations. Many middle and lower income families devote more than half of their take-home pay to rent, leaving little money to pay for transportation, food, healthcare, and other necessities. Unable to set aside money for savings, these families are denied the opportunity to become homeowners, and are at grave risk of losing their housing in the event of a medical issue, car trouble, or other personal emergency. Indeed, housing insecurity in California has led to a mounting homelessness crisis. And the crisis has had a disproportionately harmful effect on historically disadvantaged communities, including individuals with physical and developmental disabilities and communities of color.

At the core of California's housing crisis is its failure to build enough new housing to meet the needs of its growing population. The Legislative Analyst's Office estimates that, from 1980 to 2010, the state should have been building approximately 210,000 units a year in major metropolitan areas to meet housing demand. Instead, it built approximately 120,000 units per year during that period. And the situation is getting worse: in the five-year period from 2013 to 2017 California issued building permits for less than half as many units as it did in 1985-1989. Today, California ranks 49th out of the 50 states in existing housing units per capita.



August 1, 2022

Page 2

The Legislature has recognized that the housing crisis is an emergency that requires proactive solutions: “The consequences of failing to effectively and aggressively confront this crisis are hurting millions of Californians, robbing future generations of the chance to call California home, stifling economic opportunities for workers and businesses, worsening poverty and homelessness, and undermining the state’s environmental and climate objectives.” Gov. Code § 65589.5(a)(2)(A).

This project will provide much-needed housing in a variety of housing types and levels of affordability. Approval of the Specific Plan is well-supported by the record, and the County’s environmental review has met the requirements of the California Environmental Quality Act (CEQA).

Sincerely,



Matthew Gelfand

Jennifer Guetschow

From: Maureen Murphy <momurphy22@gmail.com>
Sent: Friday, July 29, 2022 5:26 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve _ comment from Nipomo resident

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Hi Jennifer -

Nipomo is a quiet rural environment. This Dana Reserve Development proposal will absolutely negatively impact traffic on the already busy 101, suck up our water supply during a drought, and kill our rural environment.

1. Traffic on the 101. At what point will the 101 freeway need to be expanded to accommodate the commuters from the 1290 units being built that will house multiple families who need to work?
2. The proposal has the smaller units buttressed against our neighborhood! We will have NO BUFFER! Unacceptable.
3. The rural environment of Nipomo is what makes Nipomo not Santa Maria! Someone saw some empty space and wanted to dump in a huge development - that can and will NEVER be turned back.
4. We are in a drought! Water, water, water.
5. Noise - how do they propose to mitigate the NOISE that Nipomo neighbors will be subjected to while building?
6. What buffers will be provided for boundaries to immediate neighborhoods buttressed against this atrocity?
7. Where will the be traffic routed to, during the building of project and afterwards?

Best regards,
Maureen Murphy



Department of Planning and Building
 ATTN: Dana Reserve/Jennifer Guetschow
 976 Osos Street, Room 300
 San Luis Obispo, CA 93408

August 1, 2022

By Email
 From Michael F. Brown Government Affairs Director
[colabslo.@gmail.com](mailto:colabslo@gmail.com)

805 944-4274

Dana Reserve

*Dana Reserve Specific Plan Environmental Impact Report
 Chapter 2 Project Description*



Figure 2-9. DRSP Proposed Conceptual Master Development Plan.

The DEIR fails on many grounds including but not limited to:

Context

Science

Fairness

Perspective

Logic

In the end and like most EIRs, it is a compartmentalized, systematic exploitation of the obvious designed to discourage future progress.

Some of these failures are detailed below. However before considering the detail, please read the section immediately below, which provides essential overall context which the DEIR completely ignores.

Table 4-1. Summary of Environmental Impacts Analysis

Environmental Resource	Significant, Unavoidable Adverse Impacts	Significant, but Mitigable Impacts	Less than Significant Impacts
Aesthetics		X	
Agriculture and Forestry Resources		X	
Air Quality	X		
Biological Resources	X		
Cultural Resources		X	
Energy		X	
Geology and Soils		X	
Greenhouse Gas Emissions	X		
Hazards and Hazardous Materials		X	
Hydrology and Water Quality		X	
Land Use and Planning	X		
Mineral Resources			X
Noise		X	
Population and Housing	X		
Public Services		X	
Recreation		X	
Transportation	X		
Tribal Cultural Resources		X	
Utilities and Service Systems		X	
Wildfire		X	

The Draft Dana Reserve Environmental Impact Report (DEIR) finds CEQA Class I unmitigatable impacts for 6 of the Environmental Resource criteria. These include Air Quality, Biological Resources, Greenhouse Gas Emissions, Population and Housing, and Transportation.

The combined findings would forbid decision makers from approving the project, except that CEQA provides that project alternatives can be considered if the project cannot be moved to a different location. In this case the developer does not own an alternative site where the project could be located.

More blatantly, it ignores the fact that there is no site in the unincorporated county owned by a private person on which the 288 acre project could be located. The County’s Housing Element inventory of existing sites demonstrates this fact conclusively. See pages in section 7 - (8) - 7-(20) of the Housing element for the detail. The data for the categories is summarized below.

Very Low and Low

Assessor's Parcel Number	Community	General Plan Designation and Zone	Acres	Maximum Allowable Density (units/ac)	Maximum Potential Units Per General Plan	Realistic Potential Units (18 units/ac)	Affordability Category	Water Capacity (Y/N?)	Sewer Capacity (Y/N?)	Electrical Service Available (Y/N?)	Internet Service Available (Y/N?)
017-322-016	Shandon	CR	2.31	38	88	41	Lower	Yes	Yes	Yes	Yes
TOTALS			81.96		3,114	1,459					

Moderate

Totals			57.8		2,003	975					
---------------	--	--	-------------	--	--------------	------------	--	--	--	--	--

Note that only a total of 139.8 acres are zoned for low and moderate in the entire unincorporated area. The Dana reserve at 288 acres exceeds this amount.

Above Moderate

Totals			194.39		1,205	821					
---------------	--	--	---------------	--	--------------	------------	--	--	--	--	--

Only 194.4 acres are zoned for above moderate (everything else). Even when above moderate is added in, there are only 333.8 acres zoned in the entire unincorporated County for homes.

The County’s scheme of land use provides no substantial opportunity to develop large numbers of homes with economies of scale on any basis. The fact that it has a State approved Housing Element is simply window dressing and a result of the narrow and incomplete State criteria for achieving approved housing elements.

Basically, the County’s scheme of land use is destined to preserve and promote large lot and estate type development of homes in excess of \$1 million or more in price for high income/high net worth whites seeking a rural or semi-rural lifestyle. It is patently discriminatory and is particularly abusive of Hispanic families, black families, agricultural workers who are largely

Hispanic, aging persons on fixed incomes, single mothers, homeless people, and young people seeking to form a family household.

Moreover, it seeks to concentrate low and moderate income people in dense development within the corporate cities and unincorporated URLs. Here, the County is again concentrating low and moderate income people (many of whom are Hispanic, Black, Native American) into dense zones. All this is camouflaged under the rubric of fighting global warming and promoting “efficient” development.

In turn, and because where you live has everything to do with your chances in life, the lower income people are condemned to the worst schools, highest tax and fee jurisdictions, crime, cannabis dispensaries, traffic noise (scary sirens and public transit buses roaring down the streets), homeless encampments, and all the rest.

Please see the article Addendum I to this EIR response at the end for further information.

The California Environmental Quality Act (CEQA)

In the case of the Dana Reserve Project and many other projects, CEQA is abused by local planners, decision makers, and intervenors to aid and abet the social and racial concentration of the poor into dense urban areas with older and often deteriorated housing. In turn, this insulates the upper middle and upper income whites from the negative urban living problems of crime, drug and alcohol abuse, noise, traffic, and social unrest.

The permitting data reveals the terrible truth: Notwithstanding all the rhetoric, hardly any dwelling units are being permitted in the unincorporated area at all. Remember, the table below summarizes the number of units permitted, not the number actually constructed. The largest numbers are in the South County area and mainly consist of units permitted decades ago in the Nipomo golf communities. Most of the units are the result of the developers implementing a deferred phase of construction, not truly new permits.

Were it not for these the County would have permitted less than 100 during the first 3 quarters of 2021 – 22.

New Dwelling Units ¹ by Planning Area/Sub Area, 2005-2021

Planning Area/Sub Area	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21 ²
Adelaida	24	12	21	11	3	5	3	2	5	5	4	8	5	8	6	4
Carrizo ³	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
El Pomar-Estrella	90	53	33	14	9	11	10	20	38	16	28	19	22	26	15	12
Estero	19	15	13	6	10	8	3	6	13	8	7	18	6	10	7	7
Las Pilitas	0	6	5	2	5	1	3	1	2	1	0	1	1	1	0	2
Los Padres (North)	2	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0
Nacimiento	43	32	18	11	7	9	10	33	50	21	20	25	27	18	14	9
North Coast	14	7	9	1	5	0	3	7	2	3	2	0	0	2	1	1
Salinas River	99	41	33	36	25	16	15	21	45	60	65	207	74	86	65	37
San Luis Bay Coastal	52	22	70	7	15	13	17	34	41	25	30	39	41	9	11	1
San Luis Obispo	11	9	11	2	4	4	5	6	9	2	4	10	5	8	12	10
Shandon-Carrizo (North)	28	28	11	5	2	4	6	2	4	0	4	4	3	6	5	12
South County ⁴	71	34	77	19	17	40	35	114	157	116	113	161	131	118	102	116
South County Coastal ³	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Total	453	259	301	114	103	113	111	246	366	257	277	492	315	292	238	211

1. Only including units subject to the Growth Management Ordinance. For 20015-2016, based on number of construction permit applications received in fiscal year. For 2017-2021, based on number of construction permits issued in fiscal year.

2. As of April 26, 2021.

3. Carrizo and South County Coastal Planning Areas were added to this chart for FY 21-22 and were not tracked in previous years' annual allocation reports.

4. Huasna-Lopez Sub Area was removed from this chart for FY 21-22 because it is included in the South County Planning Area.

In these regards, as outlined above, the entire EIR and process are terribly flawed and designed to kill the project. After all, it lists alternative 3 as the preferred project. Under Alternative 3, the residential land use category would be limited to approximately 78 to 390 rural residential units (plus associated ADU development) instead of the 1300 proposed in the application.

Alternative 3 would be less dense, have many fewer homes, and lack the economies of scale necessary to produce work force and low income units.

Specific Dana Reserve Class I Impacts:

Air Quality.

Actually, the project appears to meet or exceed all the clean air requirements that pertain to existing or potential problems from dunes dust, chemical, agricultural, or other sources.

Instead, the key unmitigatable source (CO2 and other tailpipe gases) is alleged to be the fact that the project would increase the housing jobs imbalance and the new residents would have to drive their cars to area employment centers, most likely in Santa Maria and San Luis Obispo.

Inconsistent. The proposed project is located within the NCSD Sphere of Influence (SOI). Nipomo is an unincorporated area that is jobs poor. The project would result in the creation of 1,441 dwelling units (including ADUs) and approximately 273 new jobs, which would increase

anticipated to hinder regional and local improvements related to increased transportation mobility and potential increase in VMT. Although the DRSP would include commercial uses and infrastructure to promote the use of public transit and walking and bicycling (e.g., Park and Ride lot, transit service expansion, connections to bicycle lane network), it would remain inconsistent with this measure.

The project is to be built in phases over many years. The State of California has set 2035 as the year when no new fossil fuel vehicles can be sold in the State. During the run up period over the next decade the number of fossil fuel cars should decline swiftly. This barrier, and its assignment as an unmitigatable Class I Impact, is therefore false as the problem is already scheduled to be solved.

The EIR cites the fact that the project would exceed VMT in reaching its conclusion. This is detailed in the Transportation section of the DEIR

Table 4.3-8. Project VMT Impact Summary

Category	VMT Per Employee	VMT Per Capita
County Threshold	25.7	27.2
Proposed Project	26.9	30.0
Percent Reduction in VMT Required to Reduce to Below Threshold	4.46%	9.34%

Source: AMBIENT (2022)

Other operational air quality impacts of the project are also listed as unmitigatable.

With implementation of Mitigation Measures AQ/mm-3.3 and TR/mm-3.1, operational annual emissions would be reduced to below SLOAPCD’s significance threshold; however, daily emissions would continue to exceed SLOAPCD’s significance threshold. Therefore, impacts related to the generation of criteria pollutants in exceedance of established daily emissions thresholds would be significant and unavoidable.

Table 4.3-11. Operational Emissions without Mitigation

Operational Period/Source	Emissions ¹						
	ROG	NOx	ROG+NOx	CO	PM ₁₀		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Area Source	59.5	1.4	60.9	118.8	0	0.7	0.7
Energy Use	1.0	8.5	9.5	4.2	0	0.7	0.7
Mobile	34.9	54.7	89.6	350.2	115.8	0.7	116.5
Total Project Emissions	95.4	64.6	160.0	473.3	115.8	2.0	117.8
SLOAPCD Significance Thresholds	--	--	25	550	25	1.25	--
Exceeds SLOAPCD Thresholds?	--	--	Yes	No	Yes	Yes	--
Annual Emissions (tons/year)							
Total Project Emissions	15.6	10.1	25.7	72.0	17.6	0.3	17.9
SLOAPCD Significance Thresholds	--	--	25	--	25	--	--
Exceeds SLOAPCD Thresholds?	--	--	Yes	--	No	--	--

Source: AMBIENT (2022)

Note: Based on operational year of 2030 for Hotel, Commercial, Educational, and Residential. Totals may not sum due to rounding. Refer to EIR Appendix D for modeling output files and assumptions.

¹ Daily emissions are based on the highest emissions for summer or winter operational conditions for buildout conditions. Totals may not sum due to rounding.

Biological Resources

The EIR Summary Table indicates that the Biological Resources constitute a Class I unmitigatable resource. A lengthy chapter is presented on this subject that lists scores of plant and animal species which will suffer harm if the project is built. It also contains pages of minutiae about possible mitigations. All this is quite confusing.

At the end of the chapter there is a statement of unmitigatable class I resource.

4.4.6 Cumulative Impacts BIO Impact 20: The project would have cumulatively considerable impacts related to biological resources. Cumulative impacts would be significant and unavoidable (Class I). The proposed project's contribution to cumulative impacts on biological resources is based on the loss of open space and associated wildlife habitat. The Specific Plan Area primarily consists of Burton Mesa chaparral, coast live oak woodland, and coast live oak forest, intermixed with various grassland habitats. Several special-status plant and animal species and two sensitive vegetation communities occur on-site, all of which would be impacted by the proposed development, except for 21.7 acres of primarily coast live oak forest habitat. The County anticipates several smaller residential development projects in the surrounding community and two major development projects.

Basically, it appears that any project of any significance would be too impactful. Obviously, the construction of even 50 houses and some commercial would result in cutting down trees, removing the bushes, etc.

The mitigations listed seem to be massive detailed lists of further studies, annual reporting, and impractical projects.

This section needs to be summarized and structured in way that the public and decision makers can actually assess the gravamen of the issue. In fact a portion of the chapter states:

Evidence of episodic disturbance from farming was observed in the field and from aerial imagery dating back to 1939. Field evidence of very old woodland clearcutting suggests a link to a historic drought between 1862 and 1864 when ranchers were compelled to fell trees for livestock consumption (Guinn 1890; and personal communications between Althouse and Meade with Jim Sinton, family rancher familiar with the Nipomo Mesa). Google Earth imagery indicates that the grassland west of US 101 was last farmed in about 2002, or possibly 2006 (Althouse and Meade 2022a).

*Farming, mowing, and chaparral (brush) removal appears to have been conducted for decades. Imagery from 1939 shows evidence of brush clearing on rolling topography and farmed fields on flatter terrain, and imagery from 1949 indicates some of the brush cover and associated coast live oaks (*Quercus agrifolia*) were starting to grow back. Some brush clearing is evidenced in 1957. The 1969 to 1994 aerials show chaparral cover generally increasing in areas not actively farmed. Between 1994 and 2002, shrub reduction appears to have reduced brush cover while retaining young trees barely visible in the 1994 imagery. Aerial images from 2002 and years thereafter show reduced brush cover. Livestock pens are visible in 2011 to 2013 aerial imagery.*

Two additional parcels provide a connection from Cherokee Place on the north side of the ranch to Willow Road. The western 7-acre parcel is undeveloped and shows evidence of significant site disturbance from past dry farming. There are no trees, weedy species dominate, and a few bushes have become reestablished and/or have regenerated since 2010 when the last mowing appears to have occurred. The eastern 7-acre parcel is densely wooded with a residence and numerous animal pens for horses, chickens, and other animals.

This is not some pristine natural land untouched by humans.

Greenhouse Gas Emissions

GHG Impact 3 (Class I)
The project would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.
Mitigation Measures
Implement Mitigation Measures AQ/mm-3.1, AQ/mm-3.3, GHG/mm-1.1, and TR/mm-3.1.
Residual Impacts
Implementation of Mitigation Measures AQ/mm-3.1, AQ/mm-3.3, GHG/mm-1.1, and TR/mm-3.1 would reduce potential impacts related to operational GHG emissions from the proposed project. However, the project would generate VMT in a manner that would be inconsistent with SLOCOG's 2019 RTP/SCS and the effectiveness of the identified mitigation to reduce this impact below applicable thresholds is not certain. Therefore, with implementation of identified mitigation, potential impacts would be significant and unavoidable (Class I).

Cumulative Impacts GHG Impact

The project would result in a cumulatively considerable impact to greenhouse gas emissions. Cumulative impacts would be significant and unavoidable (Class I). As discussed in Chapter 3, Environmental Setting, the cumulative impact analysis is based on the County's cumulative projects list. Cumulative projects would generate residential, industrial, and commercial development within the county. Project-specific impacts related to the generation of short and long-term GHG emissions would be less than significant with mitigation.

COLAB NOTE: This pretzel logic. Recognizing that the planet is a closed eco system, nothing more could ever be bold anywhere in the world which generates any significant CO_{2e}. The fact that the measure is confined to SLO is ridiculous since the alleged problem is planetary. The DEIR is simply cherry picking the arbitrary county boundary as its frame of reference.

Based on required compliance with existing diesel idling requirement, the CBC and CALGreen, and the County's solid waste reduction goals, reasonably foreseeable future projects are not anticipated to result in short- or long-term GHG emissions that would conflict with established thresholds. Nevertheless, reasonably foreseeable future projects would be subject to separate environmental review to determine potential impacts related to GHG emissions and reduce GHG emissions, as necessary. Therefore, impacts would be less than cumulatively considerable.

The project would generate VMT that would exceed the significance threshold of 25.7 VMT per employee and 27.2 VMT per capita; therefore, the proposed project would be inconsistent with the 2019 RTP/SCS and the effectiveness of identified mitigation included to reduce this impact is not certain, thus it would remain significant and unavoidable. Reasonably foreseeable future projects would likely contribute to VMT within the vicinity of the Specific Plan Area. Individual future projects would be subject to separate environmental review to determine individual

impacts related to consistency with the 2019 RTP/SCS and implement reduction measures as necessary and feasible.

Other reasonably foreseeable future projects are not anticipated to generate population growth or VMT of this scale; however, reasonably foreseeable future projects within the vicinity of the Specific Plan Area still have the potential to contribute VMT and further exceed established thresholds.

Since other reasonably foreseeable future projects are anticipated to generate substantially less population growth and VMT, implementation of long-term VMT reduction strategies would likely mitigate impacts to below established VMT thresholds. **However, due to project-specific significant impacts, cumulative impacts would be significant and unavoidable**

Table 4.8-2. SLOAPCD GHG Thresholds of Significance

Operational Year	2030
Land Use Sectors GHG Emissions Target ¹	213,000,000
Population ²	41,860,549
Employment ³	20,729,820
Service Population (SP)	62,590,369
GHG Efficiency Threshold (MTCO ₂ e/SP/year)	3.4

Source: AMBIENT (2022)

This chart is for the whole county. It is not just for the emissions attributable to the unincorporated county over which the Board of Supervisors has regulatory land use authority. It is unfair and the goal should be for the unincorporated county. Note that per the table below , from its adopted Energy Wise Plan.

Where does the 213,000,000 (million) come from?

Is this for the whole county including cities?

The unincorporated county only generated 917,000 in 2006.

It should be less now as the County has implemented a number of CO2 reducing programs and projects.

The primary sectors of GHG emissions are transportation (40%), commercial and industrial energy (24%), agriculture (off-road equipment, livestock, and crops) (18%), residential energy (15%), waste (3%), and aircraft (less than 0.1%).

Figure 3-4. Unincorporated San Luis Obispo County 2006 GHG Emissions

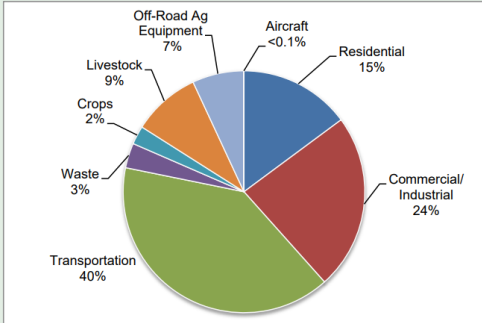


Table 3-1. Unincorporated San Luis Obispo County 2006 GHG Emissions

	2006 GHG Emissions (MTCO ₂ e)	Percentage of Total Emissions
Residential	136,360	15%
Commercial/Industrial	215,970	24%
Transportation	365,260	40%
Waste	30,540	3%
Other – Crops	22,630	2%
Other – Livestock	83,420	9%
Other – Off-Road Equipment	63,280	7%
Other – Aircraft	240	< 0.1%
Total	917,710	100%¹

1. Due to rounding, the sum of individual values may not equal the total given.

Figure ES-3. Community-Wide GHG Emissions Forecast (MTCO₂e)

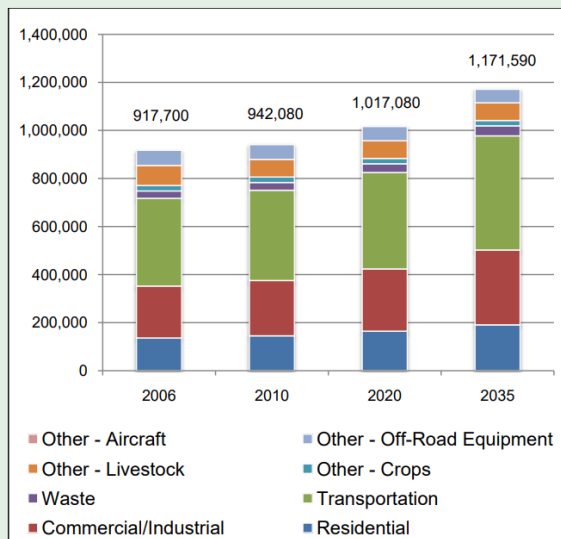


Table 4.8-5. Operational GHG Emissions Without Mitigation

Operational Year/Source	2030 GHG Emissions (MTCO _{2e} /year)
Area Source ¹	32.9
Energy Use ²	2,477.2
Motor Vehicles ³	13,836.04
Waste ⁴	368.2
Water ⁵	169.6
Total Operational Emissions	16,884.0
Amortized Construction Emissions	987.3
Total with Amortized Construction Emissions	17,871.3
Service Population (SP) ⁶	4,826
MTCO_{2e}/SP	3.7
GHG Efficiency Significance Threshold	3.4
Exceeds Threshold?	Yes

Source: AMBIENT (2022)

This section of the DEIR lacks appropriate context and data:

- What percent of SO County’s total MTCO_{2e} emissions do 17,871.3 represent? Is this significant enough to reject the project?
- What percent of California’s total MTCO_{2e} emissions do 17,871.3 represent?
- As noted above, if all new vehicles sold in 2035 and after must be electric, what is the validity of this finding?
- Given all of other new and accumulated State regulations on vehicle emissions, how valid is the 13, 836.04 number?
- Are the calculations formulae underlying the number based on current laws or were the formula basis developed 5 years ago?

Land Use and Planning

Car Pollution by the Trip to Work: This section promulgates 3 Class I unmitable imapcts . The first one , below, is based the Countypolicy that homes should be bult close to work palces. The problme is tthat the largest employers are in Santa Maria, San Luis Obispo, the Cal Poly Campus, the Atascadero State Hospital, and several scattaered large school districts. The County chased the largest Nipomo employer (Philipps 66) out of the County when it rejected a lager oil loading facility.

As noted above , the DEIR Clean Air analysis is obslote and based on old data. Morevoer it is scientifically irrational as it arbtralaly restriects the CO_{2e} problem boundary to theamount generated in the County. Even if the County and Califronia become entireley carbon free, the United States would have to invade and subdue China, Russia, India, North Korea, Iran, and now

the European Union to compel them to reduce their exponential expansion of fossil fuel use. This would be a war which the US would lose. China would wind up administering western north America which would end any consideration of this symbookc and destructive set of policies.

LUP Impact 3 (Class I)
<i>The project would adversely affect the local jobs-to-housing ratio within the project area and would be inconsistent with Land Use Planning Policy L-3 of the San Luis Obispo County Clean Air Plan.</i>
Mitigation Measures
<i>No feasible mitigation has been identified.</i>
Residual Impacts
<i>Potential impacts associated with policy inconsistency would be significant and unavoidable (Class I).</i>

Rare Plants: The DEIR promulgates an unmitagatable Class I Impact due to rare plants on the site. It is a mixed chaparral / oak woodland which cover thousands of sq. miles in southern and central California. While the development would impact specific plant on the site, it would not strategically impact the overall range of the species.

Moreover the site has been anthropomorphically disturbed over the decades by grazing and agriculture. This is not a pristine evolutionary biological community.

In 2011, the County Planner who wrote the Conservation and Open Space element revealed us that it was designed to forestall as much development as possible. He was amazed that there was not more public opposition.

Once again the site is being treated as if it were the universe as opposed to an infinitesimal portion of the Oak/Chaparral environment.

Reportedly, the California Rare Plant Society has threatened to sue the County if the project is approved. Of course hundreds of acres of this environment are burned to scorched earth over the years because governments will not allow controlled burns, fire breaks, timber harvesting, agriculture, and other fire control mechanisms. Should they sue, the Planner should be subpoenaed to the depositions and testify under oath about his biased development of the ordinance.

LUP Impact 5 (Class I)
The project would result in the net loss of California Rare Plant Rank 4 and Watch List plant species, native oak woodland, and sensitive habitats; therefore, the project would be potentially inconsistent with goals and policies of the County of San Luis Obispo General Plan Conservation Open Space Element pertaining to preservation of biological resources and Policy 3.8 of the Parks and Recreation Element.

Sensitive Biological Resources: and Views Here the DEIR finds a Class I unmitagatable impact due to the conversion of the view of the site to a development and the loss of biological resources .

Views: Most of the people viewing the site are driving past it on Highway 101 at 65 miles per hour while focusing on the cars ahead of them to avoid the frequent back down induced rear end crashes which occur in that section the highway. They only have a few seconds to look. Moreover, the west side section of the highway immediately to the South contains a series of commercial developments including a large Flea Market, RV Sales lot, furniture outlets, bill boards, and condominiums. The east side contains a pot puree of dilapidated trailer parks, bill boards ,dog kennels, plant nurseries and broken down vehicles.

The DEIR is totally out of context of the area and is a reducto ad absurdum . This isn't the Hearst Ranch or even the Leticia Vineyard.

LUP Impact 10 (Class I)
The project would result in cumulative impacts associated with inconsistency with Land Use Planning Policy L-3 and goals and policies identified within the County of San Luis Obispo General Plan Conservation and Open Space Element, Framework for Planning (Inland), Land Use Ordinance, and South County Area Plan regarding preservation and no net loss of sensitive biological resources and preservation of rural visual character, compatibility with the natural landscape, and preservation of views of oak woodlands and other visually significant features.
Mitigation Measures
<i>Implement Mitigation Measures AES/mm-3.1 and AES/mm-3.2, AES/mm-7.1, BIO/mm-2.1 through BIO/mm-2.3, BIO/mm-4.1, BIO/mm-15.1, BIO/mm-16.1, BIO/mm-18.1 through BIO/mm-18.4, and BIO/mm-19.1.</i>

Population and Housing

The DEIR asserts that the project will generate too much unplanned population for the Nipomo area. In fact, the County population growth has fallen below all recent estimates. Most of it is in Paso Robles. Also the County has driven its largest Nipomo employer Phillips 66 out of the County and never lifted a finger to help PG&E maintain the Diablo Nuclear Power Plant proving 2000 jobs just a few miles up Highway 101 from Dana project site in n Avila Beach.

Nevertheless, the DEIR ignores this fact and dwells on Plan inconsistency.

PH Impact 1 (Class I)
The project would induce substantial unplanned population growth in the Nipomo area.
Mitigation Measures
No feasible mitigation has been identified.
Residual Impacts
Potential impacts associated with substantial unplanned population growth would be significant and unavoidable (Class I).

Based on the analysis above, the DRSP is anticipated to result in the future construction of 831 singlefamily dwelling units, 458 multi-family dwelling units, and 152 ADUs. According to the U.S. Census Bureau, the average household size in Nipomo between 2015 and 2019 was 3.16. In order to calculate a more conservative population estimate, the Nipomo average household size was used to calculate the project’s estimated residential population rather than rely on the countywide average household size of 2.51. Based on the average local household size in Nipomo, future buildout of DRSP residential land uses is anticipated to result in a residential population increase of approximately 4,555 (Table 4.14-13).

Specific Plan Area PH Impact 1: The project would induce substantial unplanned population growth in the Nipomo area. Impacts would be significant and unavoidable (Class I). The DRSP would allow for the future phased development of residential uses, village commercial uses, flex commercial uses (including light industrial uses), open space, trails, and a public neighborhood park within the 288-acre Specific Plan Area.

Table 4.14-14. Project Residential Population Generation

Land Use Type	Number of Dwelling Units	Nipomo Average Household Size ¹	Estimated Population Generated
Single-Family	831		2,626
Multi-Family	458	3.16	1,448
Accessory Dwelling Units	152		481
Total	1,441	--	4,555

¹ Source: U.S. Census Bureau (2019)

The finding is that unplanned population growth is inconsistent with various plans. However, other than the assertion that the housing to jobs ratio is skewed and that the vehicle miles traveled would increase, there is no data demonstrating that the phased build out the proposed development would cause any real harm in terms of public health and safety.

There are no problems with utilities (in fact the project benefits the entire area population in terms of water availability and cost), no public safety issues, no parks issues, no school issues,

ET. In fact the DEIR lists all the other measures in this category as potentially consistent with policies, plans , and ordinances.

The jobs /housing balance is a red herring because there is no way that Nipomo has sufficient land zoned for large commercial projects such as office parks. In fact the Dana reserve project actually provides development which ads 250 jobs. As we note above in the Land Use and Planning Section , the key employers are in or adjacent to the City of San Luis Obispo and in the City of Santa Maria.

Area governments, institutions , am private sector employers all not difficulty in recurring and retaining employees. One of the main reasons is lack of housing.

In this case the DEIR would have the decision makers look a gift horse in mouth in all respects in compliance with stale and obsolete policies produced by ideological anti-growth staffers over a decade ago.

Transportation

This section simply regurgitates the impossibility of adding more homes without adding any traffic . It does however list the potential of some mitigation which could help.

TR Impact 3 (Class I)	
Buildout of the Specific Plan Area would exceed the County VMT thresholds and therefore would not be consistent with State CEQA Guidelines Section 15064.3(b). VMT per employee would be incrementally reduced compared to existing conditions; however, the project-related increase in residential VMT per capita and overall VMT would exceed the County VMT thresholds.	
Mitigation Measures	
<i>TR/mm-3.1</i>	<p><i>A transportation demand management program or identification of transportation demand management strategies to implement would be required of each applicant. The residential, commercial, education, and/or hotel development applicant in consultation with the County of San Luis Obispo will choose feasible transportation demand management strategies and tailor to the development proposal. Potential measures to reduce vehicle miles traveled include, but are not limited to:</i></p> <ol style="list-style-type: none"> <i>1. Improve or increase access to transit</i> <i>2. Increase access to common goods and services</i> <i>3. Incorporate affordable housing into the project</i> <i>4. Orient the project towards transit, bicycle, and pedestrian facilities</i> <i>5. Improve bicycle and/or pedestrian facilities and/or transit services</i> <i>6. Limit or eliminate parking supply</i> <i>7. Implement or provide access to commute reduction programs</i> <i>8. Provide car-, bike-, and ride-sharing programs</i> <i>9. Provide transit passes</i> <i>10. Provide on-site amenities at places of work</i>

TR Impact 9 (Class I)
The project would result in a cumulatively considerable impact to transportation and traffic.
Mitigation Measures
Implement Mitigation Measure TR/mm-3.1.
Residual Impacts
<i>Cumulative impacts related to consistency with applicable plans, hazardous roadways design, and emergency access would be avoided through compliance with identified project-specific mitigation; no additional mitigation is needed to avoid or minimize potential cumulative impacts. However, implementation of Mitigation Measure TR/mm-3.1 would not reduce impacts to a less-than-significant level. Therefore, residual cumulative impacts would be significant and unavoidable (Class I).</i>

ADDENDUM I



THE DEHUMANIZING TYRANNY OF DENSIFICATION

The prevailing vision of environmentalism today caters to a global oligarchy.

BY EDWARD RING

Filing cabinet of human lives, Where people swarm like bees in tunneled hives, Each to his own cell in the covered comb, Identical and cramped—we call it home."

— Gerald Raftery, "Apartment House"

The conventional wisdom among America's liberals, often seconded and rarely challenged by conservatives, is that population growth in the United States should be channeled as much as

possible into the footprint of existing cities. Surrounding cities should be “greenbelts,” suburban growth should be rejected as unsustainable “sprawl,” and human settlement in areas defined as the “urban-wildland interface” should be discouraged and, where possible, reversed.

The movement to increase the population density of cities and reduce rural populations is already enshrined in California law and is rolling quietly across the rest of the nation. It is marketed as enlightened, environmentally sustainable urban planning, but the moral pretext obscures a self-serving density agenda that is shared by several powerful special interests.

Among all the misanthropic trends in public policy that threaten the freedom and prosperity of ordinary Americans, the density agenda is probably the least discussed.

Stated simply, population densification will fundamentally undermine Americans’ ability to preserve their freedom and independence. You don’t have to reference Agenda 2030—about which it is now almost *impossible* to find any negative commentary online—to understand how easily a population can be controlled when it is relocated and concentrated into a handful of megacities.

In the 1990s, shortly before the end of apartheid, I remember speaking with someone who had just returned from a tour of South Africa. He commented on his impressions of the densely populated black townships that were adjacent to every major city.

“They’ve got them all bottled up tight as sardines in a can,” he said, “nice and neat, so whenever they want, they can zap them all.”

Here is an aerial photo of neighborhoods in Soweto, just outside Johannesburg. It was perhaps the most infamous township of the apartheid era.

The Racist Bantustan

Soweto, South Africa
40' x 80' lots, single family dwellings



This image, which corresponds to a population density exceeding 20,000 people per square mile, reveals how blacks in Soweto were pushed into packed neighborhoods where they could easily be contained in the event of mass civil unrest.

In America, even this population density is frowned upon by enlightened environmentalists. After all, those people lived in “single-family dwellings,” which are themselves “exclusionary” and “unsustainable.” In California, and against the odds, politically connected developers can still build limited numbers of single-family dwellings because free-standing individual homes are the overwhelming choice of families, if they can afford them.

Featured below is an aerial photo of such a development in Sacramento, California’s state capital and one of the citadels of green extremism. Note the lot size. These 40-by-80-foot lots are precisely the same size as those in Soweto.

The Green Bantustan

Sacramento, California

40' x 80' lots, single family dwellings



How those neighborhoods are evaluated by mainstream commentators bespeaks a blithe hypocrisy. In Soweto, such neighborhoods were variously described as concentration camps where people were confined and subjected to inhumane crowding. In Sacramento, these neighborhoods are under attack as environmentally incorrect “sprawl,” as laws and zoning increasingly favor multifamily dwellings.

Causes and Effects

Economics, not any particular concern for the planet, drives the density agenda. Chief among these economic imperatives is to render housing barely affordable. Reducing the supply of housing while increasing the U.S. population through loose immigration policies creates shortages, which then drive-up prices.

Perpetually inflating the value of real estate, in turn, creates new asset collateral. This helps balance the U.S. trade deficit, as foreign investors repatriate dollars by buying expensive American real estate. It also enables the ongoing U.S. trade deficit, as homeowners are seduced

into borrowing against their home equity to purchase imported consumer products. The macroeconomic scheme that lets Americans print as much currency as they want and monetize

the world with dollars purchasing foreign goods is sustained, in large part, by keeping the value of U.S. real estate artificially high.

That isn't the only reason to cram people into the footprint of existing cities and jack up the cost of all housing through engineered shortages. The interests of public-sector unions and public utilities are another powerful driver obscured by density policies.

Public-sector unions always benefit when public infrastructure spending is restricted due to environmental concerns. Instead of investing public funds to build and upgrade reservoirs, aqueducts, and freeways, public agencies can allocate more of their budgets to increasing the pay and benefits for government workers. Local public-sector fiefdoms also benefit when the population is increased in existing jurisdictions. In the past, the integrity of existing suburbs would not be violated, and instead, new cities outside established jurisdictions would gain those new residents and collect the new tax revenue.

Public utilities have a powerful financial incentive to embrace the density agenda and its intimate sibling, the renewables agenda. When people are forced to ration energy and water as more people are crammed into existing neighborhoods, the same utility grids—water, power, and wastewater—can be employed without costly expansion. Never mind that residents will now be restricted to 40 gallons of indoor water use per day, or pay to have expensive dual water meters installed so bureaucrats can impose and monitor an outdoor “water budget.” Never mind that renewable electricity flowing through smart meters will cost households 50 cents or more per kilowatt-hour during peak demand times, or that there will no longer be enough wastewater flowing through the sewer pipes to move the effluent.

Public utilities will deliver less of everything but charge much more. Their revenue will go up even as their deliveries go down. And since their earnings are restricted to a regulated percentage of total revenue, they will make more profit than ever.

Planned Obsolescence Is the New Normal

The density agenda is the product of intersecting benefits that attract a powerful coalition of special interests. In almost every sector of the economy, monopolistic corporate special interests have navigated a profitable path that furthers the shared agenda.

When environmentalist-inspired regulations make it almost impossible to get building permits, public entities collect higher fees, and favored developers build homes they can sell for more money and more profit. When environmentalists litigate to stop the construction of a new

reservoir, public agencies retain the funds for more internally remunerative uses, and the possibility of new home construction is diminished. Without access to water, new homes cannot get built. When homes are too expensive for most families to afford, institutional investors roll in and buy whole subdivisions and rent them all, depriving Americans of what throughout our history was the most reliable way to build generational wealth.

It is crucial to understand the collaborative role of the high-tech industry in all this. Property management by institutional investors, along with the operation of modern appliances by

individual homeowners, will be facilitated by appliances connected to the internet and algorithmically monitored.

Tech firms will secure perpetual and lucrative new revenue streams supplying hardware components for this entire surveillance panopticon, along with collecting fees for mandatory and frequent software updates. Remember the bored Maytag repair man? Those days are done. Technological “upgrades” to enable ultra-efficient appliances mean you’ll replace your refrigerator, washer, dryer, dishwasher, hot water heater, and every other durable good as often as you replace your smartphone. Planned obsolescence, masquerading as green and empowering, is the new normal.

Rationing in all its forms—and seldom ever called by that name—rewards the entrenched elite and harms everyone else.

Banks, institutional investors, mega housing developers, international corporations, tech heavyweights, public utilities, and public agencies all prefer high density. Environmentalism provides cover.

None of this is meant to disparage legitimate expressions of environmentalism. If one wishes to ignore the economic reasons for the high-density movement and ascribe to density proponents purely enlightened motivations, then this comes down to two competing visions of environmentalism and sustainability.

One of them recognizes the importance of building enabling infrastructure so small investors and individual families can afford to live however they wish. Some will prefer the amenities of a densely populated urban core, and others will prefer the ambiance of spacious suburbs. But the notion that Americans are running out of room or resources to build new suburbs is as delusional as the idea that only a “smart” appliance can achieve acceptable levels of efficiency and sustainability. All too often, these are merely opportunistic lies endlessly parroted by journalists who have never examined the facts.

The prevailing vision of environmentalism today, unfortunately, caters to a global oligarchy. They have decided it is in their interests, along with the interests of the planet—most definitely in that order—to preach imminent doom. Stack and pack, do it for the earth, and laugh all the way to the bank.

Edward Ring is a senior fellow of the Center for American Greatness. He is also a contributing editor and senior fellow with the California Policy Center, which he co-founded in 2013 and served as its first president. Ring is the author of Fixing California: Abundance, Pragmatism, Optimism (2021) and The Abundance Choice: Our Fight for More Water in California (2022). This article first appeared in the July 26, 2022 edition of American Greatness.



July 30, 2022

Jennifer Guetschow
San Luis Obispo County
Department of Planning and Building
976 Osos Street, Room 300
San Luis Obispo, CA 93408

Sent via email to jGuetschow@co.slo.ca.us

Dear Ms. Guetschow:

These comments are submitted on behalf of the California Native Plant Society, San Luis Obispo Chapter regarding the Draft Environmental Impact Report (DEIR) for the proposed Dana Reserve Specific Plan project (Project). We have reviewed the DEIR and find the DEIR contains several deficiencies and believe it does not fully comply with CEQA. For the reasons detailed below, we believe the DEIR must be revised and recirculated to remedy these deficiencies.

The San Luis Obispo Chapter (CNPSSLO) of the California Native Plant Society (Society) focuses on the protection of and education about native plant species and their natural habitats in San Luis Obispo County and portions of northern Santa Barbara County. The Mission of the Society is to protect CA's native plants and their natural habitats, today and into the future, through science, education, stewardship, gardening, and advocacy.

This development project contemplates a total of 1,289 new residential units on three adjoining parcels totaling 288-acres outside the Urban Reserve Line in the Nipomo Mesa area. A General Plan Amendment would be required to expand the Urban Reserve Line. Land uses would be changed from Residential Rural to Residential Single Family, Recreation, Residential Multi-Family and Commercial. The Dana Reserve Project is one of, if not the, largest proposed housing projects in San Luis Obispo County. We believe the project as proposed is too large for the site and must be reduced in size.

Thank you for the opportunity to comment on this Project.

I. The Project is inconsistent with its own identified Objectives (Project Description comments)

CEQA Section 15124(b) states "The statement of objectives should include the underlying purpose of the project and may discuss the project benefits." While the DEIR presents the objectives of the Project (DEIR at 2-13), it does not include a clear statement of the underlying purpose of the project. Furthermore, it is noteworthy that several of the objectives are in apparent conflict with Objective 9, which states "to maintain the large, centrally located oak woodland



area...and to minimize impacts to special status plants and animals on site.” The Project does little to minimize impacts to the oak woodland, oaks, and special status plant and animals. As discussed in the DEIR (Section 4.4) and below, it results in significant, unavoidable impacts to each of these resources.

II. The benefits of the Project as Listed on Page 2-14 of the DEIR are Questionable

The DEIR on page 2-14 also refers to the County’s Memorandum of Agreement and some of the benefits the County may receive from implementation of the Project. Listed here are:

- A. **“Implementing the County’s stated land use goals.”** We believe that, on balance, the Project’s inconsistencies with goals and policies, especially Open Space and Biological Resource policies, in addition to substantial unplanned population growth as discussed below in this letter, outweigh whatever land use goals are being referred to here. Therefore, this is not a benefit of the project.
- B. **“Dedication of an Open Space Easement, neighborhood park, and trail system.”** While we acknowledge the applicant’s set-aside of 17 acres of oak forest in an open space area, it is notable that this area is on steeper slopes and building in this area would be difficult regardless. According to the DEIR, and as spelled out below, the proposed Open Space protects only 4% of the oak woodlands on site, and 3% of the Burton Mesa chaparral.
- C. **“Providing for affordable housing in furtherance of the County’s Housing Element...”** Trading the unique biological resources of the Nipomo Mesa for a project that may not achieve affordable housing goals is not a benefit and is not supportable.
- D. **“Permanent conservation of 388 acres of oak woodland or similar habitat located off-site.”** As it is zoned agriculture and is located on steep slopes, the proposed Dana Ridge 388-acre site is not threatened with development. The proposed conservation easement is not functional mitigation for the significant and unavoidable impacts of the project on oak trees, oak woodlands, and oak forest habitats. This is not a benefit of the project.

III. The DEIR Fails to Adequately Address Biological Impacts

The DEIR identifies six Class I impacts to biological resources; we concur with those identified; however, we believe several have not been recognized as such (there are 10 Class I biological impacts, as discussed below) in addition to other issues.

A. Allowing Burton Mesa chaparral mitigation outside SLO County, or even off the Nipomo Mesa, is inadequate mitigation

The DEIR on page 4.4-72 discusses the impacts to Burton Mesa chaparral, specifically the loss of 35 acres. The DEIR acknowledges that on-site mitigation opportunities are limited under the



current project design; it further acknowledges that due to the limited nature of the community, even off-site mitigation opportunities are limited, and its feasibility is questionable. However, *BIO/mm-14.1*, while first stating that the protection, enhancement, and/or restoration of contiguous patches of Burton Mesa chaparral on the Nipomo Mesa is preferred, which we agree with, the mitigation still contemplates the fulfillment of this requirement by restoring Burton Mesa chaparral in Santa Barbara County (at an additional 2:1 ratio). This is not appropriate. CEQA requires that mitigation be “like for like” – allowing mitigation in an adjacent County should not be acceptable, just like allowing mitigation for loss of oak woodlands in an adjacent County would not be acceptable. While mitigation banks have been developed for wetland resources, and certain endangered species where an HCP has been prepared, we are not aware of this being done for this natural community. Why should SLO County forfeit its resources when the impact can be avoided?

B. Off-site compensation for oaks and oak woodland is not a functional mitigation, and Dana Ridge is not an appropriate mitigation site for loss of oaks and Oak Woodland (Impacts 15 and 18)

The DEIR at 4.4.74 Mitigation *BIO/mm-15.1* addresses Off-Site Mitigation for Coast Live Oak Woodland (*Quercus agrifolia* / *Adenostoma fasciculatum* – [*Salvia mellifera*]). Here conservation of oak is addressed in the context of the ecosystem in which it is found, rather than as an isolated species. CNPS supports the analysis of the substitute habitat requirements, but also notes that locating suitable habitat may be impossible to either find or acquire. This is noted under “residual impacts” of BIO Impact 15 (Class 1) on DEIR page 4.4-75.

The DEIR summarizes impacts to Oak Woodlands in Impact 18 (DEIR at 4.4-79-82), in the context of a conflict with local plans and policies. The DEIR presents, in *BIO/mm-18.1*, at least four pages of detail on how to minimize damage to oaks that are retained on site. *BIO/mm-18.2* requiring an Oak Tree Replacement Plan (DEIR at 4.4-89) appears very complex, involving the essential re-creation of the habitat at some unknown off-site location, with some 40 species of plants listed as being part of such mitigation effort or of other landscaping. *BIO/mm-18.3* requires the protection of oaks on site through the development of an Oak Woodland Protection and Restoration Plan (DEIR at 4.4-91) that includes fuel management measures. *BIO/mm-18.4* requires off-site preservation of oak woodlands and forest at a 2:1 ratio (DEIR at 4.4-92) and identifies the applicant-proposed “mitigation” of conserving Dana Ridge Ranch. CNPS has for years had a Policy of not recognizing off-site compensation as mitigation.¹ In this instance, the Dana Ridge site is not appropriate for several reasons: (1) it is not threatened with development; (2) it is not visible or accessible to the residents of Nipomo; (3) it contains steep slopes that are most likely unbuildable; (4) it is introduced solely as a false claim to mitigate the large net losses to oak resources; and (5) it would be subject to the very restrictive oak removal standards of the County Oak Ordinance, and therefore oaks on the site would be effectively protected by that ordinance in the absence of any connection to Dana Reserve.

¹ California Native Plant Society. 1998. Policy on Mitigation Guidelines Regarding Impacts to Rare, Threatened, and Endangered Plants. Available online at cnps.org.



At DEIR Section 4.4.2.2.3 Oak Woodlands Conservation, the application of Senate Bill 1334 enabling of a destructive 'oak management plan' is described. We object to the use of an 'oak woodlands management plan' as an instrument to avoid the intent of the County Oak Ordinance to conserve oak trees with the no-net-loss policy. The developer is using the 'management plan' as a vehicle to implement a clause in Senate Bill 1334 to mitigate through use of conservation easements, (PRC 21083.4 (b) (1)), although this clearly violates the spirit of the County Oak Ordinance. In addition, the allowance under SB 1334 that mitigation will allow planting an “appropriate number of trees” (PRC 21083.4 (b) (2) (A)), with obligation to maintain the trees ending after seven years (PRC 21083.4 (b) (2) (B)) would not result in any certainty that trees would survive to maturity. SB 1334 also states that plantings "shall not fulfill more than one-half of the mitigation requirements of the project" (PRC 21083.4 (b) (2) (C)).

It seems much more realistic and prudent to simply protect the existing oak woodland and have a smaller project. This avoids the costly, difficult, and lengthy task of trying to re-create the habitat, which, if successful, would take years to truly accomplish. The record is mixed at best. For example, the recent mitigation effort to replace removed oaks from the nearby Willow Road interchange at Highway 101 has gone on for at least seven or eight years at immense expense at a poorly chosen location (wrong soil type) and can be judged a failure.

C. The impacts to Pismo Clarkia, Federally and State-listed, are not accurately represented (Bio Impact 2)

The DEIR indicates that eight “micropopulations” of Pismo Clarkia occur onsite (DEIR at 4.4-17 and Figure 4.4-5), having been documented during 2019 and 2020 surveys, but not in 2017 and 2018. Bio Impact 2 identifies potential direct and indirect impacts to Pismo Clarkia. Direct, unavoidable impacts are identified as loss of 0.02 acres of the 0.2 acres occurring onsite (DEIR at 4.4-53, Figure 4.4-9) from the construction of the arterial road “Collector B.” The DEIR includes three mitigations, BIO/mm 2.1-2.3, that include obtaining an incidental take permit from CDFW, establishing a conservation easement, preparing a Habitat Management Plan, in addition to avoidance of patches identified during 2019 and 2020, in addition to the construction year. Further mitigation is required for the loss of the 0.02 acres, at a 3:1 ratio, “along appropriate boundaries of preserved oak woodland habitat areas” (DEIR at 4.4-56). The DEIR concludes impacts are significant but mitigated to insignificance. We disagree and believe the impacts are significant and unavoidable (Class I).

CNPS experts have been involved in efforts to restore Pismo Clarkia². Pismo Clarkia is indeed a “sensitive” species: the patches are shifting and delicate — they can be extinguished by too much stability or too much impact and require the underlying soil and animal associates to be suitable. Translocation of populations and topsoil stockpiling may be successful for one or two

² Arcadis, 2009. Pismo Clarkia Restoration Study 2009 (Year 1) Mitigation and Monitoring Report, PXP – Arroyo Grande Oilfield, Pismo Beach, CA. Prepared for Plains Exploration and Production Company, 5640 South Fairfax Avenue, Los Angeles, CA 90056.



years, but with continued monitoring, the translocated and managed populations head toward steep and terminal decline. There are also issues with herbivory when treatments are placed next to oak woodlands and scrub types where there is adequate cover for brush rabbits. It is also doubtful that construction can be limited to what appears to be a small 50-60 ft. corridor for Collector B, which is also a corridor for water mains (DEIR at 2-9). Given this, the impacts to Pismo Clarkia are significant and unavoidable. CNPS has access to data supporting the long-term failure of Pismo Clarkia transplantation efforts which can be supplied on request.

D. The impacts to Mesa horkelia, Nipomo Mesa ceanothus, and sand mesa manzanita are not accurately represented (Bio Impact 3)

The DEIR on page 4.4-57 identifies impacts to these species and states that impacts can be mitigated to insignificance through the implementation of BIO/mm-3.1 (preservation on or off-site at 1:1 and restoration at 2:1, respectively through a Habitat Mitigation and Monitoring Plan), in addition to BIO/mm 1.1-1.6 (construction protective measures), 14.1 (protect/restore Burton Mesa chaparral); and 15.1 (protect/restore oak woodland at 2:1 ratio). The DEIR states, on page 4.4-59:

“Therefore, it is imperative to preserve an existing population of each species at a 1:1 ratio along with enough suitable unoccupied habitat to reestablish populations prior to issuance of the grading permit. Preservation of an existing population will offset the temporal loss incurred until the reestablishment component of the mitigation can be successfully implemented. This is imperative because it is not always possible to successfully reestablish rare plants (CNPS 1998).”

The DEIR does not include locations of existing populations that would be preserved, and it is not assured that they will be found. Until these habitat areas are located and can be assured to be protected, impacts would be **significant and unavoidable (Class I)**.

E. The DEIR fails to accurately assess impacts to migratory birds (no impact identified)

It is widely recognized that both migratory and resident bird populations depend on intact, healthy habitat. The Conservation and Open Space Element of the General Plan's Goal BR-1 states: *“Native habitat and biodiversity will be protected, restored, and enhanced.”* This Project is clearly inconsistent with this Goal, in addition to Policy BR 1.1: *“Protect sensitive biological resources.”* The DEIR concludes that there is no potential impact and there are no identified wetlands or wildlife movement corridors. CNPS strongly rejects this conclusion and finds that it fails to recognize that oak woodlands are often the terminus of either wintering species or nesting species, providing major food resources to species.

F. Impacts to Nesting Birds are Significant and Unavoidable (Class I)

The DEIR on page 4.4-65 identifies impacts to nesting birds and states that impacts can be mitigated to insignificance through the implementation of BIO/mm 7.1 (pre-construction surveys



and nest avoidance), in addition to BIO/mm 1.1-1.6 (construction protective measures), 14.1 (protect/restore Burton Mesa chaparral); 15.1 (protect/restore oak woodland at 2:1 ratio); and 18.4 (off-site preservation of oak woodland at 2:1). However, the DEIR concludes for Impact 14, 15 and 18, for which these mitigations are proposed, that impacts are significant and unavoidable (DEIR at 4.4-73, 4.4-75, and 4.4-92). Given the substantial loss of habitat (Burton Mesa chaparral, oak woodland, oak forest) that would result from the Project, and the management of the Open Space that would remain, and the fact that these impacts are unavoidable, we believe that impacts to nesting birds are also significant and unavoidable Class I).

G. Impacts to American Badger are Significant and Unavoidable (Class I)

The DEIR on page 4.4-67 and 68 identifies impacts to American badger, A CDFW species of special concern, and states that impacts can be mitigated to insignificance through the implementation of BIO/mm 9.1 (badger den preconstruction survey and relocation), in addition to BIO/mm 1.1-1.6 (construction protective measures), 14.1 (protect/restore Burton Mesa chaparral); 15.1 (protect/restore oak woodland at 2:1 ratio); and 18.4 (off-site preservation of oak woodland at 2:1). As stated above under Item F., the impacts for which these mitigations are proposed are significant and unavoidable. Given the substantial loss of habitat (Burton Mesa chaparral, oak woodland, oak forest) that would result from the Project, and the management of the Open Space that would remain, and the fact that these impacts are unavoidable, we believe that impacts to American badger are also significant and unavoidable (Class I). It is likely that American badger would be extirpated from the area due to the loss of open grassland habitat. American badger home range estimates are extremely variable across their range. While they will travel up 6 miles in search of prey,³ two to two and a half square miles (1327-1549 acres) is typical for a male in California.⁴

IV. The DEIR Fails to Address Certain Issues Relating to Water Resources

A. The DEIR fails to address the dependence of the project on water imported by Nipomo Community Services District which should otherwise have been used to counter continued decline of groundwater storage in the area

CNPS concurs that the project will not directly contribute to the continuing decline in water storage under the Nipomo Mesa. This is because the project will only use imported water brought by pipeline from Santa Maria through the Nipomo Supplemental Water Project (NSWP).

Nipomo CSD has stated that the amount of imported water is sufficient to serve both this project and other potential future projects within the NCSO service area, while not contributing to pumping from Nipomo Mesa sources. The allocation of this imported water to serve future

³ U.S.G.S. Western Ecological Research Center. 2017. Accessed 2022. American Badgers in San Diego County. <https://www.usgs.gov/centers/werc/science/american-badgers-san-diego-county>

⁴ CDFW. 1988-1990. California Wildlife Habitat Relationship System. American Badger Life History Account. Originally published in Zeiner et al., 1988-1990. California's Wildlife. Vol I-III.



development may severely constrain the use of the water in recovering groundwater levels in the basin.

The Nipomo Mesa Management Reports for 2020⁵ and 2021⁶ reveal a loss of groundwater storage of 8,807 AF in 2021 and 8,582 AF in 2020. This is also demonstrated by the Key Wells Index which shows continuing declines in well levels. In addition, the Reports show that groundwater extraction from the Nipomo Mesa Management Area was 13,677 AF in 2021 and 14,313 AF in 2020. This implies that about half of the extractions were mined from storage at a time when supplemental water was importing in 3,002 AF in 2021 and 3,809 AF in 2020.

NCSD notes that supplemental water imports could be as high as 3,000 AFY, which is less than half of the ongoing deficit. This raises the issue that imported water should first be dedicated to recharging the basin beyond the quantities currently being substituted at the well head by water imports.

Wastewater from the project will be treated at the Southland Wastewater Treatment Facility, which is situated at the extreme southeast corner of the Nipomo Mesa, and close to the 130 ft. high bluff bordering the Santa Maria River. Nipomo Mesa Management Reports illustrate groundwater contours showing flow to the southwest, so that it is extremely unlikely that the Southland plant will recharge the production aquifers beneath the Mesa, and more likely returning water to the Santa Maria area. It is also possible that the enhanced riparian vegetation in the creek on the opposite side of the freeway is evidence of recharge from the treatment plant. CNPS does not find evidence that the imported water would recharge the aquifers utilized in creating the Key Wells Index.

B. The DEIR fails to accurately point out inconsistencies with County policies

The DEIR on page 4.10-13, 14, 15 lists several policies from the Conservation and Open Space Element of the County General Plan. We offer the following observations:

- (a) *General Plan Policy BR 4.1 Protect stream resources: Protect streams and riparian vegetation to preserve water quality and flood control functions and associated fish and wildlife habitat.* The conclusion of 'Potentially Consistent' cannot be made in view of the well-documented drawdown of water tables affecting Black Lake Canyon and associated wetlands. The project does not contribute to recovery of local water tables, and the increased impermeable surface generated by the project may inhibit local recharge.
- (b) *General Plan Policy BR 4.4 Vegetated Treatment Systems (Low Impact Development Techniques). Promote use and maintenance of engineered, vegetated treatment systems*

⁵ Nipomo Mesa Management Area, 2021. Thirteenth Annual Report, Calendar Year 2020. Prepared by NMMA Technical Group. Submitted April 2021.

⁶ Nipomo Mesa Management Area, 2022. Fourteenth Annual Report, Calendar Year 2021. Prepared by NMMA Technical Group. Submitted April 2022.



such as constructed wetlands, vegetated swales, or vegetated filter strips where they will reduce nonpoint source pollution from private and public development. The conclusion of 'Potentially Consistent' is speculative, as project plans show no substantial treatment areas to compensate from the pollution from the large number of vehicles and people using the area. This would include distributed waste from pets and other byproducts of human occupation not currently present at the site. Furthermore, pollutants might be concentrated at the collection ponds where natural soil processes would be less available for any current distributed treatment currently present at the site.

- (c) *General Plan Policy SL 2.1 Protect watersheds and aquifer recharge areas. Give high priority to protecting watersheds, aquifer-recharge areas, and natural drainage systems when reviewing applications for discretionary development. By design, this project increases impermeable surface and concentrates runoff water in basins situated at the perimeter of the project. Given that fine sediment and colloidal sediment load will also be concentrated in these basins, it is likely that recharge capacity will decrease over time. Table 4.10-2 shows that basin-provided storage volume totaling 1,249,104 cu. ft is more than the code required capacity of 1,086,134 cu. ft. and therefore fully mitigated. We have concerns that the hydrologic calculations do not address the expected increased intensity of storms associated with global warming and the increased chances of atmospheric rivers hitting the central coast. We also do not see any provision in dealing with any basin overspill during such events. For example, the basin adjacent to Pomeroy would spill into residential neighborhoods, and overspill from the northeast pond would spill beneath the freeway onto the highly erodible slopes on the far side.*
- (d) *General Plan Policy WR 1.9 Discourage new water systems. Enable expansion of public services by community services districts and County service areas to serve contiguous development when water is available. Strongly discourage the formation of new water and sewer systems serving urban development at the fringe and outside of urban or village reserve lines or services lines. Strongly discourage the formation of new mutual or private water companies in groundwater basins with Resource Management System Levels of Severity I, II, or III, except where needed to resolve health and safety concerns. We find that while the statutory wording of "new water system" may not seem to apply to the intention of NCS D to serve this development, this is in fact a new water system consuming imported water. As the groundwater condition is at RMS Level of Severity III, this would have prevented the developer from making a water import contract that was not channeled through NCS D, and therefore we find that this General Plan policy has been violated in spirit, if not in law. Furthermore, as we have noted in our comments at the start of this section, imported water would have been better utilized in recharging the groundwater rather than servicing new demand.*
- (e) *General Plan Policy WR 1.13 Density increases in rural areas. Do not approve General Plan amendments or land divisions that increase the density or intensity of non-agricultural uses in rural areas that have a recommended or certified Level of Severity II*



or II for water supply until a Level of Severity I or better is reached unless there is an overriding public need. The DEIR notes "The intent of this policy is to encourage infill development and conserve water resources." As this development is at the northeastern margin of the NCSD service area, it hardly qualifies as infill. NCSD water service to an area north of the proposed development was emplaced as an emergency measure after that area ran out of water.

- (f) General Plan Policy WR 1.14 Avoid net increase in water use. Avoid a net increase in non-agricultural water use in groundwater basins that are recommended or certified as Level of Severity II or III for water supply. Place limitations on further land divisions in these areas until plans are in place and funded to ensure that the safe yield will not be exceeded.*

Framework for Planning Policy 3 Preserve and sustain important water resources, watersheds, and riparian habitats.

As noted elsewhere, the developer claims that the use of 100% imported water results in no violation of this policy. However, it is clear that basin safe yield is currently exceeded, and this is a 'further land division'. There is also a net increase in water use. As the project is solely dependent on imported water subject to legal agreements that could change over time, the project might at some future time need to depend on local groundwater.

- (g) Policy WR 3.3 Improve groundwater quality. Protect and improve groundwater quality from point and non-point source pollution, including nitrate contamination; MTBE and other industrial, agricultural, and commercial sources of contamination; naturally occurring mineralization, boron, radionuclides, geothermal contamination; and seawater intrusion and salts. It is fairly obvious that human occupation will not improve over the water quality of water filtered by woodland and grassland, in spite of any mitigation imposed on the project.*

In conclusion, even though water for the project would be supplied by the NCSD using imported water, we note several apparent policy inconsistencies, and importantly, that the project does not contribute to recovery of local water tables.

V. Air Quality, Greenhouse Gas Emissions, and Transportation

Regarding Air Quality, the DEIR also identifies that the project would conflict with the SLOAPCD Clean Air Plan, including inconsistencies with Land Use Planning Strategies L-3 Balancing Jobs and Housing (AQ Impact 1, DEIR at 4.3-25). Impacts would be significant and unavoidable (Class I). In addition, the DEIR states that the project would result in a cumulatively considerable net increase of criteria pollutants in exceedance of established SLOAPCD daily emissions thresholds (AQ Impact 3, DEIR at 4.3-32). Impacts would be significant and unavoidable (Class I).



Regarding Greenhouse Gas Emissions, the DEIR also identifies that the project would generate VMT in a manner that would be inconsistent with SLOCOG's 2019 Regional Transportation Plan/Sustainable Communities Strategy and the effectiveness of the identified mitigation to reduce this impact below applicable thresholds is not certain (GHG Impact 3, DEIR at 4.8-28, 29). Therefore, even with implementation of identified mitigation, potential impacts would be significant and unavoidable (Class I). Cumulative impacts would also be significant and unavoidable (GHG Impact 5, DEIR at 4.8-30).

The DEIR Vehicle Miles Traveled (VMT) analysis concluded that the project's estimated VMT per Employee and residential VMT per capita are higher than the regional averages and that the project would generate an increase in regional VMT (DEIR at 4.17-40). Thus, buildout of the Specific Plan Area would exceed County VMT Thresholds of Significance and result in a significant impact. At buildout, the project would result in an overall increase in regional VMT and exceed County thresholds, resulting in a **significant and unavoidable impact to VMT** (TR Impact 3). This is also inconsistent with State CEQA Guidelines Section 15064.3(b). The DEIR at 4.17-48 also identifies **significant and unavoidable cumulative VMT impacts** (TR Impact 9).

VI. Section 4.11 - The DEIR Fails to Establish Consistency with Applicable Plan and Policies

The EIR identifies potential inconsistencies with policies relating to air quality, biological resources, GHG emissions, transportation, land use planning, public services, and recreation. We emphasize several of these inconsistencies below.

A. The project would be inconsistent with the County General Plan, Conservation and Open Space Element, in addition to other elements of the General Plan.

As identified in the DEIR, the project would be inconsistent with several goals and policies of the Conservation and Open Space Element: Goal BR1 (Native habitat and biodiversity protection), Policy Br 1.2, 1.4, 1.9 and 2.6 (DEIR at 4.11-30). Goal BR3 requires the maintenance of the acreage of native woodlands, forests, and trees at 2008 levels. As stated above, the project would result in the direct loss of 35 acres of Burton Mesa chaparral (97%), 75 acres of oak woodland (96%), and 21.7 acres of oak forest. The project is thus inconsistent with this Goal, and Policies 3.1, 3.2, and 3.3, which relate to native tree protection and oak woodland preservation (DEIR at 4.11-31). The inadequate 1:1 replacement ratios and the extremely low on-site replacement of only 194 of the 3,943 trees to be removed supports this determination. The DEIR on page 4.11-37 concludes that **LUP Impact 5** (loss of habitats and resultant policy inconsistency) would be significant and unavoidable. We agree with this determination and suggest that this points to another alternative.

From the standpoint of visual resources, Goal 2 requires that the natural and historic character and identity of rural areas be protected. The DEIR finds that the project "would inherently



change the visual character of the site and surroundings through the introduction of commercial, institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial landform alteration” (DEIR at 4.11-29). The project is inconsistent with this Goal.

Policy VR 2.1 requires that the review of proposed development encourage designs that are compatible with the natural landscape and with recognized historical character and discourage designs that are clearly out of place within rural areas. The DEIR finds that the project “would inherently change the visual character of the site and surroundings through the introduction of commercial, institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial landform alteration” (DEIR at 4.11-29). The project is inconsistent with this policy.

Policy VR 2.2 requires that the review of proposed development encourage designs that emphasize native vegetation and conform grading to existing natural forms, with abundant native and/or drought-tolerant landscaping that screens buildings and parking lots and blends development with the natural landscape. The DEIR finds that “Although the project site would preserve the existing oak ridge, it would severely alter the existing native vegetation and natural landforms of the remainder of the site with the introduction of commercial, institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial landform alteration” (DEIR at 4.11-29). The project is inconsistent with this policy.

B. The project would be inconsistent with Framework for Planning (Inland).

As identified in the DEIR, the project is inconsistent with Principles 1 and 2 and Policies 1 and 2 of these respective principles of Framework for Planning (note the incorrect spelling of principle). These policies guide the retention and preservation of open space and natural resources, and the rate of growth in the area (DEIR at 4.11-32).

Principle 1 relates to the preservation of open space, scenic natural beauty, and natural resources, the conservation of energy resources and the protection of agricultural land and resources. The DEIR finds that “Although the project would preserve the existing oak ridge, the project would inherently change the visual character of the site and surroundings through the introduction of commercial, institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial sensitive habitat loss and landform alteration” (DEIR at 4.11-32). The project is clearly inconsistent with this.

In addition, Principle 2, Policy 1 requires that rural areas be maintained in “very low-density residential uses.” The project through its large number of residential units and commercial uses would change the character of the area and thus be inconsistent with this policy. The DEIR on page 4.11-39 and 4.11-40 is inconsistent. On page 4.11-39 the DEIR indicates that **LUP Impact 7** is Class I, yet the textual discussion regarding Aesthetics that follows, and the table on page 4.11-40, indicates it is Class II. This should be rectified. Inherent in these principals and policies is the protection of resources. We believe **LUP Impact 7** is a Class I impact.



C. The project would be inconsistent with County of San Luis Obispo Land Use Ordinance 22.10.095 – Highway Corridor Design Standards.

The DEIR finds that “The project would inherently change the visual character of the site and surroundings through the introduction of roads, commercial, institutional, and residential development; the removal of over 4,000 mature oak trees; and substantial landform alteration within highly visible locations as seen from US 101 (DEIR at 4.11-33).

D. The project would be inconsistent with the South County Inland Area Plan.

The project would be inconsistent with several guidelines, goals, and supportive goals of the South County (South) SubArea. A key guideline requires “retain land in open space in new land divisions that will preserve oak woodlands, riparian and other important biological habitats (emphasis added), and historic place surroundings.” (DEIR at 4.11-34). The project is clearly inconsistent with this guideline in that it retains only 3% of the Burton Mesa chaparral and 4% of the oak woodland on site as Open Space. A key supportive goal is stated as follows, in part: “Promote the protection of natural resources and encourage the following in new development proposals: a. retention of sensitive vegetation...” (DEIR at 4.11-35). The removal of over 4,000 mature oak trees and 35 acres of Burton Mesa chaparral is wholly inconsistent with this. While several of the other policy inconsistencies mentioned above are discussed under **LUP Impacts 5, 6, and 7**, it is not clear where this inconsistency is addressed. We believe this to be a Class I impact.

E. The project would result in cumulative impacts associated with Policy Inconsistency.

We believe the DEIR correctly concludes “cumulative impacts associated with inconsistency with Land Use Planning Policy L-3 and goals and policies identified within the County COSE, Framework for Planning (Inland), LUO, and South County Area Plan regarding preservation and no net loss of sensitive biological resources and preservation of rural visual character would be *significant and unavoidable*. One can only conclude that the DEIR **fails to adequately establish consistency with applicable plans and policies**.

F. The DEIR mischaracterizes some plan inconsistencies as consistencies or leaves out discussion altogether.

Several of the policies in the Policy Consistency section are mischaracterized as potentially consistent, with a few specifics listed below, for the reason stated.



Policy	Intent	EIR Mischaracterization and Reason for Inconsistency
COSE Pol OS 1.1	Protect open space resources	DEIR indicates potentially consistent at 4.11-9 and 4.4-47. Inconsistent is correct. Only 17% of the SP area is protected as OS when most of the site is sensitive habitat (oak woodlands, BM chaparral, etc.) that would be lost to development.
COSE Policy OS 1.8	Maximize protection of environmentally sensitive resources	DEIR indicates potentially consistent at 4.11-9. Inconsistent is correct. The proposed OS area protects very little of the sensitive site resources. Except for Pismo Clarkia and mesa horkelia, DEIR Figure 4.4-3 & 4.4-8 shows that most sensitive species occur outside the proposed open space area and would be impacted. Stormwater basins provide minimal to no value as site resources.
COSE Policy OS 2.1	Protect, sustain, and restore open Space	DEIR indicates potentially consistent at 4.11-9. Inconsistent , as above. In addition, management by a homeowner’s association raises the possibility of future impacts.
Framework Principle 1, Pol 7	Maximize avoidance of sensitive environmental resources through site design.	DEIR indicates potentially consistent at 4.11-11. Inconsistent is correct. Considering the “large, centrally-located oak forest” (approx. 16-17 acres) to be avoidance of sensitive resources is a mockery given the prevalence of several rare plant species, >4,000 oaks, and 132 acres of sensitive habitats that will be lost due to this project (DEIR, Table 4.4-7).
Framework Principle 1, Pol 1		DEIR indicates potentially consistent at 4.11-11. Inconsistent is correct. Appears in DEIR on page 4.11-11 as potentially



Policy	Intent	EIR Mischaracterization and Reason for Inconsistency
		consistent; on page 4.11-32 as potentially inconsistent. Clarify. We believe inconsistent is correct.
Framework Principle 2, Pol 1		DEIR indicates potentially consistent at 4.11-11. Inconsistent is correct. Appears in DEIR on page 4.11-11 as potentially consistent; on page 4.11-33 as potentially inconsistent. Clarify. We believe inconsistent is correct.
Framework Principle 2, Pol 2		Inconsistent is correct. Appears in DEIR on page 4.11-11 as potentially consistent; on page 4.11-33 as potentially inconsistent. We believe inconsistent is correct.
Title 22 County of San Luis Obispo Land Use Ordinance Section 22.98.072 (H)(8), Land Use Category Standards for the South County Sub-area, Residential Rural (RR), Dana Ranch [aka Dana Reserve]	<i>"b. Oak habitat preservation. Designation of the existing oak forest habitat for open space preservation, where limited recreational and open space uses may be allowed. "</i>	Inconsistent. Restated in DEIR at 4.4-38, but consistency not addressed. The section requires conserving the existing oak forest habitat on site. Project does preserve 17 of 21.7 acres of oak forest, but it removes 75 acres of oak woodland. The Project is inconsistent for reasons noted above.
Title 22.58, LUO, Oak Woodland Ordinance	<i>"To maintain the character of the existing landscape and promote oak woodland management independent of regulation."</i>	Inconsistent. Summarized in DEIR at 4.4-37. Notably, consistency is not addressed in DEIR. The Project requests a CUP under the Ordinance. However, the Ordinance came about due to public pressure because of massive oak tree removal from Agricultural activities. It is antithetical to the intent that the Ordinance is now being used to support this request.

VII. The DEIR Alternatives Analysis is Inadequate and Fails to Comply with CEQA



The Alternatives Section of the DEIR summarizes the Class I impacts of the project (DEIR at 5-3 through 5-6), describes alternatives considered but discarded (5-8 through 5-11), and analyses the No-project alternative and five other alternatives, defined roughly as follows:

- Alternative 1- applicant-preferred alternative, which moves neighborhood 10, the affordable housing area, out of an oak woodland area and into a more centrally located area of the site, and allows as many residential units as the Project (1,289);
- Alternative 2 – La Canada Ranch alternative, which would vastly increase the amount of open space, and allow only 535 residential units;
- Alternative 3 – Residential Rural Cluster alternative, which would include a similar amount of open space as the Project, remove the commercial development, and would allow anywhere from 78 to 390 residential units;
- Alternative 4 – Development on Non-Native Grassland alternative, which would vastly increase the amount of open space to 183 acres and include a 15% reduction in residential units to 1,100 (and also changing the ratio of RSF to RMF); and
- Alternative 5 - Gradual Transition alternative, which includes open space similar to the Project, but would include a 12% reduction in residential units to 1,135 (and also changing the ratio of RSF to RMF).

The above alternatives differ in their feasibility and ability to reduce Class I impacts and inconsistencies with County plans and policies.

Significantly, the DEIR rejects an alternative, the Burton Mesa chaparral avoidance alternative, because “it may be infeasible from a cost perspective” (DEIR at 5-9). This alternative would preserve 205 acres in open space, and depending on how the units are allocated, could allow up to 600-700 residential units, although the DEIR claims 815, based on 111 RSF units, and 704 RMF units. We believe this to be the Environmentally Superior Alternative, as discussed further below, along with other comments on alternatives.

A. The alternatives presented fail to optimize for affordable housing while maximizing conservation of oak woodlands (DEIR page 5-57)

The DEIR analysis concludes for Alternatives 2 through 5 that there is failure to meet the project objective of providing a diversity of housing types..., including affordable housing (DEIR at 5-32, 5-44, 5-57, 5-69.) For alternatives 2 and 3, the DEIR uses this to argue against the feasibility or acceptance of the alternative (DEIR, as referenced above). For alternatives 4 and 5, it again uses this to downplay the feasibility of the alternatives. If this objective is so important, why weren't more alternatives that would meet this objective selected and analyzed?

Because (a) the proposed project is vastly inconsistent with the existing general plan, as evidenced Section VI above; and (b) in consideration of the need for affordable housing being listed as a supporting criterion for choice of certain alternatives; we suggest that another alternative should be considered. This alternative would minimize general plan inconsistencies



and optimize housing needs, so that the same number of units could be placed on the eastern half of the project area. Rather than have four fifths of the development unaffordable, all units could be made affordable rather than the currently proposed one fifth of the development. This could be achieved through multistory apartment units or some other such accommodation.

B. The analysis of alternatives fails to impartially determine whether a particular alternative meets or doesn't meet the project objectives.

Furthermore, it is notable that this one project objective, Objective 5 on page 5-2 of the DEIR, (“to provide a diversity of housing types...”) is used to downplay the feasibility of each of these alternatives when the same reasoning could be used in the opposite manner for Objective 9, (“To maintain the large centrally located oak woodland area as a site feature and to minimize impacts to special status plants and animals on site.”) We believe the analysis of alternatives fails to impartially determine whether a particular alternative meets or doesn't meet the project objectives. We find no language in the project description stating that the fundamental purpose of the project is to supply affordable housing, It may be an objective, but it is not a stated purpose. In fact, the project description contains no statement of purpose for the project. CEQA Section 15124(b) states “The statement of objectives should include the underlying purpose of the project and may discuss the project benefits.”

It is also worth noting that the DEIR in this section, 5.2.1, Project Objectives, does not use the word “basic” (DEIR, page 5-2), while numerous times in the alternatives analysis (DEIR at 5-9, 5-11, 5-32), text refers to “basic project objectives,” when there are no such identified “basic project objectives. There are just project objectives, supposedly equally weighted. (This is also the wording in Section 2.4, Project Objectives, in the Project Description (DEIR at 2-13).

C. The DEIR does not adequately analyze the Burton Mesa Chaparral Avoidance Alternative and rejects the alternative without providing substantial evidence of infeasibility (DEIR page 5-8)

This alternative results in development being placed at the eastern end of the site. (DEIR Figure 5-1, page 5-10). As currently defined in the DEIR, it would result in 205 acres being dedicated to Open Space; 61 acres would be devoted to residential uses (DEIR at 5-8). A total of 815 units, as opposed to 1,289 under the Project, would be possible. Notably, it is described as including four-story residential multi-family units, and two-story single-family units. This alternative is clearly the environmentally superior project. It appears to be rejected, among other reasons, due to the aesthetic impact of inclusion of four-story apartments or condominiums and two-story single-family homes. We find this to be without merit; a smaller 600–700-unit project (which would still be quite large for this County) could easily be designed to have lower buildings, which would eliminate the impact to aesthetics.



The idea that accessory dwelling units (ADUs) could elevate the impact of the project is an issue common to nearly all the considered alternatives, and not a reason to reject this Burton Mesa Chaparral Avoidance alternative.

The DEIR dismisses the Burton Mesa alternative as (1) not meeting the “most of the basic objectives” of the project, and (2) as “may be infeasible from a cost perspective (DEIR at 5-9). We reject both assertions.

This alternative keeps all the various housing types in the project proposal; it simply changes the ratios by eliminating the tract home neighborhoods that require removal of the oak woodland.

With a few minor changes, the BMC avoidance alternative could provide a greater range of housing types than the developer’s proposal. The commercial area could be slightly reduced to make room for more homes. Reviewing the project objectives, the BMC avoidance alternative can fulfill all 13 of them. To wit:

- It meets Objective 1 because it provides a mix of land uses (OS, MFR, SFR, FC, REC all shown in Fig 5-1).
- It meets Objective 2, respect for Old Town Nipomo, because village commercial can remain, simply reduced in size.
- It meets Objective 3, regarding parks and open space areas with a network of trails, because there is essentially no change from the Project, just a smaller project.
- It meets Objective 4, Rural history through arch design, since there is no change from the Project.
- It meets Objective 5, a Diversity of housing types, including affordable housing, since there is no change from the Project.
- It meets Objective 6, new employment and job training opportunities, since there is no change from the Project.
- It meets Objective 7, to enhance circulation within the Specific Plan Area and in the area, (but much of this is required *because* of the Project);
- It meets Objective 8, to integrate a network of walking, bicycling, and equestrian facilities because this remains possible in a reduced area.
- It meets Objective 9, to maintain a large centrally located oak woodland (see Figure 5-1);
- It meets Objective 10, to meet County energy requirements, since there is no change from the Project.
- It meets Objective 11, to reduce uncertainty in planning since there is no change from the Project, it’s just a smaller project.
- It meets Objective 12, for effective and efficient development of public facilities, infrastructure, and services since there is no change from Project, just a smaller project.
- It meets Objective 13, to meet the requirements of the NCSD.



No substantial evidence is provided to show why the BMC avoidance alternative is not feasible. For these reasons the dismissal of this alternative is rejected, and we request that more detailed analysis of this alternative be made, both on the basis of its financial feasibility and on its obvious position as the environmentally superior alternative.

The Burton Mesa chaparral avoidance alternative would still make the project one of the largest in San Luis Obispo County in years. It also would still allow for 600 to 700 units to be built as part of the project. It also would keep intact the great majority of the oak woodland and Burton Mesa chaparral and would preserve 90% or more of the oaks on site. For these reasons this alternative should be considered the environmentally superior alternative and should be supported instead of the developer's proposal.

D. The DEIR does not adequately analyze the Residential Rural Development Alternative, rejecting it without substantial evidence (DEIR page 5-9)

This alternative would set aside 173 acres as residential rural land, with 49 acres of open space, and 22 acres dedicated to commercial. In view of the nature of the surrounding developed land as Rural Residential, it might be surmised that future development of the Dana Reserve would follow the same path and be considered by many to have been the most likely future for the land. However, the alternatives section in the DEIR does not attempt to review the entire parcel being zoned to Residential Rural, but just those portions that are intended for housing under the currently proposed project. The concept of clustering the lots is not considered. This appears to be just one of several different use configurations, but as the most likely potential for the site in the absence of the Dana Reserve would be Residential Rural for the entire parcel, this option should have been considered, along with the potential for clustering to protect habitat. Again, the argument about not meeting the "basic" project objective relating to providing a diversity of housing types, including affordable housing, comes up, and the alternative is eliminated.

E. The DEIR does not adequately analyze the Residential Rural Cluster Subdivision Alternative (Alternative 3)

We question the land area analysis presented under the analysis of Alternative 3. DEIR Section 5.4.4.1 notes that the cluster subdivision standards (LUO Section 22.22.140.B.) and the Subdivision Design Standards (LUO Section 22.22.060.) allow for 39 Rural Residential Parcels with an approximately 0.5-acre parcel size if sewer and water were to be provided, resulting in 40 acres of footprint on the 185 acres of the project land. The DEIR also states that a minimum parcel size of 2.5 acres would be required if water is not provided, totaling 97.5 acres for the 39 parcels. However, there is no analysis of the degree and location of clustering addressed in Alternative 3, where the infrastructure costs are considered a negative factor (*This alternative may preclude annexation into the NCS D due to infrastructure costs. If annexation into the NCS D does not occur, this alternative would rely on domestic water and sewer infrastructure and the minimum lot size would be 2.5 acres.*) If the clustering is restricted to the eastern end of the parcel, and is not distributed over much of the parcel, infrastructure costs would not be such a significant issue, and



the footprint would be limited to the 40 acres with no violation of the Conservation and Open Space Element of the General Plan.

The DEIR identifies this residential rural cluster alternative as the environmentally superior alternative. While it can be agreed that this alternative is superior to the proposed project, it is not environmentally superior to the Burton Mesa chaparral avoidance alternative, which has been questionably eliminated, and is therefore improperly identified. Alternative 3 could result in “edge effects;” a phenomenon well known to ecologists. This effect states that the edges of a habitat are more prone to degradation from outside than the interiors areas of such habitat. The non-native habitats of the housing complex, with their introduced plants (and weeds), and dogs and cats, can quickly invade neighboring undisturbed areas. Having clusters of such housing will increase the amount of “edge”, thus making it easier for such intrusions to occur. This phenomenon has been observed again and again, and although such a development approach may leave more oak trees, it reduces the intrinsic value of the habitat and reduces that habitat to essentially its scenic character. It should be noted that this alternative is presented only in concept; much would depend on how and where the clusters were sited.

We therefore reject the selection of Alternative 3 as Environmentally Superior.

F. Alternative 4 also fails as the Environmentally Superior Alternative

The Burton Mesa chaparral avoidance alternative and Alternatives 2 and 4 result in the greatest amount of open space (205 acres, 173, and 183 acres, respectively) and thus preservation of biological resources. Alternative 4 would result in 1,100 units within 80 acres and is considered feasible (DEIR at 5-57). Alternative 4 is clearly better than the proposed project based on the increased acreage of protected oak woodland through a 15% decrease in housing and other land uses. However, the edge effects issue removes this alternative from consideration.

We therefore conclude that a slightly revised Burton Mesa Chaparral avoidance alternative is the environmentally superior alternative, and that its rejection as infeasible is without substantial evidence.

G. Evaluate a Proposed Alternative to Reconcile the oft-stated Need for Affordable Housing found in the Alternatives Analysis of the DEIR while achieving Minimal Impacts to Natural Resources and minimizing inconsistencies with the General Plan

CNPS concurs that the DEIR shows that the Project and its Alternatives cannot minimize impacts to natural habitat to a degree that would be possible if the County's need for affordable housing were to be applied to this entire project. As noted above, CNPS, given a choice of alternatives, were it not for edge effects, would prefer Alternative 4, but we concur that this does not include sufficient affordable housing. We prefer the Burton Mesa Chaparral avoidance alternative, which has been inappropriately rejected. None of the Alternatives or the Proposed



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Project sufficiently address the affordable housing crisis, despite being one of the largest housing projects proposed for the South County. We therefore strongly recommend a new alternative be considered: one that includes all units being built as affordable in a much smaller unit footprint, and that these units be concentrated at the eastern end of the project area. To best match developer objectives, as required by CEQA, we recommend that this new alternative be allowed as many residential units as originally planned but concentrated in a much smaller area by using multiple unit buildings. In this way impacts to the oaks and listed species, which are considered significant and unavoidable in the existing analysis, would be greatly reduced.

In summary, allowing insufficient mitigation and a gross violation of the General Plan by a developer is not in the best interests of the people in the County. As CEQA states that alternatives must, to a certain degree, meet the objectives of the developer, CNPS suggests that raising densities on a smaller footprint *does* meet a major objective, while also addressing a housing need that is insufficiently addressed by the current project.

VIII. Conclusion

The Dana Reserve Specific Plan Project must be reduced in size. The project site contains unique resources that need not be traded for the development of housing. There are multiple significant and unavoidable (Class I) impacts of the project that should drive this reduction in size. This is one of, if not THE, largest project(s) in SLO County. There are numerous and vast inconsistencies with County policies, specifically the biological resource policies of the Conservation and Open Space Element of the General Plan. The alternatives analysis eliminates what we believe is a viable alternative. Given this, we believe the DEIR should be revised and recirculated to reflect that the Burton Mesa chaparral avoidance alternative is the environmentally superior alternative, and it must be analyzed along with other alternatives.

Thank you for your consideration of these comments.

Sincerely,

Melissa Mooney
President

California Native Plant Society, San Luis Obispo Chapter

Jennifer Guetschow

From: Natalie Rozier <natalierozier@gmail.com>
Sent: Sunday, July 31, 2022 6:50 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve EIR comments

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Dear Ms. Guetschow,

I am writing to you regarding the proposed Dana Reserve development in Nipomo, CA and the recent Draft Environmental Impact Report (DEIR). It is clear from reading the DEIR that the negative impacts resulting from the Dana Reserve Project will NOT overcome the economic benefits of the project. The Dana Reserve proposal is a cash grab by developers who have prioritized profits by proposing an overly large housing development with disregard to the negative impact a project of this size will have on traffic, the environment, schools, and daily life in South County.

As a mother raising my family in Nipomo, I am acutely aware that the social services in Nipomo are spread woefully thin (health care, schools, parks, police, etc.). To introduce an additional 5000+ residents in a relatively small area, would be devastating for Nipomo. Nipomo High School is already overcrowded at 146% of capacity. Additionally, Lange Elementary, Dana, and Nipomo Elementary are all overcrowded. Nipomo has ONE park to service all its residents. The proposed Dana Reserve Project doesn't do anything to address the lack of infrastructure in Nipomo and doesn't add anything to the community while placing an unreasonable burden on the community by providing more residents than there are services available for. The proposed park site in the middle of the development has been noted by the County Parks as being "to small and encumbered with drainage features that should not count towards acres used of park land" in their comments on the DEIR. Additionally, the developer has requested to waive Quimby fees, which means all maintenance funds will need to be drawn from an HOA, further impacting the affordability of the development. The fact that the developer has requested to waive Quimby fees when they stand to make well over one billion dollars is just further evidence of the greed of the developers and the fact that they are not interested in acting in the best interests of the community.

It is also questionable how "affordable" these homes might be. It is currently stated that the homes will start in the \$600k range, but we all know that with inflation and rising construction costs that a few homes might sell for \$699k, but most of them will sell for significantly more by the time they are built. The developers #1 interest is in their investors and in maximizing profits. They aren't in this because they are altruistic citizens of the community wanting to help families buy affordable homes. The reality is that in order to be "affordable," many of these houses will house multiple families, further adding to the overcrowding and traffic in all of Nipomo. Additionally, the developer is clearly not interested in the long term affordability of the neighborhood as evidenced by his request to waive Quimby fees and pass those expenses onto members of the community. Like taxes and death it is a fact that HOA fees increase over time and increasing fees further threaten the "affordable" benefits of this project.

In a time of unprecedented drought, it is unconscionable to allow a developer to build 1300 homes without a solid water recycling line plan to supplement water resources. It is our obligation to include all water saving measures at our disposal when building in a drought stricken area, not just leave it to chance that the developer will do it when the situation is past desperate. A water recycling plan for the community and recycled water line should be included in the project.

Additionally, there are SIX class I impacts to biological resources identified in the draft EIR. All of them are concerning, but it is especially galling that the developer is trying to greenwash this project by saying he is preserving a few oaks in the middle of the project and buying a hilltop parcel (dana ridge) with oak trees. The Dana Ridge is not an appropriate mitigation site for loss of oaks and Oak Woodlands. Furthermore, allowing Burton Mesa chaparral mitigation outside SLO county, or even off the Nipomo Mesa, is inadequate considering these habitats are not adjacent to the project site.

By allowing the developer to get away with clearcutting 3,948 oaks we are setting the precedent for future developers to clear large swaths of trees in prime habitat for oaks and other sensitive species, in favor of undesirable locations on the fringes of where oaks can survive, leading to a total net loss of oak trees in the county. This undermines the existing Oak Tree Ordinance for all future developments to come into the county and causes the loss of this sensitive and very important asset within our community.

As it stands, the current proposal is overly dense with homes and is not in accordance with the South County Area Plan. It was clear in the EIR that the development priorities for this project site were:

1. Open space uses
2. Industrial park retail uses
3. Commercial retail use and residential areas

The prioritization of these land uses clearly show that the preservation of on-site oak woodlands and development of commercial and industrial uses were intended to be the primary focus of future development for this site. Additionally, the proposed model wants to incorporate commercial sites within mixed use space has proven not to work in this area. I'm not the only person who remembers that the Trilogy developers promised a market, a hotel, a sheriff station, and other amenities that never came to fruition. Why would this be any different? The long term plan for this site was not to cram in as many homes as possible. Furthermore, the project creates a zoning conflict and sets up the potential for a ton of neighborly disputes by changing the zoning from Rural Residential to Single Family (SF) or Multi Family Residential zoning (MFR). Many, if not most, of the properties surrounding this site have chickens, horses, cows, peacocks, donkeys, goats, etc. To have all of these homes with different zoning packed into such a tight space is a recipe for neighborly disputes and disagreements.

The reality is that the negative impacts from this project could make Nipomo unlivable and could be a blight on our entire county. If each household has two vehicles, that is a minimum of an extra 2600 cars flowing with only 2 freeway exits available, Willow and Tefft. Traffic in this area already gets backed up at commuting times and during school drop offs and adding an additional 2600 cars would result in a gridlock of traffic on surface streets, as well as the 101. I live off Willow, neighboring the proposed site, and can testify that the traffic studies were done during the first weeks of Covid shut down when there were almost no cars on the road. Currently, when I turn right onto Willow from Hetrick it takes me up to 5 minutes because the flow of traffic is so heavy and steady. I don't even need to get into the congestion on Tefft because we all know what a nightmare it is on Sunday's when the swap meet is in session. Imagine that gridlock, but 7 days a week! A few times each day!

While we all agree that the county needs to add additional housing, especially affordable housing, allowing a mega development with 1300 homes shoved into one spot by the freeway in Nipomo is not the responsible, environmentally friendly choice and certainly not what is best for this town and SLO county. I hope you will listen to the citizens who live in this area and love their community and want what is best for everyone. I have yet to meet a neighbor or Nipomo resident who is happy about the Dana Reserve Project as it currently stands, or who thinks it will bring any benefit at all to the community. The reality is that we should be honoring the South County Area Plan and trying to preserve as much of the oaks and woodland as possible, add desperately needed commercial amenities to Nipomo, and add a modest number of sustainable and affordable homes to increase housing stock in the county.

Thank you for your time,

Natalie Rozier

Nipomo Resident

RCV# 8-1-22

July 31, 2022

Ms. Jennifer Guetschow, Project Manager
County of San Luis Obispo
Department of Planning and Building
San Luis Obispo, CA. 93401

RE: Dana Reserve Specific Plan Environmental Impact Report

Dear Ms. Guetschow:

I appreciate the opportunity to comment on the Draft Environmental Impact Report (DEIR) on the above-captioned project.

The DEIR points out numerous shortcomings of this project, which is unnecessarily destructive of valuable natural habitat, will exacerbate the area's jobs-housing balance, and violate many existing County policies or require them to be changed simply to accommodate this project. All of these changes strike me as a classic case of the tail wagging the dog, and I wonder why such a course of action is even being considered.

I will limit my main comments to the biological impacts of the project, and to certain the alternatives being considered (and not being considered).

Loss of Oak Woodland and Associated Habitat is Excessive and Unnecessary. County policies call for protection of the oak woodlands of the Nipomo area, yet this project proposes to destroy some 4,000 oak trees (the number keeps growing) and associated habitat, including a rare local vegetation type known as Burton Mesa chaparral, with no real mitigation for such massive losses.

The developer's proposal to dedicate a conservation easement over a piece of unrelated land miles away is not really mitigation. It does nothing to mitigate for the massive losses being proposed. Mitigation means to restore or replace that which is lost, and dedication of an easement does not plant or nurture one new tree to replace those lost. Planting of oaks as street trees is likewise not really mitigation. The loss is of a functioning habitat. It is not only trees that will be destroyed; it is the entire fabric of the ecological community. The pages of mitigation regarding the care for and caution around the fraction of the oak woodland that would be left on-site is comical in comparison to the destruction being countenanced.

The DEIR proposal to locate, secure, and initiate the creation of an entirely new oak woodland on an unknown and unnamed site as mitigation is disingenuous at best. There is no location, cost estimate, or timeline for any such effort. Furthermore, the likelihood of success of such an effort can be questioned. Having been involved in many mitigation projects in my 40+ year professional career, I have seen such efforts range from complete success to complete failure; but unfortunately complete success is rare. One need look no farther afield than the efforts—still ongoing—to mitigate for the oak habitat losses occasioned by the nearby Willow Road extension project to see the challenges that can face such projects, particularly when poorly planned or poorly laid out.

In similar manner, the DEIR proposes as mitigation to locate, secure, and initiate creation of a new population of Burton Mesa chaparral, hopefully on a property somewhere in the vicinity, but if not, somewhere in Santa Barbara County. Again, this effort has no location, no cost estimate, and no timeline either for its initiation or for its completion. Such a paper requirement does not constitute mitigation. In any case, requiring such mitigation before beginning of grading activities, but after approval of the subdivision of the land, is too late to ensure conservation on-site. Any such mitigation requirement should be imposed (and subject to bonding) prior to approval of the subdivision of the property, in order to ensure that mitigation in fact can and does take place.

The author is aware of certain State legislation which permits the use of off-site dedications of land as suitable mitigation for losses incurred by a project. It is noted, however, that this law is permissive and not obligatory. It does not require a granting authority to accept such off-site dedications. In certain circumstances, for example, where vernal pools are being lost, such a law may make sense. This is because vernal pools require a strict conjunction of soils, topography, hydrology, and plant and animal life to be functional, and such conditions are extremely difficult to create artificially.

In the current instance, the project sponsors are seeking many changes and exemptions to, and exceptions from, existing County policies on many fronts. The lead agency is reminded that it is under no obligation to accept any of them.

In the case of Dana Reserve, a smaller project would easily avoid most of the impacts (avoidance being the first choice in mitigation), leave room on-site for mitigation of impacts which do occur, and would dispense with the need to locate and secure an off-site location to replace any losses. It would also benefit from the same soils, topographical, hydrologic, and climatic conditions as the areas being impacted. This makes much more sense than destroying the on-site oak habitats and then hoping to replicate them somewhere else at some future date. For these reasons, the choice of a smaller project, preserving the oak woodland, is the most beneficial way to move forward.

Regarding Alternatives to the Project. The DEIR identifies several alternatives to the project as required by CEQA, but then proceeds to give each of them short shrift, claiming them to be unable to meet community objectives, or claiming them to be "infeasible". No compelling evidence is presented to back up many of these claims.

The author is particularly surprised by the discussion of the so-called "Burton Mesa chaparral avoidance" alternative, or BMCA, which would avoid the great majority of impacts to the site's natural resources. It is stated that this alternative does not achieve the project objectives, and is not feasible, but without providing any explanation of why that is so. The author disagrees. Having reviewed the objectives listed, it is seen that this project would in fact meet all or nearly all of them. This alternative, though only about one-half of the size of the proposed project, would still be one of the largest developments proposed in the County in years.

In January of this year the author, who had been invited to submit a concept for the site, did so, and that concept (which was quite similar to the BMCA alternative) would have had the full range of housing types found in the project; only the ratios were changed to emphasize the lower cost housing types, by removing the tract homes proposed where the oak woodland is. With the median home price in San Luis Obispo County now at (or exceeding) \$900,000, this seems like a very good way to go.

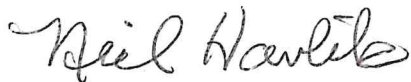
Suppose that the BMCA alternative had been the developer's proposal. Would it have been rejected by the County as infeasible? If so, why? This seems to be a spurious claim with nothing to back it up.

The same is true of other alternatives, such as the "non-native grassland" alternative, and the "rural cluster" alternative: both are stated to be feasible, and the rural cluster alternative is claimed to be the environmentally superior alternative as required by CEQA, but again there is little or no information to support either of these claims. In the author's view, the non-native grassland alternative has the disadvantage of cutting up the oak woodland into two smaller islands and placing all the surrounding areas into development. Thus, while this alternative would presumably leave the oak woodlands intact, they would be essentially islands surrounded by development, diminished in size, connectivity, and ecological value. In the case of the rural cluster alternative, no particular design or layout is presented, and much would depend upon such design to determine the nature and extent of the impacts. This leaves basically nothing to back up the assertion that this alternative is the environmentally superior one.

Recommendations. It is recommended that the DEIR be rejected as inadequate for its lack of specificity in identifying a location for the proposed mitigation for the tremendous and basically unacceptable losses to the oak woodland and chaparral habitats on the Dana Reserve site; and for its inadequate treatment of alternatives to the project which would greatly reduce the impacts of the project.

It is further recommended that the project be denied and the project sponsors be directed to resubmit a project that is more in line with existing County policies and which will be more environmentally benign. The BMCA alternative or something like it is the author's preferred alternative. That alternative could still be a large and complex project, but one that could help meet the housing needs of the County in a way more compatible with existing County policies and with the need to respect and conserve the great majority of natural environment of the area.

Thank you again for the opportunity to comment on this sadly misconceived project.



Neil Havlik, PhD.
672 Serrano Drive #11
San Luis Obispo, CA. 93405

From: Nick Hernandez <nickthequick805@outlook.com>

Sent: Sunday, July 31, 2022 10:13 PM

To: Jennifer Guetschow

Subject:[EXT]New Nipomo development

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links.

As a low-income resident, I oppose the addition more upper income housing that only rich retirees can afford. Do I need to move to Santa Maria now to be able to afford the rent? Please kill this Dana Reserve development for the sake of all low income residents in south county.

-N



Northern Chumash Tribal Council

A Native American Corporation
PO Box 6533, CA 93412 (805) 356-6149



County of San Luis Obispo
Department of Planning and Building
ATTN: Dana Reserve/Jennifer Guetschow
976 Osos Street, Room 300
San Luis Obispo, CA 93408

RE: Dana Reserve Specific Plan Draft Environmental Impact Report

Dear Ms. Guetschow:

The Northern Chumash Tribal Council (NCTC; the Tribe) submits the following comments on the Cultural Resources and Tribal Cultural Resources sections of the Draft Environmental Impact Report (DEIR) for the Dana Reserve Specific Plan (the Project). In general, we find these sections of the DEIR are poorly written and demonstrate a general lack of familiarity with the local resources. Many of their conclusions and recommendations aren't substantiated with facts or reasonable assumptions based on facts. Moreover, the requirements of CEQA regarding the evaluation of California Register of Historic Places (CRHR) eligibility, impact assessment, and mitigation are skirted or ignored outright.

Section 4.5.1, Existing Conditions

The section does not demonstrate any understanding of the local history, prehistory, or archaeology which is the necessary context for the assessment of impacts on sites in the Project area. It completely ignores the Chumash history of Nipomo and lacks any discussion of local sites of importance to which the resources in the Project area may be related. The ethnographic overview even fails to mention the most relevant Chumash place in the region, *Nipumu*, the Northern Chumash village for which the current town of Nipomo is named. This is a substantial oversight that demonstrates the lack of knowledge regarding the study area. CA-SLO-809, the archaeological site associated with that village, is less than a mile away from the Project and should have been mentioned as the most substantial and well-known site in the area, even though it's beyond the arbitrary quarter-mile radius of the records search. The excavation at CA-SLO-809 is still the most substantial excavation in the local area; its findings provide the basis for the local prehistoric cultural sequence and should have been referenced in the overview section. Another omission has to do with the well-known discovery of a Clovis point in the hills surrounding the valley, substantiating the Late Paleoindian use of the area.

The Euro-American history of Nipomo is simply glossed over as well. There is no historical overview, even though the ranching history of the area is mentioned in passing and one historical archaeological site was identified in the project area. The Dana Rancho gets no mention anywhere, a considerable oversight since it provides critical historical context for the study area (and considering the Project name), even if the Adobe itself is more than 0.25 miles distant. In general, this section is poorly written, sloppy, and internally inconsistent. In addition to the omissions already noted, it also contains factual errors. For example, Mission San Fernando Rey is not in the Chumash territory, as stated on pages 4.5-2; it is in the Tataviam/Gabrielino area.

Section 4.5.13, Existing Cultural Resources

The DEIR glosses over the history of the project area and writes off one site (P-40-002271) as insignificant because it is “undoubtedly historic” (pg 4.5.2-8) without providing evidence or explaining how they determined its age or reached this judgment regarding its significance. This information should be provided. Given the proximity of the Dana Adobe and the known historic uses of the area, this judgment should be reconsidered (or at least better supported).

Since all these sites seem to contain marine shells that can be dated using radiocarbon, please explain why that wasn’t done. Such dating would have helped in evaluating the eligibility of these sites for the CRHR and assessing potential Project impacts.

It does not appear that there has been any study of the proposed offsite conservation area/mitigation lands over in the hills on the other side of the valley. This area is part of the Project and should have been studied at the same level. In our experience, there are activities related to biological mitigation, water and range management, and other activities that could occur on these lands and would definitely impact any cultural resources present.

Section 4.5.1.3.2, Native American Coordination

This section refers to a positive response from the Native American Heritage Commission (NAHC) but there was no effort to identify the nature or location of sacred lands in the Project area so they could be protected. The reader is referred to Section 4.18 for a description of tribal consultation, but that section doesn’t discuss sacred lands and the NAHC response was not disclosed to NCTC or other tribal consultants. We received no response to our additional inquiries to the County about this matter. For these and other reasons, consultation is not completed to our satisfaction. If there are identified sacred sites they have to be considered in the early planning stages so they can be respected and protected. The County should require an ethnohistoric study to identify sacred sites so Project impacts can be identified and mitigated.

Section 4.5.4, Impact Assessment and Methodology

The County will assume that archaeological sites DR-001, P-40-2132, and P-40-2273 are eligible for the California Register for the purposes of the project, and are thus historical resources under CEQA, but the DEIR does not explain what qualities these sites have that would make them CRHR-eligible (Section 4.5.4, pp 4.5-16). Please provide this information. The DEIR avers that this assumption is based on the results of the Extended Phase 1 (XP1) investigation, but the XP1 study was only intended to define the vertical and horizontal extent of identified archaeological resources (i.e., the boundaries of the archaeological sites—see Morgan Bird’s 12-13-21 letter report to Senior Planner Jennifer Guetschow). The XP1 was helpful in defining the structure and content of the resources but does not constitute a significant evaluation, which is necessary at this point. This is a critical omission since it is

the Project's effects on those significant qualities of the sites that determine whether an impact is significant. How is the Tribe or the public judge the validity of the County's assumptions or the efficacy of the proposed mitigation without this critical missing information? Please explain why the cultural resources in the Project area were not evaluated for significance. This deficiency must be remedied in order to adequately determine the age of the cultural resources, identify their function(s), define the qualities that make the sites significant and justify recommendations regarding significance, avoidance, and other mitigation measures.

A letter to your department dated 12-13-21 from Cultural Resource Specialist Morgan Bird refers to a subsequent "comprehensive technical report." This report has not been supplied to the Tribe, and we request that it be provided now and that the comment period on the DEIR be extended for 30 days from our receipt of said document to allow us additional time for review and comment.

Section 4.5.5, Project-Specific Impacts and Mitigation Measures

Mitigation measures (MM) CR/mm-1.1 and -3.1 delay environmental review of off-site improvements and defer identification of impacts and MMs to some future unspecified time. They declare that unidentified historical and archaeological resources could be impacted but that those impacts would be less than significant with mitigation. However, these mitigation measures only require preparation of reports and do not specify that resources shall be avoided, or other mitigation. It is improper and inconsistent with CEQA requirements to rely on a future plan or report without additional public review as mitigation now. It is not necessary to know the "precise location" of the offsite improvements. A general area for these potential effects should be identified now, and the architectural/historical/archaeological studies should be completed and reported in the EIR so that design changes can be implemented to avoid any significant resources.

Please clarify whether the known archaeological sites shall be avoided or not? The EIR uses squishy language. CR/mm-2.1 says the parts of the sites found to contain subsurface deposits "shall be avoided." But then CR/mm-2.2 says, essentially, "oh that's okay, if we can't we'll do data recovery." Which is it, who decides, and when, and what are the circumstances that would preclude avoidance? None of this is specified, as it must be.

Since data recovery through excavation is not the only feasible mitigation for the impacts of this Project, the EIR must explain why avoidance and preservation in place are not feasible or why other measures better mitigate the impacts.

The DEIR notes that subsurface archaeological deposits exist in some small areas, and those areas are "potentially significant." These small areas where they identified subsurface layers are to be protected as ESAs, but the areas are not specified and we're not told where we can find that information, even if it's confidential and controlled. The Tribe requests detailed maps showing the locations of all proposed ESAs, and further requests that the comment period of the DEIR be extended for 30 days following receipt of those maps to allow sufficient time for review and comment.

The argument that surface deposits without identified subsurface components are not eligible for the CRHR is based on a highly contingent set of assumptions that are not specified in the DEIR and requires substantiation, which might well have been obtained if a realistic program of site testing and evaluation had been carried out. Without meaningful testing results, however, such a conclusion is not justified. For example, a sparse surface deposit that is 8-10,000 years old might well be judged significant, while a similar deposit of only 500 years might not. Since we know that sites of Clovis age (as much as 12,000 years old) exist in the Nipomo area, it is premature to disregard these sparse surface deposits.

Regarding CR/mm-2.2, what does it mean to say “The Data Recovery Plan will be tailored to the level of physical disturbance at each resource (if any)”? First of all, if there’s no physical disturbance why do data recovery? But more importantly, data recovery should be tailored to the significant qualities of the sites and the amount of data needed to answer the questions in the research design. It has nothing to do with the extent of disturbance. If the intent is to have specific measures for the amount of hand excavation, linked somehow to the amount of site disturbance, then that must be specified in the DEIR in some concrete way (either volume of excavation, or percentage of the site, or a ratio of the volume of site disturbance, or some other concrete measure) so the Tribe has an opportunity to review and comment. Such decisions cannot be deferred to some unspecified future time.

When data recovery is the only feasible mitigation, a data recovery plan “shall be prepared and adopted prior to any excavation being undertaken.” There are specific requirements for data recovery plans. Even though the CEQA Guidelines allow for certain details of a mitigation measure to be specified project approval when it is impractical or infeasible to include those details during the project's environmental review, it seems perfectly feasible and practical to include the data recovery plan as an appendix to the DEIR in this case. Moreover, it will be impossible to gauge the adequacy of the measure, whether it is proportional to the impacts, and whether there are any residual impacts without knowing the details of the plan.

MM CR/mm-2.3 calls for a Cultural Resource Protection Plan which may or may not include some level of tribal and archaeological monitoring. The language is unclear. Given the nature of archaeological resources on the Nipomo Mesa there is a high likelihood that sites will be discovered during construction. For that reason, tribal and archaeological monitoring of all ground disturbance should be required as a specific mitigation measure, and not just in the vicinity of known sites. The DEIR should provide details regarding the extent of monitoring required, when it shall occur, by whom, and under what conditions; such details are all omitted. These critical details cannot be deferred to some later, unspecified time. Again, the Tribes and public then have no way of judging the adequacy of the monitoring effort to mitigate impacts.

Along these same lines, there is no explanation of just what should happen when previously unidentified sites are discovered, or when unanticipated artifacts and features are found in the known sites. Please include this information in the DEIR. Definition of these mitigation details cannot be deferred; they must be included as specific measures in the EIR.

Regarding CR Impacts 4 and 5, any impacts to human remains would be significant and cannot be mitigated to less than significant levels by simply following state and law and local policy, as proposed in CR Impact 4. Simply following the law is not mitigation. We can see where you want to go with this—yank out the bodies and move on—but that’s not explicitly stated as a MM. The text (page 4.5-22) states “The NAHC would determine a Most Likely Descendant (MLD) to complete an inspection of the site within 48 hours of notification and recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.” Is removal and analysis the only option? How do you know that’s what the MLD will recommend? Leaving our ancestors' remains in place is always the preferred option, and there are many ways to accomplish that, but it is not mentioned as an alternative. Moreover, the MM does not even mention reburial if the individuals are moved!! One could assume that’s what the author thinks would happen, but where would that occur? Removing and reburying human remains does not mitigate impacts to less than significant levels. This would be a Class I (significant unmitigable) impact. What about leaving them in place? Redesign to avoid? Not even considered! This section is completely inadequate.

The Tribe considers the cumulative impacts of this Project to be substantial, and that the proposed MMs are not adequate to mitigate those impacts. We request that the County require a specific MM that more comprehensively considers the broader cultural geography of the Nipomo Mesa and surrounding area, specifically geared to the cumulative impacts on cultural values and regional research.

Regarding tribal consultation and tribal cultural resources (Section 4.18), NCTC maintains that AB52 consultation has not been completed. We have had ongoing discussions with the County and developers' representatives that have not been concluded and need to continue.

TCR/mm-1.1 calls for the construction of a repatriation vault within site DR-001. This mitigation will have a significant residual impact on the site which is not addressed. Section 4.5 calls for avoidance of the site, so these measures are inconsistent and conflicting.

TCR/mm-1.2 calls for the incorporation of tribal themes and placenames into the project design, but provides no performance standards and designates no party responsible for ensuring the measure is carried out. This must be remedied.

We reiterate our mission to protect the natural and cultural resources of the Project area and to utilize this site for the interpretative benefit of the public. We extend an invitation for further collaboration with the County and public agencies to assist the Project in the development of educational opportunities at the site.

Sincerely,

Violet Sage Walker,
Northern Chumash Tribal Council Chairwoman

Jennifer Guetschow

From: Ruth Danielson <rdanielson@msmarketintel.com>
Sent: Monday, August 1, 2022 3:42 PM
To: Jennifer Guetschow
Subject: [EXT]Comment on the Proposed Dana Reserve Project

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

SLO Planning Commission
Attn: Jennifer Guetschow

Dear County Commissioners:

I am writing to express my concern regarding the Proposed Dana Reserve Project, a development project that will develop 288 acres in the Unincorporated County Community of Nipomo.

After reading the Draft Environmental Impact Report (DEIR), the Unmitigatable Significant Class 1 issue which concerns me most is the **environmental and biological impact of the planned development** in a sensitive biological and the dire water issues our county and state are facing. It is time to prioritize the environment if we want to sustain the lives we love here on the Central Coast – and indeed to preserve life at all.

My other concerns include:

- Imbalanced housing vs job creation
- Increased traffic congestion
- Air quality, exacerbating our existing problems since the ever-expanding Trilogy development
- Land planning: Multiple elements of the project are out of alignment with the south county area plan, including how this land was intended to be developed vs the present project
- Biological impacts –
 - 3,948 oak trees to be removed
 - federally endangered species to be displaced or destroyed
 - special habitats to be destroyed
- **Again, the water situation is dire and this development will only make it worse**

The limited social and economic benefits of the Dana Reserve Project will not outweigh the many significant impacts of the project. The benefits will be felt by a few, while the negative effects ripple out to everyone – and to the essential non-human inhabitants of our community.

As a citizen of Nipomo, I ask that this project be denied until revised to such an extent that the impacts of the development are greatly decreased. We owe it to Nipomo to present a project that does not significantly decrease the quality of life for existing residents and retains the natural beauty of the land given to Captain Dana in 1837.

Sincere thanks,

Ruth Danielson
Nipomo Resident
rdanielson@msmarketintel.com

Jennifer Guetschow

From: Sandy Christiansen <mrschristiansen2012@gmail.com>
Sent: Sunday, July 31, 2022 10:16 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve - We Oppose

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Dear Ms. Guetschow,

We oppose the Dana Reserve Development Plan and wish to have our concern and opposition recognized. Our basic concerns include the following:

Traffic - ~4800 new residents in such a small space is going to create havoc on local traffic, particularly during commute times and school start/stop times. Ten Oaks, despite what local politicians claim, already has an excessive amount of traffic during those times...please note the traffic survey the county conducted on Ten Oaks was during Covid in July of 2020 so it does not reflect our "normal" traffic load. Additionally, the corner of Glenhaven and Hetrick is a hairpin turn, and very dangerous. Additional traffic is only going to make that turn even more treacherous. Please consider closing Hetrick/Glenhaven at the hairpin turn and opening Hetrick all the way through to Pomeroy so that the Pomeroy to Willow shortcut via Ten Oaks is no longer necessary. Opening Hetrick and closing Glenhaven eliminates the need to come to Ten Oaks.

Additionally, these homes are being proposed/ marketed as being beneficial to workers and that residents would not need to contribute to traffic...that they can guarantee they would reduce vehicular trips. This is preposterous. The ratio of jobs per capita in Nipomo is lower than any other town in the county, and we are on the border of Santa Barbara county. If you build homes for workers here, they will have to commute. And they will be closer to jobs in Santa Maria than in our own county. If these homes are truly for the "working class", then they should be built where the jobs are...further north, in the middle of the county! Otherwise, you're just housing Santa Maria's work force. It makes no sense, and it will definitely create more traffic on both the city streets and the highway.

Light, Noise and Air Pollution - the development plan is too dense, and will illuminate our night sky, and bring added noise and air pollution. Please require a large setback and extra tall natural screen along the western boundary against Hetrick and reduce the number of homes.

Devaluation of real estate in adjacent neighborhood - our homes on Ten Oaks are worth \$1M+ and all sit on approximately one acre or more. The new residences are dense housing, even the "larger" homes, and are not of like kind to the adjacent neighborhood. This will devalue our homes. While I understand this is a "not in my backyard" argument, the devaluation of our neighborhood will impact Nipomo as a whole. Please significantly reduce the number of homes and require larger lots so that they are of like kind to the surrounding established neighborhoods.

Water requirements in severe drought - given the current state of our State with regard to water use and mandates due to drought, we do not trust the agreement with Santa Maria to be enough of a guarantee that we will not be in a shortage when these new homes are added. Contracts are broken all the time and the water supply this project is relying upon does not even come from the same county. Santa Barbara county has no strong reason to support the water demands when severe shortages become an issue. They will break the contract and supply Santa Barbara county residents first.

Electrical grid stress - the addition of 1,289 all electric homes will bring more brown outs to our area. We all know PG&E has severe issues already. Please reduce the amount of homes to reduce the strain on our electrical grid and keep us all powered up.

Stress on emergency services and infrastructure - More people to service means we need more Sheriff, Fire, Paramedics, etc. They are already stretched very thin. Please reduce the number of new residences. With a 25% increase to our population with only one development, the town is not ready to support the residents. We currently only have one grocery store, and it is already overtaxed and understocked...try stopping by for milk on a Sunday afternoon. We are already underserved, please don't make it worse! And PLEASE do not put a fire or police station in the development!

Devastation to Flora and Fauna - we are not botanists or arborists, but we do love our oaks and native plant life. We believe the DEIR is filled with half truths and glossing over the real devastation that will happen to the Dana Reserve and how it will impact our wildlife and Nipomo as a whole. The plan, as it currently stands, will exterminate federally protected native plants that cannot be replaced and KILL approximately 4,000 "protected" oaks without proper mediation. The mediation plan bases the "preservation" off of 197 oaks, not 4,000, and it will be in another location across the freeway...none of this makes sense. For those of us that also own many of these large OLD oak trees (ours are estimated to be about 300 years old!) and do everything in our power to make sure they continue to live long healthy lives, it makes no sense that the developer is allowed to destroy SO many! We cannot even begin to fathom what level of destruction of local wildlife habitat and the wildlife itself this will bring. It is heart wrenching. Please do not devastate the landscape so drastically. Please reduce the development.

It seems that this project is a pipe dream filled with all sorts of hollow promises and glosses over the real damage that will be done. How does it make any sense at all to increase the population of Nipomo by 25% in ONE project that is on only 288 acres. Who would ever think that is a good idea? This project is much too large for the space, does not fit the community character or needs, and brings multiple types of devastation to our community. We implore you to please take these things into serious consideration and require the developer to make some drastic changes to the existing plan.

Thank you for your consideration,

Dave and Sandy Christiansen
Members of the Nipomo Action Committee
Homeowners on Ten Oaks Way

August 1, 2022

Jennifer Guetschow
County of San Luis Obispo, Planning & Building Department
976 Osos Street, Room 300
San Luis Obispo, CA 93408

Subject: Draft Environmental Impact Report for the Dana Reserve Specific Plan (PLN-1119, SUB2020-00047, LRP2020-00007, ED21-094)

Jennifer Guetschow:

The San Luis Obispo Council of Governments (SLOCOG) appreciates the opportunity to review the Draft Environmental Impact Report (DEIR) for the Dana Reserve Specific Plan (*PLN-1119, SUB2020-00047, LRP2020-00007, ED21-094*). The State of California and Federal Highway Administration designate SLOCOG as the Regional Transportation Planning Agency (RTPA) and the Metropolitan Planning Organization (MPO), respectively, for the region. While SLOCOG does not have permit or regulatory authority for land use proposals, SLOCOG is responsible for planning the long-term viability of the regional surface transportation system, and for programming funds to achieve the objectives of the adopted Regional Transportation Plan and Sustainable Communities Strategy (2019 RTP). SLOCOG staff reviews land use projects, EIRs, and plans to ensure positive outcomes in transportation and land choices within and between our communities. After reviewing the DEIR, SLOCOG submits the following comments.

HOUSING

As stated in the 2019 RTP, SLOCOG supports the expansion of the region's supply of housing for renters, first-time homebuyers, and the broader workforce to maintain the vitality of the regional economy. In 2019, the eight jurisdictions and SLOCOG began to work collaboratively on solving our regional housing and infrastructure issues. This effort has led to a unanimously adopted regional compact, the inclusion of regional policies in all eight Housing Element updates, and the start of the Regional Housing and Infrastructure Plan. Two regional goals included in the County's Housing Element are to:

- Support policies, actions, and incentives that increase housing development of all types, available to people at all income levels.
- Encourage new development that helps to improve the balance of jobs and housing throughout the Region, providing more opportunities to residents to live and work in the same community.

An action strategy of the 2019 RTP is to encourage local jurisdictions to approve a wide range of housing types in housing-deficient communities and support expanded employment opportunities in housing-rich communities to improve the existing jobs-housing imbalance. As stated on page 2-13, a primary objective of the Specific Plan is to "provide a diversity of housing types and opportunities for home ownership and rental, including affordable homes consistent with the goals and policies of the Housing Element of the General Plan, the County's Inclusionary Housing Ordinance, and regional housing needs." **SLOCOG is encouraged to see residential development that will help the County meet housing allocations established in the 2019 Regional Housing Needs Allocation (RHNA) Plan at various income levels. Additionally, SLOCOG is supportive of the mentioned local preference program for housing to be included in the Development Agreement.**

JOBS-HOUSING BALANCE

As stated on page 4.17-41 of the DEIR, "the first phase of development would include multi-family residential development (Neighborhoods 1, 2, 3, and 5), affordable housing (Neighborhood 10), commercial development (village commercial and flexible commercial), and a hotel and educational facility. Future development phases would

include additional single-family residential development, a childcare center, a park, and extensions of the pedestrian and bicycle facilities to the larger network in Nipomo.” The 2019 RTP supports residential development near existing employment centers. SLOCOG’s 2019 RTP and 2019 RHNA both promote and identify improved jobs/housing balances within each of the subregions by distributing more homes, of all income levels, into the “jobs-rich” subregion. The 2019 RTP includes a future development pattern that promotes more jobs, along with necessary investments, into the “housing-rich” subregions (this includes the South County). This results in all subregions moving in the direction of a better jobs/housing ratio (2019 RHNA Plan, p.13), and lessens impacts of congestion on U.S. 101. The 2019 RTP identifies that the South County subregion has a Jobs to Housing ratio of 0.66 in 2015 and is projected to have a Jobs to Housing ratio of 0.69 in the 2035 Preferred Growth Scenario; indicating the need for more job opportunities. Since rural areas and smaller communities are not expected to offer 1:1 job for each home, the subregion (and the region) benefits when the incorporated cities’ ratio is notably greater than 1:1. If imbalance in the South County subregion continues at 0.66 or worsens, one result will be increased congestion on our highways, primarily to enter the nearest major employment centers in San Luis Obispo and Santa Maria. **As stated in the DEIR, the residual impacts to the jobs-to-housing ratio would be significant and unavoidable (Class I) which is not consistent with the Jobs/Housing Balance Strategy of the 2019 RTP and the RHNA Plan.**

TRANSPORTATION

Increasing the connectivity of the regional transportation system is a goal of the 2019 RTP. SLOCOG is encouraged by Dana Reserve’s Project Objectives to enhance circulation within the DRSP and existing community by continuing the existing public roadway network through the DRSP property to connect to Willow Road, providing a new Park and Ride lot to encourage carpooling, and creating new public transportation points of connection to facilitate public transit use and reduce single-occupant automobile use and to integrate a network of walking, bicycling, and equestrian facilities to connect on-site residential neighborhoods and the broader community (ES-4).

Transportation Demand Management (TDM)

Providing various opportunities to use alternative transportation is important for reaching state and regional goals. SLOCOG has a long history of supporting Transportation Demand Management (TDM) activities through goals and strategies outlined in the 2019 RTP. Additionally, SLOCOG’s Regional Rideshare division aims to increase sustainable travel choices through public outreach, education, and encouragement programs. The DEIR’s TR Impact 3 is a Class I impact that includes mitigation through the implementation of a transportation demand management program or identification of transportation demand management strategies. **SLOCOG suggests working with SLO Regional Rideshare to incorporate TDM strategies to improve transportation access for residents and visitors since the project would result in Class I impacts to transportation and traffic.**

Vehicle Miles Traveled (VMT)

According to the DEIR’s Transportation Impact Study, “the project will have a significant and unavoidable impact to VMT.” State and Local goals include both Vehicle Miles Traveled (VMT) and greenhouse gas emission reductions. A best practice is locating jobs and frequently used services close to where people live. By prioritizing commercial uses needed within Dana Reserve, vehicle trips can be reduced and or replaced with bike and walk trips. **Since buildout of the Specific Plan Area would exceed the County VMT thresholds, SLOCOG suggests the developer create a transportation demand management program to implement as part of the first development phase.**

Transit

As stated in the DEIR, improved public transit amenities (e.g., covered transit turnouts, direct pedestrian access, bicycle racks, covered bench, smart signage, route information displays, lighting, etc.) shall be implemented as part of AQ/mm-3.3 “if the project is located on an established transit route.” Dana Reserve is not currently served by transit. Mitigation measure TR/mm-3.1 for TR Impact 3 includes improving or increasing access to transit as a potential measure to reduce Vehicles Miles Traveled (VMT). Since these impacts are significant and unavoidable, **SLOCOG**

suggests the developer work with the Regional Transit Authority (RTA) to include the new development as part of a served transit route.

As stated in the DEIR, “the most effective TDM measures would be those related to reducing the cost of transit through commuter benefit programs (employers) and free or reduced-cost transit passes for new residents as part of the HOAs or other conglomeration.” **SLOCOG is encouraged by this transit program.**

Park and Ride Lot

SLOCOG looks forward to working with the developer “to create, improve, or expand an on-site or nearby Park and Ride lot with car parking and bike lockers in proportion to the size of the project” (4.3-35).

Thank you again for the opportunity to provide input. We wish you and all parties involved continued success in moving the Dana Reserve Development forward. SLOCOG looks forward to continued coordination with the County and Developer to address the aforementioned transportation and land use comments. If there are any questions, please do not hesitate to contact me at (805) 781-8052 or ssanders@slocog.org.

Sincerely,

A handwritten signature in cursive script that reads "Sara Sanders". The signature is written in black ink and is positioned below the word "Sincerely,".

Sara Sanders, Transportation Planner
San Luis Obispo Council of Governments

Jennifer Guetschow

From: Stephanie Statom <stephaniestatom@yahoo.com>
Sent: Saturday, July 30, 2022 4:04 PM
To: Jennifer Guetschow
Subject: [EXT]"The social and economic benefits of the project will not outweigh the impacts of this project"

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Dear Jennifer Guetschow (County of San Luis Obispo),

The impacts from the Dana Reserve Project will "not overcome the social and economic benefits of the project.

I can't state enough how troubled I am by this proposal. What makes Nipomo beautiful are the open lands, oaks and wildlife. I can't see why the county would want the massive removal of oaks with tar and concrete poured over this picturesque pasture that faces the freeway. In doing so it removes the sight line of nature and swaps it for inappropriate concrete and buildings, squeezing Nipomo resources for a buck.

This very piece of open space is the signature of Nipomo and has been one of my most favorite spots since I was a child. I grew up in Arroyo Grande and spent my childhood sleeping over with friends who lived under tall eucalyptus trees very close to this proposed development. I knew where I was when I saw the lot from the car window. I still use it as a landmark, still check for cattle. Maybe there will be cattle there again someday. Well sadly I guess that's out of the question now. I can't understand building ugly buildings right up the the freeway. I can't understand anyone thinking this is appropriate, pleasing, inviting . Enough of Nipomo is ruined in this way.

I would hate to see this property looking like what happened to Arroyo Grande. Concrete and buildings covering the hills and valley as far as you can see from AG to Shell Beach. It's so ugly. Please don't continue to make Nipomo Ugly as well.

You are planning to massively populate Nipomo, change zoning that would cripple those living within the currant existing zoning. The families adjacent to the new proposed zoning I feel sorry for. This has happened to me in the town I live. I'm stuck living within a commercial Zone in a house from the 1930's. No one wants noise at night, people screaming, playing and talking, music and skateboards. Are you considering the impact this will have on individual families?

Why does any kind of development have to be built all the way close to the freeway? For what purpose? To show off what? Please don't do that. It's pushy and falsely egotistical.

NEXT: Where will all the wildlife go who live there? Have you made plans to relocate them? Of course this is illegal. It's illegal to relocate wildlife. So where do they go? A town is only as lovely as it's surrounding open space, proving humans and wildlife can exist together. Humans are drawn to nature and Nipomo residence are living here for this very reason.

NEXT: ***Mature oaks take up to 40 years to provide shelter and food for certain wildlife. The habitat and micro climates these living giants created will be lost forever in that spot.

Oak trees take 5 to 6 years to become completely self-sustainable. Even the fastest-growing oak trees will only grow about 3 feet per year. It takes decades before an oak tree is fully grown.

Mitigating Oak removal by planting new trees somewhere else will NOT mitigate the environmental impact their removal will create and it's a load of nonsense to offer to the public a young tree as an olive branch for the flattening of a mature grove of Oaks and other mature trees and it's surrounding habitat that uniquely provides for so much wildlife, legged or winged or other.

Once it's gone it's gone.

Many Nipomo folks are living with a well for water system. The drought and climate issues are making the situation of having enough water a real issue. Ground water will be minimized by covering this lot with concrete and tar.

Please see to it that this proposed development is stopped in its tracks and a REAL environmental Impact study is done. Please lets protect these open spaces with our lives. They give to us more than we understand.

Sincerely,

Stephanie Statom

Jennifer Guetschow

Ms. Guetschow,

After reviewing the plan for the Dana Reserve, the main issue I see with this is the scale of the project.

As background, my partner and I chose a year ago to move to Nipomo based upon several factors:

- 1.) The relative quietness of the area. Even being close to 101, noise is not significantly different than our previous house in Sunnyvale. Most hours of the day/night it is much quieter.
- 2.) Ease of traffic. Except for Sunday afternoons, traffic, even in the summer, is a calm experience.
- 3.) The darkness. As an amateur stargazer, Nipomo is ideal for looking through a telescope.
- 4.) As for disclosure, we own a house on Briarwood Lane.

The plan isn't terrible. The scale is.

- 1.) The streets and access to 101 are not set up for 1291 additional houses, no matter how you set up the three access roads into the area. North Frontage Road to Mary Ave to Tefft Street is a convoluted setup already as demonstrated by the Sunday afternoon boxing in of residents by the traffic generated by the Nipomo Swap Meet.
- 2.) Access off Willow road will require traffic signals.
- 3.) Air quality from queues of cars waiting to get out of the area will diminish.
- 4.) No matter what they claim, the majority of the residents will not be working in Nipomo. The infrastructure is not here. We will essentially become a bedroom community of Santa Maria. Not exactly ideal for a split four lane highway (101). More traffic, more noise, more pollution. Certainly not in keeping with the ideal of creating more housing for SLO county residents.
- 5.) The so called spacing between the project and adjoining properties is extremely small. Using Neighborhood 3 as an example, claiming 65 feet between buildings is a bit of a misnomer. As pointed out, these ranchettes bordering the project have developed back yards where people utilize the property for outdoor enjoyment. The real number is 35 feet or so from the back of a two story house into someone's private back yard. Similar numbers are posted for Neighborhood 7. BTW, who is responsible for cleaning up the horse manure? Another fine thought bordering on your personal recreation area.
- 6.) While it is claimed that water isn't an issue, it can be. Not planning for the possibility of water rationing and further draining of the existing resources is irresponsible.
- 7.) While not everyone in Nipomo is connected to sewage services, we are going to extend it to 1291 more housing units and associated commercial space?
- 8.) The trees should be saved. Not transplanted or grown from native acorns. Saved. Unfortunately that would require a reduction in the number of units.
- 9.) I don't know what to say about the light pollution. The installation of street lights will radically change the nature of this section of Nipomo. The overcast evenings are going to now be dull glow of sodium vapor or similar lights.

So what would I do?

- 1.) Don't extend North Frontage road until you have a better solution for the Tefft-Mary intersection and the Tefft-101 interchange. With the opening of the new plaza behind Miner's

Hardware, this entire section of Nipomo will become one traffic nightmare. Adding traffic from the DRSP will create unhealthy air quality issues for most of the day.

- 2.) Remove the units bordering on the outside properties and create a green space (and move the horse trail away from other people's property).
- 3.) Rework the project to go around stands of existing oak trees. Make these stands part of your open space concept.
- 4.) Cut the number of units in half. That would come closer to maintaining the feel of Nipomo.

The impacts from the Dana Reserve Project, in its present form, will not overcome the social and economic benefits of the project.

In its present form, the un-mitigatable issues on the DEIR, the severe bending of the South County Area Plan, the short sightedness of the water issues, the increased need for infrastructure, and the almost insurmountable effects of the traffic disaster you are trying implement should warrant major reconsideration of this project in its whole.

Timothy O'Brien

510 Briarwood Ln

Nipomo, CA 93444

myuzuu@gmail.com

Jennifer Guetschow

From: Tom Smith <tscp2000b@yahoo.com>
Sent: Sunday, July 31, 2022 1:24 AM
To: Jennifer Guetschow
Subject: [EXT]Proposed Dana Reserve

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

Thanks in advance for listening to this feedback on the Dana Reserve. Our air quality in the Nipomo Mesa is already bad enough with local pollution from both the traffic and the dunes. Why make it worse with adding thousands of new homes and all the construction activities!?

Received 8/11/22

Toni Destro
914 Miguel Ct. Nipomo

Department of Planning and Building
ATTN: Dana Reserve/Jennifer Guetschow

Dear Ms. Guetschow

I am writing to express my concern regarding the Proposed Dana Reserve Project, a development project that will develop 288 acres in the Unincorporated County Community of Nipomo.

After reading the Draft Environmental Impact Report (DEIR), the Unmitigatable Significant Class 1 issue which concerns me most is (circle item/highlight or write in your greatest concern):

- Housing (imbalanced housing vs job creation, which also increases traffic)
- Transportation (increase traffic, impacts on many roads throughout Nipomo)
- Air Quality
- Greenhouse Gas Emission
- Land Planning (multiple elements of the project are out of alignment with the south county area plan, including how this land was intended to be developed vs the present project)
- Biological impacts (3,948 oak trees to be removed, federally endangered species to be removed, special habitats to be removed)
 - Write in other issues of concern (i.e Water, public services) not determined to be a class 1 issue in the EIR
 - Water usage – we are in a severe drought so should we be building this much at this time

The limited social and economic benefits of the Dana Reserve Project will not outweigh the many significant impacts of the project. As a citizen of Nipomo, I ask that this project be denied until revised to such an extent that the impacts of the development are greatly decreased. We owe it to Nipomo to present a project that does not significantly decrease the quality of life for existing residents and retains the natural beauty of the land given to Captain Dana in 1837.

DATE: 7/25/22 SIGNED: Toni Destro
email: tdestro@earthlink.net

P: (626) 381-9248
F: (626) 389-5414
E: info@mitchtsailaw.com



139 South Hudson Avenue
Suite 200
Pasadena, California 91101

VIA E-MAIL

August 1, 2022

Jennifer Guetschow
Project Manager
County of San Luis Obispo
976 Osos Street Room 300
San Luis Obispo, CA 93408
Em: jguetschow@co.slo.ca.us

RE: Draft Environmental Impact Report Dana Reserve Project Dana Reserve DEIR

Dear Jennifer Guetschow,

On behalf of the Southwest Regional Council of Carpenters (“**Southwest Carpenters**” or “**SWRCC**”), my Office is submitting these comments on the County of San Luis Obispo (“**County**” or “**Lead Agency**”) Draft Environmental Impact Report (“**DEIR**”) (SCH No. 2021060558) for the Dana Reserve Project (“**Project**”).

The Southwest Carpenters is a labor union representing more than 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work and recreate in the City and surrounding communities and would be directly affected by the Project’s environmental impacts.

SWRCC expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

SWRCC incorporates by reference all comments raising issues regarding the DEIR submitted prior to certification of the EIR for the Project. *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal. App. 4th 173, 191 (finding that any party who has objected

to the Project’s environmental documentation may assert any issue timely raised by other parties).

Moreover, SWRCC requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (“**CEQA**”), Cal Public Resources Code (“**PRC**”) § 21000 *et seq*, and the California Planning and Zoning Law (“**Planning and Zoning Law**”), Cal. Gov’t Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency’s governing body.

The City should require the Applicant provide additional community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project Site can reduce the length of vendor trips, reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

[A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Skilled and trained workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the UC Berkeley Center for Labor Research and Education concluded:

. . . labor should be considered an investment rather than a cost – and investments in growing, diversifying, and upskilling California’s workforce can positively affect returns on climate mitigation efforts. In other words, well trained workers are key to delivering emissions reductions and moving California closer to its climate targets.¹

Recently, on May 7, 2021, the South Coast Air Quality Management District found that that the “[u]se of a local state-certified apprenticeship program or a skilled and trained workforce with a local hire component” can result in air pollutant reductions.²

Cities are increasingly adopting local skilled and trained workforce policies and requirements into general plans and municipal codes. For example, the City of Hayward 2040 General Plan requires the City to “promote local hiring . . . to help achieve a more positive jobs-housing balance, and reduce regional commuting, gas consumption, and greenhouse gas emissions.”³

In fact, the City of Hayward has gone as far as to adopt a Skilled Labor Force policy into its Downtown Specific Plan and municipal code, requiring developments in its Downtown area to requiring that the City “[c]ontribute to the stabilization of regional construction markets by spurring applicants of housing and nonresidential developments to require contractors to utilize apprentices from state-approved, joint

¹ California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* <https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf>.

² South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10>.

³ City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf.

labor-management training programs, . . .”⁴ In addition, the City of Hayward requires all projects 30,000 square feet or larger to “utilize apprentices from state-approved, joint labor-management training programs.”⁵

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.⁶

In addition, local hire mandates as well as skill training are critical facets of a strategy to reduce vehicle miles traveled. As planning experts Robert Cervero and Michael Duncan noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions since the skill requirements of available local jobs must be matched to those held by local residents.⁷ Some municipalities have tied local hire and skilled and trained workforce policies to local development permits to address transportation issues. As Cervero and Duncan note:

In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing.” The city’s First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy

⁴ City of Hayward (2019) Hayward Downtown Specific Plan at p. 5-24, *available at* <https://www.hayward-ca.gov/sites/default/files/Hayward%20Downtown%20Specific%20Plan.pdf>.

⁵ City of Hayward Municipal Code, Chapter 10, § 28.5.3.020(C).

⁶ California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* <https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf>.

⁷ Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? *Journal of the American Planning Association* 72 (4), 475-490, 482, *available at* <http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf>.

about negotiating corporate participation in First Source as a condition of approval for development permits.

The City should consider utilizing skilled and trained workforce policies and requirements to benefit the local area economically and mitigate greenhouse gas, air quality and transportation impacts.

The City should also require the Project to be built to standards exceeding the current 2019 California Green Building Code to mitigate the Project’s environmental impacts and to advance progress towards the State of California’s environmental goals.

I. **THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of Regulations (“**CCR**” or “**CEQA Guidelines**”) § 15002(a)(1).⁸ “Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR ‘protects not only the environment but also informed self-government.’ [Citation.]” *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as “an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.” *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal. App. 4th 1344, 1354 (“*Berkeley Jets*”); *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553; *Laurel Heights Improvement Ass’n v. Regents of the University of California* (1988) 47 Cal. 3d 376, 400. The EIR serves to

⁸ The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq.*, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given “great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous.” *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to “identify ways that environmental damage can be avoided or significantly reduced.” CEQA Guidelines § 15002(a)(2). If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns” specified in CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

While the courts review an EIR using an “abuse of discretion” standard, “the reviewing court is not to ‘uncritically rely on every study or analysis presented by a project proponent in support of its position.’ A ‘clearly inadequate or unsupported study is entitled to no judicial deference.’” *Berkeley Jets*, 91 Cal. App. 4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal. 3d at 391, 409 fn. 12). Drawing this line and determining whether the EIR complies with CEQA’s information disclosure requirements presents a question of law subject to independent review by the courts. *Sierra Club v. Cnty. of Fresno* (2018) 6 Cal. 5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102, 131. As the court stated in *Berkeley Jets*, 91 Cal. App. 4th at 1355:

A prejudicial abuse of discretion occurs “if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR’s function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. *Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal. 4th 412, 449–450).

B. Due to the COVID-19 Crisis, the City Must Adopt a Mandatory Finding of Significance that the Project May Cause a Substantial Adverse Effect on Human Beings and Mitigate COVID-19 Impacts

CEQA requires that an agency make a finding of significance when a Project may cause a significant adverse effect on human beings. PRC § 21083(b)(3); CEQA Guidelines § 15065(a)(4).

Public health risks related to construction work requires a mandatory finding of significance under CEQA. Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.⁹

SWRCC recommends that the Lead Agency adopt additional CEQA mitigation measures to mitigate public health risks from the Project's construction activities. SWRCC requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon SWRCC's experience with safe construction site work practices, SWRCC recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.

⁹ Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* <https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx>.

- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.

- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.¹⁰

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

¹⁰ See also The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVID-19 Standards for U.S. Construction Sites, available at https://www.cpwr.com/wp-content/uploads/publications/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, available at https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

II. THE DEIR IS INADEQUATE

A. The DEIR Fails to Support Its Findings with Substantial Evidence

When new information is brought to light showing that an impact previously discussed in the EIR but found to be insignificant with or without mitigation in the EIR’s analysis has the potential for a significant environmental impact supported by substantial evidence, the EIR must consider and resolve the conflict in the evidence. See *Visalia Retail, L.P. v. City of Visalia* (2018) 20 Cal. App. 5th 1, 13, 17; see also *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1109. While a lead agency has discretion to formulate standards for determining significance and the need for mitigation measures—the choice of any standards or thresholds of significance must be “based to the extent possible on scientific and factual data and an exercise of reasoned judgment based on substantial evidence. CEQA Guidelines § 15064(b); *Cleveland Nat’l Forest Found. v. San Diego Ass’n of Gov’ts* (2017) 3 Cal. App. 5th 497, 515; *Mission Bay Alliance v. Office of Community Inv. & Infrastructure* (2016) 6 Cal. App. 5th 160, 206. And when there is evidence that an impact could be significant, an DEIR cannot adopt a contrary finding without providing an adequate explanation along with supporting evidence. *East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal. App. 5th 281, 302.

In addition, a determination that regulatory compliance will be sufficient to prevent significant adverse impacts must be based on a project-specific analysis of potential impacts and the effect of regulatory compliance. In *Californians for Alternatives to Toxics v. Department of Food & Agric.* (2005) 136 Cal. App. 4th 1, the court set aside an EIR for a statewide crop disease control plan because it did not include an evaluation of the risks to the environment and human health from the proposed program but simply presumed that no adverse impacts would occur from use of pesticides in accordance with the registration and labeling program of the California Department of Pesticide Regulation. See also *Ebbetts Pass Forest Watch v Department of Forestry & Fire Protection* (2008) 43 Cal. App. 4th 936, 956 (fact that Department of Pesticide Regulation had assessed environmental effects of certain herbicides in general did not excuse failure to assess effects of their use for specific timber harvesting project).

1. *The DEIR Omits Critical Supporting Information regarding the Project’s Noise Impact and Improperly finds that the Project’s Noise Impact would be Less than Significant*

Environmental documents must provide technical details, not merely conclusory findings, to support their determinations. [A]n EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. CEQA Guidelines § 15147; *San Franciscans for Reasonable Growth v. City & County of San Francisco* (1987) 193 Cal.App.3d 1544, 1549 (“All technical data, however, need not be included in the body of report, but may be relegated to appendices [citation omitted] or may be contained in separate source documents which are not formally a part of the document.”). An EIR shall cite all documents used in its preparation” CEQA Guidelines § 15148. An environmental document may incorporate by reference another document so long as the document is made available for inspection to the public. CEQA Guidelines § 15150.

The DEIR states that noise impact will be less than significant with mitigation. The DEIR states that the predicted traffic noise for the easternmost portion would exceed the County’s exterior noise standard of 60dBA. However, the DEIR does not state what the noise level at that portion is. The modeling provided by the DEIR is 70, 65 or 60 dBA. But without knowing how much, it would be difficult to reach the conclusion that the mitigation would be less than significant.

2. *The DEIR Fails to Consider all Feasible Mitigations for Transportation Impacts*

An EIR must identify describe mitigation a proposed project’s potentially significant environmental impacts. PRC § 21002.1(a); 21081(a)(1). A project’s environmental impacts must be mitigated to a less than significant level or at the least, adopt all feasible mitigation to avoid a project’s significant environmental impacts. PRC §§ 21002.1(b), 21081(a)91); CEQA Guidelines § 15021(a)(2 – 3), 15091(a)(1).

CEQA Guidelines section 15064.3(b) requires analysis of a Project’s vehicle miles traveled (VMT) impacts as part of the environmental document’s transportation impacts analysis. A lead agency must support its findings with substantial evidence,

which includes “facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.” CEQA Guidelines § 15384(b).

The DEIR states the cumulative VMT with the project would have a VMT of 27 which is well above the San Luis Obispo County threshold of 25.7. The DEIR considers moves to lower the VMT such as pedestrian and bicycle networks as well as offering carpool for trip reductions. However, the DEIR states that even with all feasible VMT reduction measures, the project could not be less than significant. However, the DEIR fails to consider such feasible measures such as VMT bank mitigations. As such the DEIR should be recirculated with more considerations.

The DEIR both fails CEQA’s informational requirements, failing to analyze potential mitigation measures, but also CEQA’s substantive requirements that all feasible mitigation measures be adopted. For example, in April of 2020, Fehr & Peers (who happens to be a technical consultant on this particular environmental document) and the Western Riverside Council of Governments (“WRCOG”) published “VMT Mitigation Through Fees, Banks & Exchanges: Understanding New Mitigation Approaches.”¹¹

Oddly enough, the DEIR fails to consider any of the mitigation approaches. WRCOG proposes a number of regional VMT mitigation strategies including VMT-based Transportation Impact Fees, VMT Mitigation Exchanges and VMT Mitigation Banks.¹² These approaches are well documented and have already adopted in a number of jurisdictions, including in WRCOG which the City is a member agency of.¹³

In addition, there are many well-documented project level VMT mitigation strategies, none of which are discussed as potential mitigation measures in the DEIR. Fehr & Peers in another study conducted for WRCOG suggested a number of project-level VMT mitigation measures that would be effective in rural or suburban settings such as

¹¹ Western Riverside Council of Governments (2020) VMT Mitigation Through Fees, Banks & Exchanges, Understanding New Mitigation Approaches, *available at* https://www.fehrandpeers.com/wp-content/uploads/2020/04/VMT-Fees_Exchanges_Banks-White-Paper_Apr2020.pdf.

¹² *Id.* at pp. 16 – 17.

¹³ Neil Peacock, Senior Environmental Planner, Caltrans (2017) Working Paper: The Potential for Regional Transportation Impact Mitigation Fee Programs and Mitigation Banks to Help Streamline the Implementation of SB 743 at pp. 2 – 3, *available at* <https://static1.squarespace.com/static/5b96d09a3c3a53da0e1ba210/t/5e5ec5cf5876f4700915ddd/1583269327880/VMT+Mitigation+Precedents+Peacock+March+2017.pdf>

in Cities in the WRCOG, including diversifying land uses, providing pedestrian network improvements, and traffic calming measures among many other proposals.¹⁴

Finally, as stated previously, local skilled and trained workforce requirements can also significantly reduce vehicle miles traveled and associated air pollutant emissions.

The DEIR needs to be revised to reflect substantive consideration of the many measures available to mitigate transportation impacts, including the use of local skilled professions on all construction projects, not just the handful of measures selected for discussion in the DEIR. Furthermore, the DEIR must be revised to require the application all feasible measures to reduce the Project’s significant transportation impacts.

3. *The DEIR’s Air Quality Mitigation Fails to Consider All Feasible Mitigations*

The DEIR states the operational emissions for the Project of ROG and NO_x would be 144.9. The DEIR also states the SLOAPCD Significance Threshold is 25. While the DEIR does admit the daily operations emissions is significant and unavoidable, this is still almost six times the threshold. While the DEIR states a series of mitigations such as installation of suppressants, it fails to consider a reduction in size of the Project as a method to reduce ROG and NO_x impacts.

II. THE PROJECT VIOLATES THE STATE PLANNING AND ZONING LAW AS WELL AS THE CITY’S GENERAL PLAN

A. Background Regarding the State Planning and Zoning Law

Each California city and county must adopt a comprehensive, long-term general plan governing development. *Napa Citizens for Honest Gov. v. Napa County Bd. of Supervisors* (2001) 91 Cal. App.4th 342, 352, citing Gov. Code §§ 65030, 65300. The general plan sits at the top of the land use planning hierarchy (See *DeVita v. County of Napa* (1995) 9 Cal. App. 4th 763, 773), and serves as a “constitution” or “charter” for all future development. *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal. App. 3d 531, 540.

¹⁴ Technical Memorandum from Ronald T. Milam, AICP, PTP and Jason Pack, PE to Chris Gray (WRCOG), Chris Tzeng (WRCOG), Sarah Dominguez (SCAG) and Mike Gainor (SCAG) (February 26, 2019) SB 743 Implementation TDM Strategy Assessment, *available at* <https://www.febrandpeers.com/wp-content/uploads/2019/12/TDM-Strategies-Evaluation.pdf>

General plan consistency is “the linchpin of California’s land use and development laws; it is the principle which infused the concept of planned growth with the force of law.” See *Debottari v. Norco City Council* (1985) 171 Cal. App. 3d 1204, 1213.

State law mandates two levels of consistency. First, a general plan must be internally or “horizontally” consistent: its elements must “comprise an integrated, internally consistent and compatible statement of policies for the adopting agency.” (See Gov. Code § 65300.5; *Sierra Club v. Bd. of Supervisors* (1981) 126 Cal. App. 3d 698, 704.) A general plan amendment thus may not be internally inconsistent, nor may it cause the general plan as a whole to become internally inconsistent. See *DeVita*, 9 Cal. App. 4th at 796 fn. 12.

Second, state law requires “vertical” consistency, meaning that zoning ordinances and other land use decisions also must be consistent with the general plan. (See Gov. Code § 65860(a)(2) [land uses authorized by zoning ordinance must be “compatible with the objectives, policies, general land uses, and programs specified in the [general] plan.”]; see also *Neighborhood Action Group v. County of Calaveras* (1984) 156 Cal. App. 3d 1176, 1184.) A zoning ordinance that conflicts with the general plan or impedes achievement of its policies is invalid and cannot be given effect. See *Lesher*, 52 Cal. App. 3d at 544.

State law requires that all subordinate land use decisions, including conditional use permits, be consistent with the general plan. See Gov. Code § 65860(a)(2); *Neighborhood Action Group*, 156 Cal. App. 3d at 1184.

A project cannot be found consistent with a general plan if it conflicts with a general plan policy that is “fundamental, mandatory, and clear,” regardless of whether it is consistent with other general plan policies. See *Endangered Habitats League v. County of Orange* (2005) 131 Cal. App. 4th 777, 782-83; *Families Unafraid to Uphold Rural El Dorado County v. Bd. of Supervisors* (1998) 62 Cal. App. 4th 1332, 1341-42 (“FUTURE”).

Moreover, even in the absence of such a direct conflict, an ordinance or development project may not be approved if it interferes with or frustrates the general plan’s policies and objectives. See *Napa Citizens*, 91 Cal. App. 4th at 378-79; see also *Lesher*, 52 Cal. App. 3d at 544 (zoning ordinance restricting development conflicted with growth-oriented policies of general plan).

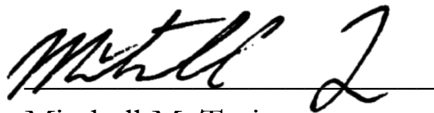
1. *The DEIR is Required to Review the Project’s Consistency with Regional Housing Plans, Sustainable Community Strategy and Regional Transportation Plans*

CEQA Guidelines section 15125(d) requires that an environmental document “discuss any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans. *See also Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal. App. 5th 467, 543. The DEIR should thoroughly evaluate the consistency of this Project with the City’s General Plan, City’s Regional Housing Needs Assessment targets, Sustainable Community Strategy and Regional Transportation Plan. The DEIR fails to analyze the Project’s consistency with any of these applicable plans.

III. CONCLUSION

SWRCC request that the City revise and recirculate the DEIR for public comment to address the aforementioned concerns. If the City has any questions or concerns, feel free to contact my Office.

Sincerely,



Mitchell M. Tsai

Attorneys for Southwest Regional Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

EXHIBIT A



Technical Consultation, Data Analysis and
Litigation Support for the Environment

2656 29th Street, Suite 201
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Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise (“SWAPE”) is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas (“GHG”) emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model (“CalEEMod”) is a “statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects.”¹ CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.²

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.³

¹ “California Emissions Estimator Model.” CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

² “California Emissions Estimator Model.” CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

³ “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled (“VMT”) associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.⁴

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

$$\text{“VMT}_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$$

Where:

n = Number of land uses being modeled.”⁵

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

$$\text{“Emissions}_{\text{pollutant}} = \text{VMT} * \text{EF}_{\text{running,pollutant}}$$

Where:

$\text{Emissions}_{\text{pollutant}}$ = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

$\text{EF}_{\text{running,pollutant}}$ = emission factor for running emissions.”⁶

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.⁷ In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act (“CEQA”) requires that such changes be justified by substantial evidence.⁸ The default number of construction-related worker trips is calculated by multiplying the

⁴ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.

⁵ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.

⁶ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

⁷ “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

⁸ CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.⁹ Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively.”¹⁰ Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.¹¹ The operational home-to-work vehicle trip lengths are:

“[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings” (emphasis added).¹²

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).¹³

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	16.47	11.17
Minimum	10.80	10.80
Maximum	19.80	14.70
Range	9.00	3.90

⁹ “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

¹⁰ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

¹¹ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.

¹² “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.

¹³ “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8- miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7- miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan (“Project”) located in the City of Claremont (“City”). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.¹⁴ In an effort to evaluate the potential for a local hire provision to reduce the Project’s construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO ₂ e)	3,623
Amortized Construction GHG Emissions (MT CO ₂ e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO ₂ e)	3,024
Amortized Construction GHG Emissions (MT CO ₂ e/year)	100.80
% Decrease in Construction-related GHG Emissions	17%

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project’s urbanization level and location.

¹⁴ “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

A handwritten signature in blue ink that reads "Matt Hagemann".

Matt Hagemann, P.G., C.Hg.

A handwritten signature in blue ink that reads "Paul Rosenfeld".

Paul E. Rosenfeld, Ph.D.

Attachment A

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8
County	Orange	19.8	14.7
County	Placer-Lake	16.8	10.8
County	Placer-Mountain	16.8	10.8
County	Placer-	16.8	10.8
County	Plumas	16.8	10.8
County	Riverside-	16.8	10.8
County	Riverside-	19.8	14.7
County	Riverside-Salton	14.6	11
County	Riverside-South	19.8	14.7
County	Sacramento	15	10
County	San Benito	16.8	10.8
County	San Bernardino-	16.8	10.8
County	San Bernardino-	19.8	14.7
County	San Diego	16.8	10.8
County	San Francisco	10.8	10.8
County	San Joaquin	16.8	10.8
County	San Luis Obispo	13	13
County	San Mateo	10.8	10.8
County	Santa Barbara-	8.3	8.3
County	Santa Barbara-	8.3	8.3
County	Santa Clara	10.8	10.8
County	Santa Cruz	16.8	10.8
County	Shasta	16.8	10.8
County	Sierra	16.8	10.8
County	Siskiyou	16.8	10.8
County	Solano-	15	10
County	Solano-San	16.8	10.8
County	Sonoma-North	16.8	10.8
County	Sonoma-San	10.8	10.8
County	Stanislaus	16.8	10.8
County	Sutter	16.8	10.8
County	Tehama	16.8	10.8
County	Trinity	16.8	10.8
County	Tulare	16.8	10.8
County	Tuolumne	16.8	10.8
County	Ventura	16.8	10.8
County	Yolo	15	10
County	Yuba	16.8	10.8
Statewide	Statewide	16.8	10.8

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	16.47	11.17
Minimum	10.80	10.80
Maximum	19.80	14.70
Range	9.00	3.90

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Village South Specific Plan (Proposed)
Los Angeles-South Coast County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4103	1.4103
2	12-1-2021	2-28-2022	1.3613	1.3613
3	3-1-2022	5-31-2022	1.1985	1.1985
4	6-1-2022	8-31-2022	1.1921	1.1921
5	9-1-2022	11-30-2022	1.1918	1.1918
6	12-1-2022	2-28-2023	1.0774	1.0774
7	3-1-2023	5-31-2023	1.0320	1.0320
8	6-1-2023	8-31-2023	1.0260	1.0260

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

9	9-1-2023	11-30-2023	1.0265	1.0265
10	12-1-2023	2-29-2024	2.8857	2.8857
11	3-1-2024	5-31-2024	1.6207	1.6207
		Highest	2.8857	2.8857

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

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

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	2.9000e-003	0.0641	0.0233	2.0000e-004	6.4100e-003	2.1000e-004	6.6200e-003	1.7300e-003	2.0000e-004	1.9300e-003	0.0000	19.6816	19.6816	1.2800e-003	0.0000	19.7136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	2.9000e-003	0.0641	0.0233	2.0000e-004	6.4100e-003	2.1000e-004	6.6200e-003	1.7300e-003	2.0000e-004	1.9300e-003	0.0000	19.6816	19.6816	1.2800e-003	0.0000	19.7136

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.7952	1,408.7952	0.0530	0.0000	1,410.1208

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.7952	1,408.7952	0.0530	0.0000	1,410.1208

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e-003	1.2051	0.3200	9.1400e-003	0.3292	0.0000	1,327.3369	1,327.3369	0.0462	0.0000	1,328.4916

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e-003	1.2051	0.3200	9.1400e-003	0.3292	0.0000	1,327.3369	1,327.3369	0.0462	0.0000	1,328.4916

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003			0.0966	0.0966		0.0966	0.0966	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003			0.0966	0.0966		0.0966	0.0966	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

8.0 Waste Detail

8.1 Mitigation Measures Waste

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Boilers

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

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

11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Village South Specific Plan (Proposed)
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1521
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.0568	1,463.0568	0.0927		1,465.3750

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.0568	1,463.0568	0.0927		1,465.3750

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190		8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190		8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Village South Specific Plan (Proposed)
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.6932	1,430.6932	0.0955		1,433.0812

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.6932	1,430.6932	0.0955		1,433.0812

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.9763	12,075.9763	0.4663		12,087.6341

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.9763	12,075.9763	0.4663		12,087.6341

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.1325	11,655.1325	0.4151		11,665.5099

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.1325	11,655.1325	0.4151		11,665.5099

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Village South Specific Plan (Proposed)
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.8300e-003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.8300e-003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4091	1.4091
2	12-1-2021	2-28-2022	1.3329	1.3329
3	3-1-2022	5-31-2022	1.1499	1.1499
4	6-1-2022	8-31-2022	1.1457	1.1457
5	9-1-2022	11-30-2022	1.1415	1.1415
6	12-1-2022	2-28-2023	1.0278	1.0278
7	3-1-2023	5-31-2023	0.9868	0.9868
8	6-1-2023	8-31-2023	0.9831	0.9831

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

9	9-1-2023	11-30-2023	0.9798	0.9798
10	12-1-2023	2-29-2024	2.8757	2.8757
11	3-1-2024	5-31-2024	1.6188	1.6188
		Highest	2.8757	2.8757

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

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

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	2.6500e-003	0.0639	0.0209	2.0000e-004	5.6200e-003	2.0000e-004	5.8200e-003	1.5300e-003	1.9000e-004	1.7200e-003	0.0000	18.9847	18.9847	1.2600e-003	0.0000	19.0161

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	2.6500e-003	0.0639	0.0209	2.0000e-004	5.6200e-003	2.0000e-004	5.8200e-003	1.5300e-003	1.9000e-004	1.7200e-003	0.0000	18.9847	18.9847	1.2600e-003	0.0000	19.0161

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e-003	0.8790	0.2336	8.7800e-003	0.2424	0.0000	1,105.9771	1,105.9771	0.0451	0.0000	1,107.1039

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e-003	0.8790	0.2336	8.7800e-003	0.2424	0.0000	1,105.9771	1,105.9771	0.0451	0.0000	1,107.1039

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e-003	0.8564	0.2281	6.8500e-003	0.2349	0.0000	1,042.5294	1,042.5294	0.0392	0.0000	1,043.5090

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e-003	0.8564	0.2281	6.8500e-003	0.2349	0.0000	1,042.5294	1,042.5294	0.0392	0.0000	1,043.5090

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

8.0 Waste Detail

8.1 Mitigation Measures Waste

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Boilers

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

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Village South Specific Plan (Proposed)
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0956
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.5212	1,409.5212	0.0912		1,411.8015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.5212	1,409.5212	0.0912		1,411.8015

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Village South Specific Plan (Proposed)
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.3262	1,380.3262	0.0941		1,382.6791

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.3262	1,380.3262	0.0941		1,382.6791

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.0104	9,481.0104	0.3984		9,490.9691

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.0104	9,481.0104	0.3984		9,490.9691

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.1981	9,155.1981	0.3538		9,164.0437

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.1981	9,155.1981	0.3538		9,164.0437

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
<i>% Decrease in Construction-related GHG Emissions</i>	17%

EXHIBIT B



Paul Rosenfeld, Ph.D.

Principal Environmental Chemist

Chemical Fate and Transport & Air Dispersion Modeling

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H₂O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. *Journal of Real Estate Research*. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.**, Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermol and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

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Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*. Amsterdam: Elsevier Publishing.

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Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellev, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office, Publications Clearinghouse (MS-6)*, Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld**. (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States” Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florida, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants..* Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld, P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld, P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

- In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019
- In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido”
Defendant.
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019
- In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019
- In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19
- In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018
- In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017
- In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017
- In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017
- In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018
- In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No.: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No.: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action NO. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward
DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City
Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*.
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

EXHIBIT C



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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

**Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review**

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.



Northern Chumash Tribal Council

A Native American Corporation
PO Box 6533, CA 93412 (805) 356-6149



County of San Luis Obispo
Department of Planning and Building
ATTN: Dana Reserve/Jennifer Guetschow
976 Osos Street, Room 300
San Luis Obispo, CA 93408

RE: Dana Reserve Specific Plan Draft Environmental Impact Report

Dear Ms. Guetschow:

The Northern Chumash Tribal Council (NCTC; the Tribe) submits the following comments on the Cultural Resources and Tribal Cultural Resources sections of the Draft Environmental Impact Report (DEIR) for the Dana Reserve Specific Plan (the Project). In general, we find these sections of the DEIR are poorly written and demonstrate a general lack of familiarity with the local resources. Many of their conclusions and recommendations aren't substantiated with facts or reasonable assumptions based on facts. Moreover, the requirements of CEQA regarding the evaluation of California Register of Historic Places (CRHR) eligibility, impact assessment, and mitigation are skirted or ignored outright.

Section 4.5.1, Existing Conditions

The section does not demonstrate any understanding of the local history, prehistory, or archaeology which is the necessary context for the assessment of impacts on sites in the Project area. It completely ignores the Chumash history of Nipomo and lacks any discussion of local sites of importance to which the resources in the Project area may be related. The ethnographic overview even fails to mention the most relevant Chumash place in the region, *Nipumu*, the Northern Chumash village for which the current town of Nipomo is named. This is a substantial oversight that demonstrates the lack of knowledge regarding the study area. CA-SLO-809, the archaeological site associated with that village, is less than a mile away from the Project and should have been mentioned as the most substantial and well-known site in the area, even though it's beyond the arbitrary quarter-mile radius of the records search. The excavation at CA-SLO-809 is still the most substantial excavation in the local area; its findings provide the basis for the local prehistoric cultural sequence and should have been referenced in the overview section. Another omission has to do with the well-known discovery of a Clovis point in the hills surrounding the valley, substantiating the Late Paleoindian use of the area.

The Euro-American history of Nipomo is simply glossed over as well. There is no historical overview, even though the ranching history of the area is mentioned in passing and one historical archaeological site was identified in the project area. The Dana Rancho gets no mention anywhere, a considerable oversight since it provides critical historical context for the study area (and considering the Project name), even if the Adobe itself is more than 0.25 miles distant. In general, this section is poorly written, sloppy, and internally inconsistent. In addition to the omissions already noted, it also contains factual errors. For example, Mission San Fernando Rey is not in the Chumash territory, as stated on pages 4.5-2; it is in the Tataviam/Gabrielino area.

Section 4.5.13, Existing Cultural Resources

The DEIR glosses over the history of the project area and writes off one site (P-40-002271) as insignificant because it is “undoubtedly historic” (pg 4.5.2-8) without providing evidence or explaining how they determined its age or reached this judgment regarding its significance. This information should be provided. Given the proximity of the Dana Adobe and the known historic uses of the area, this judgment should be reconsidered (or at least better supported).

Since all these sites seem to contain marine shells that can be dated using radiocarbon, please explain why that wasn’t done. Such dating would have helped in evaluating the eligibility of these sites for the CRHR and assessing potential Project impacts.

It does not appear that there has been any study of the proposed offsite conservation area/mitigation lands over in the hills on the other side of the valley. This area is part of the Project and should have been studied at the same level. In our experience, there are activities related to biological mitigation, water and range management, and other activities that could occur on these lands and would definitely impact any cultural resources present.

Section 4.5.1.3.2, Native American Coordination

This section refers to a positive response from the Native American Heritage Commission (NAHC) but there was no effort to identify the nature or location of sacred lands in the Project area so they could be protected. The reader is referred to Section 4.18 for a description of tribal consultation, but that section doesn’t discuss sacred lands and the NAHC response was not disclosed to NCTC or other tribal consultants. We received no response to our additional inquiries to the County about this matter. For these and other reasons, consultation is not completed to our satisfaction. If there are identified sacred sites they have to be considered in the early planning stages so they can be respected and protected. The County should require an ethnohistoric study to identify sacred sites so Project impacts can be identified and mitigated.

Section 4.5.4, Impact Assessment and Methodology

The County will assume that archaeological sites DR-001, P-40-2132, and P-40-2273 are eligible for the California Register for the purposes of the project, and are thus historical resources under CEQA, but the DEIR does not explain what qualities these sites have that would make them CRHR-eligible (Section 4.5.4, pp 4.5-16). Please provide this information. The DEIR avers that this assumption is based on the results of the Extended Phase 1 (XP1) investigation, but the XP1 study was only intended to define the vertical and horizontal extent of identified archaeological resources (i.e., the boundaries of the archaeological sites—see Morgan Bird’s 12-13-21 letter report to Senior Planner Jennifer Guetschow). The XP1 was helpful in defining the structure and content of the resources but does not constitute a significant evaluation, which is necessary at this point. This is a critical omission since it is

the Project's effects on those significant qualities of the sites that determine whether an impact is significant. How is the Tribe or the public judge the validity of the County's assumptions or the efficacy of the proposed mitigation without this critical missing information? Please explain why the cultural resources in the Project area were not evaluated for significance. This deficiency must be remedied in order to adequately determine the age of the cultural resources, identify their function(s), define the qualities that make the sites significant and justify recommendations regarding significance, avoidance, and other mitigation measures.

A letter to your department dated 12-13-21 from Cultural Resource Specialist Morgan Bird refers to a subsequent "comprehensive technical report." This report has not been supplied to the Tribe, and we request that it be provided now and that the comment period on the DEIR be extended for 30 days from our receipt of said document to allow us additional time for review and comment.

Section 4.5.5, Project-Specific Impacts and Mitigation Measures

Mitigation measures (MM) CR/mm-1.1 and -3.1 delay environmental review of off-site improvements and defer identification of impacts and MMs to some future unspecified time. They declare that unidentified historical and archaeological resources could be impacted but that those impacts would be less than significant with mitigation. However, these mitigation measures only require preparation of reports and do not specify that resources shall be avoided, or other mitigation. It is improper and inconsistent with CEQA requirements to rely on a future plan or report without additional public review as mitigation now. It is not necessary to know the "precise location" of the offsite improvements. A general area for these potential effects should be identified now, and the architectural/historical/archaeological studies should be completed and reported in the EIR so that design changes can be implemented to avoid any significant resources.

Please clarify whether the known archaeological sites shall be avoided or not? The EIR uses squishy language. CR/mm-2.1 says the parts of the sites found to contain subsurface deposits "shall be avoided." But then CR/mm-2.2 says, essentially, "oh that's okay, if we can't we'll do data recovery." Which is it, who decides, and when, and what are the circumstances that would preclude avoidance? None of this is specified, as it must be.

Since data recovery through excavation is not the only feasible mitigation for the impacts of this Project, the EIR must explain why avoidance and preservation in place are not feasible or why other measures better mitigate the impacts.

The DEIR notes that subsurface archaeological deposits exist in some small areas, and those areas are "potentially significant." These small areas where they identified subsurface layers are to be protected as ESAs, but the areas are not specified and we're not told where we can find that information, even if it's confidential and controlled. The Tribe requests detailed maps showing the locations of all proposed ESAs, and further requests that the comment period of the DEIR be extended for 30 days following receipt of those maps to allow sufficient time for review and comment.

The argument that surface deposits without identified subsurface components are not eligible for the CRHR is based on a highly contingent set of assumptions that are not specified in the DEIR and requires substantiation, which might well have been obtained if a realistic program of site testing and evaluation had been carried out. Without meaningful testing results, however, such a conclusion is not justified. For example, a sparse surface deposit that is 8-10,000 years old might well be judged significant, while a similar deposit of only 500 years might not. Since we know that sites of Clovis age (as much as 12,000 years old) exist in the Nipomo area, it is premature to disregard these sparse surface deposits.

Regarding CR/mm-2.2, what does it mean to say “The Data Recovery Plan will be tailored to the level of physical disturbance at each resource (if any)”? First of all, if there’s no physical disturbance why do data recovery? But more importantly, data recovery should be tailored to the significant qualities of the sites and the amount of data needed to answer the questions in the research design. It has nothing to do with the extent of disturbance. If the intent is to have specific measures for the amount of hand excavation, linked somehow to the amount of site disturbance, then that must be specified in the DEIR in some concrete way (either volume of excavation, or percentage of the site, or a ratio of the volume of site disturbance, or some other concrete measure) so the Tribe has an opportunity to review and comment. Such decisions cannot be deferred to some unspecified future time.

When data recovery is the only feasible mitigation, a data recovery plan “shall be prepared and adopted prior to any excavation being undertaken.” There are specific requirements for data recovery plans. Even though the CEQA Guidelines allow for certain details of a mitigation measure to be specified project approval when it is impractical or infeasible to include those details during the project's environmental review, it seems perfectly feasible and practical to include the data recovery plan as an appendix to the DEIR in this case. Moreover, it will be impossible to gauge the adequacy of the measure, whether it is proportional to the impacts, and whether there are any residual impacts without knowing the details of the plan.

MM CR/mm-2.3 calls for a Cultural Resource Protection Plan which may or may not include some level of tribal and archaeological monitoring. The language is unclear. Given the nature of archaeological resources on the Nipomo Mesa there is a high likelihood that sites will be discovered during construction. For that reason, tribal and archaeological monitoring of all ground disturbance should be required as a specific mitigation measure, and not just in the vicinity of known sites. The DEIR should provide details regarding the extent of monitoring required, when it shall occur, by whom, and under what conditions; such details are all omitted. These critical details cannot be deferred to some later, unspecified time. Again, the Tribes and public then have no way of judging the adequacy of the monitoring effort to mitigate impacts.

Along these same lines, there is no explanation of just what should happen when previously unidentified sites are discovered, or when unanticipated artifacts and features are found in the known sites. Please include this information in the DEIR. Definition of these mitigation details cannot be deferred; they must be included as specific measures in the EIR.

Regarding CR Impacts 4 and 5, any impacts to human remains would be significant and cannot be mitigated to less than significant levels by simply following state and law and local policy, as proposed in CR Impact 4. Simply following the law is not mitigation. We can see where you want to go with this—yank out the bodies and move on—but that’s not explicitly stated as a MM. The text (page 4.5-22) states “The NAHC would determine a Most Likely Descendant (MLD) to complete an inspection of the site within 48 hours of notification and recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.” Is removal and analysis the only option? How do you know that’s what the MLD will recommend? Leaving our ancestors' remains in place is always the preferred option, and there are many ways to accomplish that, but it is not mentioned as an alternative. Moreover, the MM does not even mention reburial if the individuals are moved!! One could assume that’s what the author thinks would happen, but where would that occur? Removing and reburying human remains does not mitigate impacts to less than significant levels. This would be a Class I (significant unmitigable) impact. What about leaving them in place? Redesign to avoid? Not even considered! This section is completely inadequate.

The Tribe considers the cumulative impacts of this Project to be substantial, and that the proposed MMs are not adequate to mitigate those impacts. We request that the County require a specific MM that more comprehensively considers the broader cultural geography of the Nipomo Mesa and surrounding area, specifically geared to the cumulative impacts on cultural values and regional research.

Regarding tribal consultation and tribal cultural resources (Section 4.18), NCTC maintains that AB52 consultation has not been completed. We have had ongoing discussions with the County and developers' representatives that have not been concluded and need to continue.

TCR/mm-1.1 calls for the construction of a repatriation vault within site DR-001. This mitigation will have a significant residual impact on the site which is not addressed. Section 4.5 calls for avoidance of the site, so these measures are inconsistent and conflicting.

TCR/mm-1.2 calls for the incorporation of tribal themes and placenames into the project design, but provides no performance standards and designates no party responsible for ensuring the measure is carried out. This must be remedied.

We reiterate our mission to protect the natural and cultural resources of the Project area and to utilize this site for the interpretative benefit of the public. We extend an invitation for further collaboration with the County and public agencies to assist the Project in the development of educational opportunities at the site.

Sincerely,

Violet Sage Walker,
Northern Chumash Tribal Council Chairwoman



VIA EMAIL AND BY HAND

August 1, 2022

County of San Luis Obispo
Department of Planning and Building
Attn: Dana Reserve/Jennifer Guetschow
976 Osos Street, Rm 300
San Luis Obispo, CA 93408
JGuetschow@co.slo.ca.us

Re: Dana Reserve Specific Plan Draft Environmental Impact Report

Dear Ms. Guetschow, et al:

I am writing to endorse the Northern Chumash Tribal Council's comments on the Dana Reserve Specific Plan Draft Environmental Impact Report (DEIR) and to raise the additional, overlapping issue of the grossly inadequate historical analysis of the Project area.

The undersigned, Eva Ulz, was executive director of the History Center of San Luis Obispo County from 2014 to 2018. Ms. Ulz has served on the Dana Adobe Nipomo Amigos (DANA) board of directors and acted as its interim executive director for several months in 2018. Ms. Ulz also served on the California Preservation Program Steering Committee and the City of San Luis Obispo's Jack House Committee. She currently serves as chair of the City of San Luis Obispo's cultural heritage committee and is a member of the California Preservation Foundation education committee.

The DEIR failed to consult local archives.

No information is given regarding the specific "literature and data review" or "background research" used in the preparation of Section 4.5 "Cultural Resources" of the DEIR, however, according to Subsection 4.5.1.3.1 "Records Search," it appears that no local archives were consulted. Relevant information exists in the research libraries and collections of the History Center of San Luis Obispo and Dana Adobe Nipomo Amigos (DANA). Additionally, relevant information may also be in the Cal Poly Special Collections, South County Historical Society, and other local archives.

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The History Center was formed in the 1950s—in partnership with the County and City of San Luis Obispo—and acquired the Dana Adobe shortly thereafter, eventually passing the property to the Dana Adobe Nipomo Amigos (DANA) decades later. The History Center maintains a research library and historical archive which contains significant primary and secondary sources regarding the history of Rancho Nipomo, the nearly 38,000-acre Mexican land grant to Captain William Goodwin Dana in 1837.

DANA also maintains a library of books, documents, and research regarding the history and evolution of the Dana family and Rancho Nipomo throughout the 19th and 20th centuries.

As a result, Section 4.5.1 “Cultural Resources: Existing Conditions” omits critical local historical context.

Had the local sources described herein been consulted, the DEIR would likely not be entirely bereft of local historical context. For example, the DEIR recites generic Mission-era history but fails to include any meaningful mention of Rancho Nipomo, including the fact that the entire Nipomo area was under unified ownership of the Dana family for much of the 19th century and operated as working rancho.

Likewise, no mention is made of Nipumu, the Chumash village that existed there long before and up to and including the rancho era; some local historians believe that villagers may have worked as vaqueros on the Danas’ rancho.

Neither is there any information about the agricultural revolution that took place in Nipomo after the droughts of the 1860s broke the ranchos. Dorothea Lange’s famous “Migrant Mother” photograph was taken in Nipomo during the dustbowl migration of the Great Depression. Several years later, the culturally and ethnically diverse Nipomo farming community was shaken by the Japanese Internment.

Omission of local historical context from the description of the existing conditions at and surrounding the Project area is a fatal flaw because it precludes the DEIR’s ability to identify and disclose potentially significant adverse impacts to the historical and cultural resources that communicate these historical events and themes—many of which have statewide, if not national, significance.

There is substantial evidence that the 0.25-mile radius adopted for cultural resources identification is inadequate.

DEIR Subsection 4.5.1.3.1 announces without explanation that the search for existing cultural resources was limited to a 0.25-mile radius around the Project Area. However, as explained above, the complex history of land ownership in the Nipomo area clearly shows that such a limitation is both arbitrary and inadequate, particularly in light of the fact that certain off-site Project improvements have not yet been located and will almost certainly be sited as to adversely impact historical and cultural resources.

Although the Dana Adobe now sits on less than 2 acres (adjacent to a 100-acre County-managed open space), the historical boundaries of the rancho encompassed nearly all of modern Nipomo. The DEIR's failure to recognize and disclose this essential fact, inter alia, shows that not only does the DEIR provide no evidence provided to support the apparently arbitrary 0.25-mile radius, but there is substantial evidence that supports requiring a much wider ranging inquiry.

Given the complete lack of any local historical context and omission of easily discovered and highly relevant facts—particularly in the face of the DEIR's apparent reliance on a generic Mission-era historical statement—it is questionable whether such significant deficits can even be remedied by a response to comments. In my opinion, the only adequate remedy for these omissions is a revised and expanded historical and cultural resources report.

Sincerely,



Eva Ulz
Certified Law Clerk
Supervised by Babak Naficy

Cc: Northern Chumash Tribal Counsel; Babak Naficy

Jennifer Guetschow

From: Valerie Vaz <valvaz100@gmail.com>
Sent: Monday, August 1, 2022 2:21 PM
To: Jennifer Guetschow
Subject: [EXT]Dana Reserve

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

As a resident of South County I was happy to see Dana Reserve as a proposed project. It will provide much needed housing to the south county, including affordable housing.

I moved to the Central Coast with a job transfer 7 years ago. I was fortunate to be able to buy my home when I moved. With that said, I was earning above a "head of household" income, and had a housing budget up to \$500k. I was able to find a 3/2 townhouse in Arroyo Grande for \$485k. Today, I could not afford to buy my own home.

As we attempt to attract new companies to the region, we need to provide housing for their workforce. I believe that the lack of inventory will continue to drive up our home prices and price out potential employees.

I fully SUPPORT Dana Reserve!

-

Valerie Vaz
cell 805-234-5285 | email valvaz100@gmail.com