The local air quality emissions from construction were analyzed through utilizing the methodology described in *Localized Significance Threshold Methodology* (LST Methodology), prepared by SCAQMD, revised October 2009. The LST Methodology found the primary criteria pollutant emissions of concern are NOx, CO, PM10, and PM2.5. In order to determine if any of these pollutants require a detailed analysis of the local air quality impacts, each phase of construction was screened using the SCAQMD's Mass Rate LST Look-up Tables. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily onsite emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality. Table E shows the onsite emissions from the CalEEMod model for the different construction phases and the calculated emissions thresholds that have been detailed above.

Table E - Construction-Related Local Criteria Pollutant Emissions

	Po	llutant Emissi	ons (pounds/d	lay)
Phase	NOx	CO	PM10	PM2.5
Excavation and Grading of Channel <sup>1</sup>	38.22	15.92	1.93	1.43
Channel Construction	16.24	10.01	0.86	0.81
Catch Basin Construction	24.79	13.59	1.21	1.14
Final Grading and Road Construction <sup>1</sup>	20.85	10.91	1.19	0.92
Paving	6.93	4.83	0.41	0.38
SCAQMD Thresholds for 25 meters (82 feet) <sup>2</sup>	170	1,007	6	5
Exceeds Threshold?	No	No	No	No

Notes:

Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for two acres in Air Monitoring Area 22, Corona/Norco Area.

The data provided in Table E shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds for any phase of construction. In addition, construction emissions would be short-term, limited only to the period when construction activity is taking place. As such, construction related local air concentrations would be less than significant for the proposed project. Additionally, construction activities would be required to follow SCAQMD regulations that limit fugitive dust emissions, including SCAQMD Rules 401 and 403. These rules require that contractors working on the proposed project to implement measures to reduce fugitive dust emissions that include the following:

- Limit speed of vehicles on dirt areas of the project site to 15 miles per hour or less.
- Apply water and/or other dust suppressants as necessary to prevent or alleviate erosion by the forces of wind.
- Limit all stockpiles that can be blown by wind to 8 feet in height or apply a soil stabilizer.
- Cover all trucks hauling soil or other loose material.
- Sweep daily all paved access roads and any trackout onto public road with water sweepers.
- When winds exceed 25 mph, cease all grading operations other than dust suppression activities.

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<sup>&</sup>lt;sup>1</sup> Grading based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.

<sup>&</sup>lt;sup>2</sup> The nearest sensitive receptors are single-family homes located as near as 10 feet (3 meters) from the project site. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25 meter thresholds.

#### **Operational Emissions**

The on-going operation of the proposed project would not result in a long-term increase in air quality emissions. The only emissions associated with the long-term operations are from annual routine maintenance trips to the project site by District personnel in a small truck. No change in the routine maintenance schedule would occur from implementation of the proposed project. Therefore, no long-term operational emissions are anticipated and there would be no impact.

#### Level of Significance

Less than significant impact.

#### Impact 3: Cumulative Net Increase in Non-Attainment Pollution

The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel throughout the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered would cover an even larger area. Accordingly, the cumulative analysis for the project's air quality must be generic by nature. The project area is out of attainment for ozone and PM10 and PM2.5 particulate matter. In accordance with CEQA Guidelines Section 15130(b), this analysis of cumulative impacts utilizes a project approach that relies on a summary of projections of future development and impacts contained in adopted plans. Therefore, if the proposed project is consistent with the following items, the project would result in a less than significant cumulative net increase in non-attainment criteria pollutants.

- Consistency with the SCAQMD project specific thresholds for construction and operations; and
- Project consistency with existing air quality plans.

#### Consistency with Project Specific Thresholds

#### Construction-Related Impacts

The project site is located in the South Coast Air Basin, which is currently designated by the EPA for federal standards as a non-attainment area for ozone and PM2.5 and by CARB for the state standards as a non-attainment area for ozone, PM10, and PM2.5. The regional ozone, PM10, and PM2.5 emissions associated with construction of the proposed project have been calculated above in Table D. The above analysis found that development of the proposed project would result in less than significant regional emissions of VOC and NOx (ozone precursors), PM10, and PM2.5 during construction of the proposed project. Therefore, a less than significant cumulative impact would occur from construction of the proposed project.

#### Operational-Related Impacts

The greatest cumulative operational impact on the air quality to the Air Basin will be the incremental addition of pollutants mainly from increased traffic from residential, commercial, and industrial development. In accordance with SCAQMD methodology, projects that do not exceed SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative

#### Vista Environmental

1021 Didrikson Way Laguna beach California 92651 phone 949 510 5355 facsimile 949 494 3150 email greg@vistalb.com impact. The above analysis found that continued use of the proposed channel would result in no new VOC and NOx (ozone precursors), PM10, and PM2.5 emissions. With respect to long-term emissions, this project would create no cumulative impact.

#### Consistency with Air Quality Plans

As detailed above, the project site is currently designated as Residential Agricultural in the General Plan and is zoned Agricultural – Low Density 20,000 sq. ft. (A-1-20). The proposed project is consistent with the current land use designation and zoning and would not require a General Plan Amendment or zone change. Therefore, the proposed project would not result in an inconsistency with the current land use designations with respect to the regional forecasts utilized by the AQMP.

#### Level of Significance

Less than significant impact.

#### **Impact 4: Sensitive Receptors**

The proposed project would not expose sensitive receptors to substantial pollutant concentrations. The local concentrations of criteria pollutant emissions produced in the nearby vicinity of the proposed project, which may expose sensitive receptors to substantial concentrations have been calculated above for construction activities and a qualitative analysis has been provided for operational activities. The discussion below also includes an analysis of the potential impacts from toxic air contaminant emissions. The nearest offsite sensitive receptors are single-family homes located as near as 10 feet (3 meters) from the project site.

#### Construction-Related Sensitive Receptor Impacts

Construction of the proposed project may expose sensitive receptors to substantial pollutant concentrations of localized criteria pollutant concentrations and from toxic air contaminant emissions created from onsite construction equipment, which are described below.

#### Local Criteria Pollutant Impacts from Construction

The local air quality impacts from construction of the proposed project has been analyzed above in Table E and found that the construction of the proposed project would not exceed the local NOx, CO, PM10 and PM2.5 thresholds of significance discussed above in Table C. Therefore, construction of the proposed project would create a less than significant construction-related impact to local air quality and no mitigation would be required.

#### Toxic Air Contaminants Impacts from Construction

The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the proposed project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Given the relatively limited number of heavy-duty construction equipment and the short-term construction schedule, the proposed project would not result in a long-term (i.e., 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk. In addition, California Code of Regulations Title 13, Article 4.8, Chapter 9,

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1021 Didrikson Way Laguna Beach California 92651 Phone 949 510 5355 Facsimile 949 494 3150 Email Greg@vistalb.com Section 2449 regulates emissions from off-road diesel equipment in California. This regulation limits idling of equipment to no more than five minutes, requires equipment operators to label each piece of equipment and provide annual reports to CARB of their fleet's usage and emissions. This regulation also requires systematic upgrading of the emission Tier level of each fleet, and currently no commercial operator is allowed to purchase Tier 0 or Tier 1 equipment and by January 2023 no commercial operator is allowed to purchase Tier 2 equipment. In addition to the purchase restrictions, equipment operators need to meet fleet average emissions targets that become more stringent each year between years 2014 and 2023.

Additionally, construction activities would be required to follow SCAQMD regulations that limit DPM emissions, including SCAQMD Rule 402 that does not allow the discharge of any source of air contaminants that may create a nuisance at the nearby homes. In addition, the District requires all contractors to adhere to the District's best management practices (BMPs) that limit construction activities and associates emissions from occurring in close proximity to the nearby homes. Therefore, through implementation of State and SCAQMD regulations and the District's BMPs, a less than significant short-term toxic air contaminant impact would occur during construction of the proposed project. As such, construction of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

#### Operations-Related Sensitive Receptor Impacts

The on-going use of the storm drain channel would not expose sensitive receptors to substantial pollutant concentrations. The only emissions associated with the long-term operations are from weekly routine maintenance trips to the project site by District personnel in a small truck. No change in the routine maintenance schedule would occur from implementation of the proposed project. As such, no long-term operational emissions are anticipated and there would be no impact.

#### Level of Significance

Less than significant impact.

#### **Impact 5: Objectionable Odors**

The proposed project would not create objectionable odors affecting a substantial number of people. Individual responses to odors are highly variable and can result in a variety of effects. Generally, the impact of an odor results from a variety of factors such as frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in the ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

Sensory perception has four major components: detectability, intensity, character, and hedonic tone. The detection (or threshold) of an odor is based on a panel of responses to the odor. There are two types of thresholds: the odor detection threshold and the recognition threshold. The detection threshold is the lowest concentration of an odor that will elicit a response in a percentage of the people that live and work in the immediate vicinity of the project site and is typically presented as the mean (or 50 percent of the population). The recognition threshold is the minimum concentration that is recognized as having a

#### VISTA ENVIRONMENTAL

characteristic odor quality, this is typically represented by recognition by 50 percent of the population. The intensity refers to the perceived strength of the odor. The odor character is what the substance smells like. The hedonic tone is a judgment of the pleasantness or unpleasantness of the odor. The hedonic tone varies in subjective experience, frequency, odor character, odor intensity, and duration. Potential odor impacts have been analyzed separately for construction and operations below.

#### Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement, paints and solvents and from emissions from diesel equipment. The objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. Due to the transitory nature of construction odors, a less than significant odor impact would occur and no mitigation would be required.

#### Potential Operations-Related Odor Impacts

The proposed project would consist of channel improvements to the current interim dirt lined trapezoidal channel, including the development of a concrete channel and several catch basins to improve capacity for increased flow rates. The proposed project would have the potential to reduce odors that may currently be created in the interim dirt lined channel from organic processes and insufficient capacity of the conveyance of the ultimate condition flow rates. However, current odor levels are nominal and do not rise to a significant enough level to be unpleasant to a majority of the population in the study area. Therefore, a less than significant odor impact would occur from operation of the existing project.

#### Level of Significance

Less than significant impact.

#### Impact 6: Generation of Greenhouse Gas Emissions

The proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The proposed project would consist of improvements to the existing interim dirt lined channel, including the development of a concrete channel and several catch basins. The proposed project is anticipated to generate GHG emissions from construction equipment, however no generation of GHG emissions is anticipated from the operation of the proposed project.

The project's GHG emissions have been calculated with the CalEEMod model. A summary of the results is shown below in Table F and the CalEEMod model run printout is attached to this letter.

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Table F - Construction Related Greenhouse Gas Emissions

	Greenhouse (	Gas Emission	s (Metric To	ns per Year
Category	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Excavation and Grading of Channel	28.70	0.01	0.00	28.81
Channel Construction	31.51	0.00	0.00	31.62
Catch Basin Construction	42.34	0.01	0.00	42.51
Final Grading and Road Construction	5.46	0.00	0.00	5.49
Paving	0.71	0.00	0.00	0.72
Total Construction Emissions	108.72	0.02	0.00	109.14
Amortized Total Construction Emissions (30 years) <sup>1</sup>	3.62	0.00	0.00	3.64
SCAQMD Draft Threshold of Significance				3,000

Notes:

The data provided in Table F above shows that the proposed project would create a total of 109.14 MTCO<sub>2</sub>e or 3.64 MTCO<sub>2</sub>e per year, when amortized over a 30 year period. In order to identify significance criteria under CEQA for development projects, SCAQMD initiated a Working Group, which provided detailed methodology for evaluating significance under CEQA. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 3,000 MTCO2e for all land use type projects. Although the SCAQMD provided substantial evidence supporting the use of the above threshold, they have not been formally adopted because the SCAQMD was awaiting the outcome of the State Supreme Court decision of the California Building Industry Association v. Bay Area Air Quality Management District (BAAQMD), which was filed on December 17, 2015 and the SCAQMD Board has not yet approved these thresholds. According to the SCAQMD draft threshold of significance, a cumulative global climate change impact would occur if the GHG emissions created from the on-going operations would exceed 3,000 MTCO<sub>2</sub>e per year. Therefore, a less than significant generation of greenhouse gas emissions would occur from development of the proposed project. Impacts would be less than significant.

#### Level of Significance

Less than significant impact.

#### Impact 7: Greenhouse Gas Plan Consistency

The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The applicable plans for the proposed project are the *County of Riverside Draft Climate Action Plan*, February 2015 and the SCAQMD Working Group's draft GHG emissions thresholds. The County's Climate Action Plan provides a GHG emission reduction target of a 15 percent decrease from 2008 levels by 2020. The Climate Action Plan provides measures to reduce transportation, energy, area source, water, solid waste, agricultural, and industrial sources of GHG emissions. None of these measures are applicable to the operation of the storm drain channel. As such the proposed project is consistent with the County's Climate Action Plan.

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<sup>&</sup>lt;sup>1</sup> Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009. Source: CalEEMod Version 2013,2.2.

In addition, as detailed above in Impact 6, implementation of the proposed project would result in the generation of 3.64 MTCO<sub>2</sub>e per year. The proposed project would be below the SCAQMD's proposed threshold of 3,000 MTCO<sub>2</sub>e per year. As such, the proposed project is consistent with the SCAQMD Working Group's draft GHG emissions thresholds. Therefore, the proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

#### Level of Significance

Less than significant impact.

Please let me know if you have any questions or need additional information with regard to the above analysis. I can be reached at (949) 510-5355, or email me at greg@vistalb.com.

Sincerely,

Greg Tonkovich, AICP

Bry Touhand

Senior Analyst

Vista Environmental

Encl.: CalEEMod Printouts

#### Norco Storm Drain

South Coast Air Basin, Summer

### 1.0 Project Characteristics

#### 1.1 Land Usage

)	0
00.000,1-2	104,544.00
)	2.40
	Acre
	2.40
Contract Springs Contracts	Other Non-Asphalt Surfaces

# 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2017
Utility Company	Southern California Edison	uo			
CO2 Intensity (Ib/MWhr)	630.89	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

# 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 2.4 acres Other Non-Asphalt Surfaces; 0.56 Other Asphalt Surfaces.

Construction Phase - 10 days Channel Excavation/Grading; 25 days Channel Const; 25 days Catch Basin Const; 5 days Final Grading/Road Const; 2 days

Off-road Equipment - Catch Basin Const - 1 crane; 1 tractor/loader/backhoe; 2 signal boards; 1 off-highway truck; 1 concrete saw.

Off-road Equipment - Channel Const: 1 crane, 1 concrete pump, 1 excavator.

Off-road Equipment - Channel Excavation/Grading - 2 excavators; 2 crawler tractors; 2 rubber tired loaders.

Off-road Equipment - Final Grading/Road Const - 1 grader; 1 skid steer loader; 1 off-highway truck.

Off-road Equipment - Paving - 1 paver; 1 roller.

Trips and VMT - 6 vendor trips added to Excavation/Grading of Channel & Final Grading/Road Construct to account for water trucks. Haul truck trip length 15 mi one way.

Grading - 3,075 CY exported during Excavation and Grading of Channel.

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403 minimum reqs, water exposure 3 times per day selected.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	25.00
tblConstructionPhase	NumDays	220.00	24.00
tblConstructionPhase	NumDays	6.00	10.00
tblConstructionPhase	NumDays	6.00	5.00
tblConstructionPhase	NumDays	10,00	2.00
tblGrading	MaterialExported		3,075.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
blOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
lbIOffRoadEquipment	PhaseName	ng dan ang dan ang dang mengham gang bang bang bang bang da at-dawi cantabah dan mandah dan dan aban apan amam	Excavation and Grading of Channel
blOffRoadEquipment	PhaseName	na innernin maarka maadadhaada dha ha ha ka ah ah maadadhaanna innennin oo dhaadaan kaaada	Excavation and Grading of Channel
blOffRoadEquipment	PhaseName	akki yari shiki jikiyi iron. Bayi tayit gani sikn padi garisada binu jawa say sawa wan mak mahi makarakalakan man ma	Excavation and Grading of Channel
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripLength	and were stated and spirit speak stated in the state of $20.00$	15.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	9.00

### 2.0 Emissions Summary

# 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction** 

	A contract of the contract of		
C02e		0.0000 6,363.690	0.0000 6,363.690 7
N2O	i de la	0.0000	
CH4	b/day	1.2238	1.2238
Fugitive   Exhaust   PM2:5   Bio-CO2   NBio-   Total CO2   CH4   N2O   PM2.5   Total   CO2   CO2   CH4   N2O   CO2   CO3   C	)/g	0.0000   6,337.991   6,337.9919   1,2238	1.8032 0.0000 6,337.991 6,337.9919 1.2238
NBio- CO2		6,337.991 9	6,337.991 9
Bio- CO2			0.0000
PM2,5 Total		1.8032	
Exhaust PM2.5		1.4908	1.4908
Fugitive PM2.5		0.3124	0.3124
PM10 Total		1.6204 3.4229	
Fugitive Exhaust PM10 PM10 PM10 Total	b/day	1.6204	1.6204 3.4229
Fugitive PM10	9/qI	1.8024	1.8024
502		0.0631	0.0631
00		46.2665   23.7881	46.2665 23.7881 0.0631
NOX			46.2665
ROG		3.6469	3.6469
	Year	2017	Total

#### Mitigated Construction

C02e	0.0000 6,363.690	6,363.690 7
N2O.	0.0000	0.0000 6,363.690 7
Total CC2 CH4	1.2238	1.2238
Total CC2	6,337.9919	6,337.9919
NBio- CO2	0.0000 6,337.991 6,337.9919 9	0.0000   6,337.991   6,337.9919   1.2238
PM2:5 Bio- CO2	0.0000	
	1.7301	1.7301
Fugitive Exhaust PM2.5 PM2.5	1.4908	1.4908
41,050,01	0.2393	0.2393
PM10 Total	2.7548	2.7548
Fugitive Exhaust PM10 PM10	1.6204	1.6204
Fugitive PM10 Ib.	1.1343	1.1343
\$02	0.0631	0.0631
00	46.2665 23.7881	46.2665 23.7881
Ň	46.2665	
ROG	3.6469	3.6469
Year	2017	Total
		L

ROG         NOx         SO2         Fugitive         Exhaust         PM2.6         Exhaust         PM2.6         Bio-CO2         No.0         CO2         Total         No.0         CO2         CH4.         N20         CO24           Percent         0.00         0.00         0.00         0.00         37.07         0.00         19.52         23.39         0.00         4.05         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00 <th></th> <th></th> <th></th>			
ROG         NOx         CO         SO2         Fugitive         Exhaust         PM10         Fugitive         Exhaust         PM2.6         BIo-CO2         Intel         Total         PM2.6         PM2.6         PM2.6         Total         Total         Total         Total         Total         O.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00 <t< th=""><th>CO2<b>e</b></th><th>0.00</th><th></th></t<>	CO2 <b>e</b>	0.00	
ROG         NOx         CO         SO2         Fugitive         Exhaust         PM2.6         Bio-CO2         Total CO2         Total CO3         PM2.6         PM2.6         Final CO2         Total CO3         PM2.6         Final CO3         Total CO3         PM2.6         Total CO3         PM2.6         PM2.6         Total CO3         PM2.6	N20	0.00	
ROG         NOx         GO         SO2         Fugitive         Exhaust         PM10         Fugitive         Exhaust         PM2.6         BIO- CO2         INBIO-CO2         Total           0.00         0.00         0.00         37.07         0.00         19.52         23.39         0.00         4.05         0.00         0.00	СНА	0.00	
ROG         NOx         CO         SO2         Fugitive         Exhaust         PM2.6         BIO- CO2         BIO- CO2         BIO- CO2         NB           0.00         0.00         0.00         37.07         0.00         19.52         23.39         0.00         4.05         0.00	Total CO2	0.00	
ROG         NOx         CO         SO2         Fugitive         Exhaust         PM10         Fugitive         Exhaust         PM2.6         BM2.6         PM2.6         PM2.6         Total           0.00         0.00         0.00         37.07         0.00         19.52         23.39         0.00         4.05	NBio-CO2	0.00	
ROG         NOx         CO         SO2         Fugitive         Exhaust         PM10         Flugitive         Exhaust           0.00         0.00         0.00         37.07         0.00         19.52         23.39         0.00	Bio-CO2	00'0	
ROG         NOx         CO         SO2         Fugitive         Exhaust         PM10         Flugitive         Fugitive           PM10         Total         PM2.6         FM2.6         FM	PM2.5 Total	4.05	
ROG         NOx         CO         SO2         Fugitive         Exhaust         PM10         F           PM10         PM10         Total         Total         Total         Total           n         0.00         0.00         37.07         0.00         19.52	Extraust PM2.6	0.00	
ROG         NOx         CO         SO2         Fugitive         Exhaust           pWrig         PWrig         PWrig           n         0.00         0.00         37.07         0.00	Fugitive PM2.6	23.39	
ROG NOx CO SO2 Fugitive Especial Co 0.00 0.00 37.07	PM10 Total	19.52	
ROG NOx CO SO2 F	Exhaust PM10	0.00	
NOX CO 0.00 0.00 u	Fugitive	37.07	
0.00 0.00	S02	00.0	
ROG 0.00	8	0.00	
	MOX	0.00	
Percent Reduction	ROG	0.00	
		Percent	Reduction

### 3.0 Construction Detail

#### Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date IN	Num Days Num Days	Vum Days	Phase Description
<del>-</del>	ng of	Grading	6/1/2017	6/14/2017	သ	10	
2	Channel Construction	Building Construction	6/15/2017	7/19/2017	ည	25	
S	Catch Basin Construction	Building Construction		8/22/2017	5	24	
4	Final Grading and Road	Grading		8/29/2017	5	2	
5		Paving	8/30/2017	8/31/2017	2	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

#### Acres of Paving: 0

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

#### OffRoad Equipment

Phase Name	Officed Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Excavation and Grading of Channel	Crawler Tractors	2	8.00	208	0.43
Excavation and Grading of Channel	Excavators	2	8.00	162	0.38
Excavation and Grading of Channel	Rubber Tired Loaders	2	8.00	199	0.36
Channel Construction	Cranes	The state of the s	8.00	226	0.29
Channel Construction	Excavators	The state of the s	8.00	162	0.38
Channel Construction	Pumps		8.00	84	0.74
Catch Basin Construction	Concrete/Industrial Saws		8.00	81	0.73
Catch Basin Construction	Cranes	The state of the s	8.00	226	0.29
Catch Basin Construction	Off-Highway Trucks		8.00	400	0.38
Catch Basin Construction	Signal Boards	2	8.00	9	0.82
Catch Basin Construction	Tractors/Loaders/Backhoes	MAIN STANDARD OF CONTROL CONTR	9.00	26	0.37
Final Grading and Road Construction	Graders		8.00	174	0.41
Final Grading and Road Construction	Off-Highway Trucks		8.00	400	0.38
Final Grading and Road Construction	Skid Steer Loaders		8.00	64	0.37
Paving	Pavers		8.00	125	0.42
Paving	Rollers	1	8.00	80	0.38

#### Trips and VMT

Phase Name	pment	Š	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip Hauling Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length		Length	Class	Vehicle Class	Vehicle Class
xcavation and	9	15.00	9.00	384.00	14.70	06.9	15.00	15.00 LD_Mix	HDT_Mix	HHDT
Channel Construction	8	54.00	21.00	00.0	14.70	06.9	20.00	20.00 LD_Mix	HDT_Mix	HHDT
Satch Basin	9	54.00	21.00	00.0	14.70	06.9	20.00	20.00 LD_Mix	HDT_Mix	HEDT
Final Grading and	3	8.00	6.00	00'0	14.70	9.90	20.00	20.00 LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	00:00	0.00	14.70	9.90	20.00	20.00 LD_Mix	HDT_Mix	HEDT

# 3.1 Mitigation Measures Construction

Water Exposed Area

# 3.2 Excavation and Grading of Channel - 2017 Unmitigated Construction On-Site

CC2e		0.0000	3,937.899 4	3,937.899 4
N20				
CH4	o/day		1.1989	1.1989
Total CO2	/d	0.000.0	3,912.723 3,912.7236 6	3,912.723  3,912.7236 6
Bio-CO2 NBio- CO2			3,912.723 6	3,912.723 6
Bio-CO2				
PM2.5 Total		0.1198	1.3784	1.4982
Fugilive Exhaust PM2.5 PM2.5		0.000.0	1.3784	1.3784
Fugilive PM2.5		0.1' 98		0.1198
PM10 Total		1.0953	1.4983	2.5935
Fugilive Exhaust PM10 PM10	b/day	0.0000	1.4983	1,4983
0.0002466000	r <b>c</b> pl	1.0953		1.0953
\$0 <b>2</b>			0.0383	0.0383
00		a Martin video regrego	38.2203 15.9186	15.9186
NOX		in lippics (mayor accomp.		38.2203
ROG			3.0213	3,0213
	Category	Fugitive Dust	Off-Road	Total

## Unmitigated Construction Off-Site

		86	46	59	91
CO2e		2,125,186 0	128.8194	171.7859	2,425.791 3
		2,		·-	2,
N20					
CH4		0.0156	9.1000e- 004	8.4400e- 003	0.0249
	b/day		9.10	8.44 0	
NBio- Total CO2	IP/c	2,124.859 2,124.8594 4	003	086	2,425.268 2,425.2684 4
otal (		,124.	128.8003	171.6086	,425.
		359 2			898
NBIO- CO2		124.8	128.8003	171.6086	425.2
2		2		·	2
Bio-CO2					
	44		 		
PM2.5 Total		0.2417	0.0176	0.0457	0.3050
ā t		0.3	i	i	0
aust 2.5		042	30e-	1.2400e- 003	124
Exhaust PM2.5		0.1042	6.9400e- 003	1.2400 003	0.1124
.5	204	75	ļ	<u> </u>	56
Fugitive PM2.5		0.1375	0.0107	0.0445	0.1926
		es	·	0	
PM10 Tetal		0,6153	0.0451	0.1690	0.8293
4			! [	L	
Exhaust PM10		0,1133	7.5500e- 003	1.3500e- 003	0.1222
	ib/day	0			-
Fugitive PM10	7	0.5020	0.0375	0.1677	0.7072
д <u>.</u>			!		Ö
05	10.	214	1.3000e- 003	2,1200 <del>c-</del> 003	249
SC		0.02	1.30	2.12	0.02
0		6.4260	0.5629	0.8806	7.8695
ဝ၁		6.4	0.5	0.8	8.7
×		7.5012	45	.05	162
ΧON	100	7.50	0.4745	0.0705	8.0462
		9	6	_	_
ROG		0.5236	0.0459	0.0561	0.6257
			<b> </b>		
	à	D.	_		
	Category	Hauling	Vendor	Worker	Total
	U	_		-	
			1	1	L

### Mitigated Construction On-Site

CO2e	1	0.0000	3,937.899 4	3,937.899 4
N2O				
CH4	,		1.1989	1.1989
Total CO2	lb/day	0,000.0	912.7235	
NBio-			3,912.723 3,912.7235 5	,912.723 3, 5
Bio-CO2			0.0000	0.0000 3,912.723 3,912.7235 5
PM2,5 Total	Cate:	0.0467	1.3784	1.4251
Exhaust PM2.5		0.000.0	1.3784	1.3784
Fugitive PM2.5	i ng	0.0467		0.0467
PM10 Total		0.4272	1.4983	1.9254
	y	0.0000	1.4983	1.4983
Fugitive Exhaust PM10 PM10	lb/day	0.4272		0.4272
\$05			0.0383	0.0383
<u>ට</u> ට		***************************************	15.9186	
XON		Parkey Straffer statements	38.2203 15.9186	3.0213 38.2203 15.9186
ROG			3.0213	3.0213
	Category	Fugitive Dust	Off-Road	Total

### Mitigated Construction Off-Site

CO2e		2,125.186 0	128.8194	171.7859	2,425.791 3
NZO					
CH4.	lb/day	0.0156	9.1000e- 004	8.4400e- 003	0.0249
Total CO2	)/ <b>q</b> l	2,124,859 2,124.8594 4	128.8003	171.6086	2,425.268 2,425,2684 4
NBio- CO2		2,124,859	128.8003	171.6086	2,425.268 4
Bio-CO2					
PM2.5 Total		0.2417	0.0176	0.0457	0:3050
Exhaust PM2.5		0.1042	6.9400e- 003	1,2400e- 003	0.1124
Fugitive PM2.5		0.1375	0.0107	0.0445	0.1926
PM10 Total		0.6153	0.0451	0.1690	0.8293
Exhaust PM10	lb/day	0.1133	7,5500e- 003	1.3500e- 003	0.1222
Fugitive PM10	/ <b>q</b>	0.5020	0.0375	0.1677	0.7072
802		0.0214	1.3000e- 003	2.1200e- 003	0.0249
00		6.4260	0.5629	0.8806	7.8695
NOx		7,5012	0.4745	0.0705	8.0462
ROG		0.5236	0.0459	0.0561	0.6257
	Category	Hauling	Vendor	Worker	Total

# 3.3 Channel Construction - 2017

## **Unmitigated Construction On-Site**

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CO2e		749.859 3	,749.859 3
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	o/day	٥	
Total CO2 CH4	p/c	1,741.534 1,741.5343 0.3964 3	1,741.534 1,741.5343 3
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9		4	4
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NBio- CO2		<b>4</b>	7
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ust PM2,5 Bio-CO2 N 2.5 Total C	W 15		
22 <u>28</u>		0.8120	0.8120
Bř.		0.8	8.
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2.5 2.5	72.00	0.8120	0.8120
\$ 2		8.0	8.0
4			
PM10 Fugitive Exhaust Total PM2.5 PM2.5			
2° €	100		
3.₹			
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重点		0.8552	0.8552
Fuglitve Exhaust PM10 PM10		0.8552	8
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	10.00		<b></b>
C4		75	72
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ROG		6088	80
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# Unmitigated Construction Off-Site

			8/	93	26
CO2e		0.000.0	450.8678	618.4293	1,069.297 1
NZO					
CH4		0.000.0	3.1800e- 003	0.0304	0.0336
20	lb/day		ļ	L	
Total OC		0.0000	450.8010	617.791	,068.592 1,068.5921 1
NBio-   Total CO2   CH4		0.000.0	450.8010	617.7911 617.7911	1,068.592 1
Bio-CO2					
PM2.5 Total	Service 2	0.0000	0.0617	0.1646	0.2263
Exhaust PM2.5		0.0000	0.0243	4.4800e- 003	0.0288
Fugitive PM2.5		0.0000	0.0374	0.1601	0,1975
PM10 Total		0.000.0	0.1577	0.6085	0.7662
Exhaust PM10	lb/day	0.000.0	0.0264	4.8500e- 003	0.0313
Fugilive PM10	/q	0.0000	0.1313	0.6036	0.7349
SO2		0.0000	4.5700e- 003	7.6400e- 003	0.0122
00		0,000	1.9700	3.1700	5.1400
NOX		0.0000	1.6606	0.2539	1.9145
ROG		0.000.0	0.1608	0.2021	0.3629
	Category	Hauling	Vendor	Worker	Total

### Mitigated Construction On-Site

•203		1,749.859 3	1,749.859 3
NZO		A	
\$#O	lb/day	0.3964	0.3964
Fotal CO2	d l	0.0000 1,741.534 1,741.5343	0.0000 1,741.534 1,741.5343
NBIO- CO2		1,741.534	1,741.534 3
Bio- CO2	1000		0.0000
st PMZ,5 E 5 Total		0.8120	0.8120
Fugitive Exhaust PM10 Fugitive Exhaust PM10 PM10 Total PM2.5 PM2.5		0,8120	0.8120
Fugifive PM2.5			
PM10 Total		0.8552	0.8552
Exhaust PM10	s/day	0.8552	0.8552
Fugilive PM10	<b>₩</b>	and the state of t	
<b>20</b> S	4	0.0175	0.0175
80		10.0090	10.0090
Ŏ		16.2420	1.6088 16.2420
ROG		1.6088	1.6088
	Category	Off-Road	Total

### Mitigated Construction Off-Site

	26.00	•	œ	က	_
CO2e		0.000	450.8678	618.4293	1,069.297 1
N20					
CH4	b/day	0.0000	3.1800e- 003	0.0304	0.0336
Total CO2	lal.	0.0000	450.8010	617.7911 617.7911	,068.592 1,068.5921 1
-COD		0.0000	450.8010	617.7911	1,068.592
Bio- C02		-			
PM2.5 Total		0.0000	0.0617	0.1646	0.2263
Eugitive Exhaust PM2.5 PM2.5		0.0000	0.0243	4.4800e- 003	0.0288
Fugitive PM2,5		0.0000	0.0374	0.1601	0.1975
PM10 Total		0.000.0	0.1577	0.6085	0.7662
Exhaust PM10	biday	0.000.0	0.0264	4.8500e- 003	0.0313
Fugitive PM10	(Q)	0.0000	0.1313	0.6036	0.7349
S02		0.0000	4.5700e- 003	7.6400e- 003	0.0122
ဝ၁		0.0000	1.9700	3.1700	5.1400
NO.		0.0000	1.6606	0.2539	1.9145
ROG		0.0000	0.1608	0.2021	0.3629
	Category	Hauling	Vendor	Worker	Total

# 3.4 Catch Basin Construction - 2017

# Unmitigated Construction On-Site

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N2O C <b>02e</b>	27	2,866,700		2,866.700 4
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OI.	p/q	2,851,490 2,851,4909 0.7243		2,851,490  2,851,4909   0,7243 9
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Flugitive Exhaust PM2.5 Bio- CO2 NBio- Total CO2 CH4 PM2.5 PM2.5 Total CO2	700	<b>—</b>		
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Fugilive Exhaust PM40 PM10		1,2143		1.2143
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# **Unmitigated Construction Off-Site**

TO WAS INVESTIGATE AND	CONTRACTOR NAMES IN ASS		7	,	
CO26		0.000	450.8678	618.4293	1,069.297 1
NZO					
CH4	lb/day	0.0000	3.1800e- 003	0.0304	0.0336
Total CO2	lb/d	0.0000	450,8010	617.7911	,068.592 1,068.5921 1
NBio- CO2		0.0000	450.8010	617.7911	1,068.592
Bio-CO2					
PM2.5 Total		0.0000	0.0617	0.1646	0.2263
Exhaust PM2.5		0.000.0	0.0243	4.4800e- 003	0.0288
Fugitive PM2:5	14	0.0000	0.0374	0.1601	0.1975
PM10 Total	10 S 10 S	0.000.0	0.1577	0.6085	0.7662
Exhaust PM10	lbiday.	0.000	0.0264	4.8500e- 003	0.0313
Fugitive PM10	lb/c	0.0000	0.1313	0.6036	0.7349
\$05		0.000.0	4.5700e- 003	7,6400e- 003	0.0122
ဝ၁	di di	0.0000	1.9700	3.1700	5.1400
NOX		0.0000	1.6606	0.2539	1.9145
ROG		0.000.0	0.1608	0.2021	0.3629
	Category	Hauling	Vendor	Worker	Total

### Mitigated Construction On-Site

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CO2e		2,866.700 4	2,866.700 4
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Ο.		3,86	38,
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<u>a</u>		51	51
H I		2,8	2,8
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46.5		2,851,490   2,851,4909   0.7243 9	2,8
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8	1.2	0.0000	8
ă		8	3
ă		0	0.0000 2,851.490 2,851.4909 0.7243
PMz.5 Bio-CO2 NBio- Total CO2 CH4			
φ. <u></u>		1,1439	1,1439
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Fugitive Exhaust PM2.5 PM2.5		.1439	1.1439
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3 6	100		
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2 €		1.2143	1.2143
PM10 Total		, I	
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Fugitive Exhaust PM10 PM10	<b>5</b>	-	
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### Mitigated Construction Off-Site

CO26		0.000.0	450.8678	618.4293	1,069.297 1
N2O	46. ·				
CHA	lb/day	0.0000	3,1800e- 003	0.0304	0.0336
Total CO2	/g	0.000	450.8010 450.8010	617.7911 617.7911	1,068.592   1,068.5921
NBio- CO2		0.0000	450.8010	617.7911	1,068.592
Bio-CO2					
PM2.5 Total		0.0000	0.0617	0.1646	0.2263
Exhaust PM2.5		0.0000	0.0243	4.4800e- 003	0,0288
Fugilive PM2.5		0.0000	0.0374	0.1601	0.1975
PM10 Total		0.0000	0.1577	0.6085	0.7662
Exhaust PM10	biday	0.0000	0.0264	4.8500e- 003	0.0313
Fugitive PM10	<b>G</b>	0.0000	0.1313	0.6036	0.7349
205		0.0000	4.5700e- 003	7.6400e- 003	0.0122
တ			THE COUNTY COME THE	3,1700	5.1400
NOX		0.0000	1.6606	0.2539	1.9145
ROG		0.0000	0.1608	0.2021	0.3629
	Category	Hauling	Vendor	Worker	Total

# 3.5 Final Grading and Road Construction - 2017

**Unmitigated Construction On-Site** 

CO2e		0.000.0	2,204.077 5	2,204,077 5
NZO				
NBio- Total CO2 CH4	b/day		0.6710	0.6710
Total CO2	<b>Q</b>	0.0000	2,189,986 2,189,9864 0.6710 4	2,189.986 2,189.9864 4
NBio- CO2			2,189.986	2,189.986
Bio-CO2				
st PM2.5 I		0.0573	0.9020	0.9592
Exhau PM2.6		0.0000	0.9020	0.9020
Fugitive PM2.5		0.0573		0.0573
. PM10 Total		0.5303	0.9804	1,5107
Fugitive Exhaust PM10 PM10	b/day	0.0000	0.9804	0.9804
Fugitive PM10		0.5303		0.5303
802			5 0.0214	5 0.0214
00			10.9095	10.9095
NON :			2 20.8481	20.8481
ROG			1.9312	1.9312
	Category	Fugitive Dust	Off-Road	Total

# Unmitigated Construction Off-Site

			-		
CO2s		0.0000	128.8194	91.6192	220.4385
N20.			Market bester Special parties of the special		
СНА	b/day	0.000.0	9,1000e- 004	4.5000e- 003	5.4100e- 003
Total CO2		0.0000	128.8003 128.8003	91.5246	220.3249
Exhaust PM2.5 Bio-CO2 NBio- Total CO2 PM2.5 Total	The second second	0.000.0	128.8003	91.5246	220.3249
Blo-CO2					
PM2.5 Total		0.0000	0.0176	0.0244	0.0420
Exhaust PM2.5		0.0000	6.9400e- 003	6.6000e- 004	7,6000e- 003
Fugitive PM2.5		0000.0	0.0107	0.0237	0.0344
PIM10 Tõtal		0.000.0	0.0451	0.0901	0.1352
Exhaust PM10	lb/day.	0.0000	7.5500e- 003	7.2000e- 004	8.2700e- 003
Fugitive PM10	<b>(g)</b>	0.0000	0.0375	0.0894	0.1269
S02		0.0000	1.3000e- 003	1.1300e- 003	2.4300e- 003
8		0.0000	0.5629	0.4696	1.0325
NOX		0.0000	0.4745	0.0376	0.5121
ROG		0.000.0	0.0459	0.0299	0.0759
	Category .	Hauling	Vendor	Worker	Total

## Mitigated Construction On-Site

CO2e		0.0000	2,204.077 5	2,204.077 5
NZO				
CHA	o/day		0.6710	0.6710
NBio- Total CO2 CO2	P/gl	0.0000	0.0000 2,189.986 2,189.9864 0,6710 4	0.0000 2,189.986 2,189.9864 0.6710 4
NBio- CO2			2,189.986	2,189.986
Bio-CO2			0.0000	0.0000
PM2.5 Total	10.0	0.0223	0.9020	0.9243
Exhaust PM2.5		0.000.0	0.9020	0.9020
Fugilive Exhaust PM2.5 PM2.5		0.0223		0.0223
PM10 Total		0.2068	0.9804	1.1872
Exhaust PM10	t./day	0.0000	0.9804	0.9804
Fugitive PM10	/91	0.2068		0.2068
302	W.		0.0214	0.0214
00			20.8481 10.9095	10.9095
×ON			20.8481	20.8481
ROG			1.9312	1.9312
	Category	Fugitive Dust	Off-Road	Total

### Mitigated Construction Off-Site

CO2e		0.000	128.8194	91.6192	220.4385
NZO					
CHA	b/day	0.0000		4.5000e- 003	5.4100e- 003
Total CO2	(P)	0.0000	128.8003	91.5246	220.3249
NBio- GO2		0.0000	128.8003	91.5246	220.3249
Blo- CO2	H <sub>1</sub> and			Maria sissai saan	
PM2.5 Total		0.0000	0.0176	0.0244	0.0420
Exhaust PM2.5		0.0000	6.9400e- 003	6.6000e- 004	7.6000e- 003
Fugilive PM2.5		0.0000	0.0107	0.0237	0.0344
PM10 Total		0.0000	0.0451	0.0901	0.1352
Exhaust PM10	lb/day	0.0000	7.5500e- 003	7.2000e- 004	8.2700e- 003
Fugitive PM10	<b>(b)</b>	0.0000	0.0375	0.0894	0.1269
202		0.0000	1,3000e- 003	1.1300e- 003	2.4300e- 003
00		0.0000	0.5629	0.4696	1.0325
NO.N		0.0000	0.4745	0.0376	0.5121
ROG		0.0000	0.0459	0.0299	0.0759
	Category	Hauling	Vendor	Worker	Total

#### 3.6 Paving - 2017 Unmitigated Construction On-Site

	ROG	XON	93	. SO2	Fugitive PM10	Exhaust PM10	PM18 Total	Fugitive Exhaust PM2.5 PM2.5	Exhaust PM2.5	PM2.5 Bio-CO2 NBio- Total CO2 CO2	BI6-CO2	NBIO- CO2	Total CO2	CH4	NZO	C02e
Category				(F)	Ib/day	Á							<b>19</b>	b/day		
Off-Road	0.6710	6.9321	4.8269	7.1400e- 003		0.4086	0.4086		0.3759	0.3759		730.1781	730.1781   730.1781	0.2237		734.8764
Paving	0.7336	Communication (statement of the statement of the statemen	The state of the s		ALL STREET, ST	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4046	6.9321	4.8269	7.1400e- 003		0,4086	0.4086		0.3759	0.3759		730.1781	730.1781	0.2237		734.8764

# **Unmitigated Construction Off-Site**

1956-P3504	oneening			_	_
CO2e		0.0000	0.0000	57.2620	57.2620
N2O					
CH4	lay	0.0000	0.0000	2.8100e- 003	2.8100e- 003
PM2.5 Blo-CO2 NBlo- Total CO2 Total CO2	lb/day	0.000.0	0.000.0	57.2029	57.2029
NBio- CO2		0.000.0	0.0000	57.2029	57.2029
Bio-CO2					
PM2.5 Total		0.000.0	0.0000	0.0152	0.0152
Exhaust PM2.6		0.000.0	0.000.0	4.1000e- 004	4,1000e- 004
Fugitive PM2.5		0.0000	0.0000	0.0148	0.0148
PM10. Total		0.0000	0.0000	0.0563	0.0563
Exhaust PM10	b/day	0.000.0	0.0000	4.5000e- 004	4,5000e- 004
Fugitive PM10	y <b>q</b> l	0.000.0	0.000.0	0.0559	0.0559
205		0.0000	0.0000	7.1000e- 004	7.1000e- 004
00	100	0.0000	0.0000	0.2935	0.2935
NOX		0.0000	0.0000	0.0235	0.0235
ROG		0.0000	0.0000	0.0187	0.0187
	Category	Hauling	Vendor	Worker	Total

## Mitigated Construction On-Site

CO2e		734.8764	0.0000	734.8764
N2O				
CH4	lay	0.2237		0.2237
otal CO2	)/ <b>q</b> l	730.1781	0.0000	730.1781 730.1781
NBIc- To CO2		730.1781		730.1781
Bio- C02		0.000.0		0.0000
PM2.5 Total		0.3759	0.0000	0.3759
Exhaust PM2.5		0.3759	0.0000	0.3759
Fugitive PM2,5		Processor of the Contract of		
PM10 Total		0.4086	0.0000	0.4086
Exhaust PM10	lb/day	0.4086	0.0000	0.4086
Fugitive PM10	)/ <u>(</u> ]			
20S		7.1400e- 003	ente en march de marc	7.1400e- 003
ဝ၁		4.8269	And the state of t	4.8269
NOX		6.9321		6.9321
ROG		0.6710	0.7336	1.4046
	Category	Off-Road	Paving	Total

### Mitigated Construction Off-Site

	ROG	XON V	ဌ	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- 602	NBio- CO2	Total CO2	CH4	NZO	CO2 <b>e</b>
Category					.lb/day	ay.			30				lb/k	b/day		
Hauling	0.0000	0.000.0	0.000.0	0.0000	0.000.0	0.0000	0.0000	0.000.0	0.000.0	0.0000	ders union derry james	0.000.0	0.000.0	0.0000		0,000,0
Vendor	0.0000	0.0000	0.000.0	0.0000	0.000.0	0.000.0	0.000	0.0000	0.000.0	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0187	0.0235	0.2935	7.1000e- 004	0.0559	4.5000e- 004	0.0563	0.0148	4.1000e- 004	0.0152		57.2029	57.2029	2.8100e- 003		57.2620
Total	0.0187	0.0235	0.2935	7.1000e- 004	0.0559	4.5000e- 004	0.0563	0.0148	4.1000e- 004	0.0152		57.2029	57.2029	2.8100e- 003		57.2620

Date: 11/3/2016 11:22 AM

#### **Norco Storm Drain**

### South Coast Air Basin, Winter

### 1.0 Project Characteristics

#### 1.1 Land Usage

Population	0	0
Floor Surface Area	24,393.60	104,544.00
Lot Acreage	0.56	2.40
Metrio	Acre	Acre
Size		2.40
Land Uses	urfaces	Other Non-Asphalt Surfaces

# 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2017
Utility Company	Southern California Edison	·			
CO2 Intensity (Ib/MWhr)	630.89	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

# 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 2.4 acres Other Non-Asphalt Surfaces; 0.56 Other Asphalt Surfaces.

Construction Phase - 10 days Channel Excavation/Grading; 25 days Channel Const; 25 days Catch Basin Const; 5 days Final Grading/Road Const; 2 days

Off-road Equipment - Catch Basin Const - 1 crane; 1 tractor/loader/backhoe; 2 signal boards; 1 off-highway truck; 1 concrete saw.

Off-road Equipment - Channel Const: 1 crane, 1 concrete pump, 1 excavator.

Off-road Equipment - Channel Excavation/Grading - 2 excavators; 2 crawler tractors; 2 rubber tired loaders.

Off-road Equipment - Final Grading/Road Const - 1 grader; 1 skid steer loader; 1 off-highway truck.

Off-road Equipment - Paving - 1 paver; 1 roller.

Trips and VMT - 6 vendor trips added to Excavation/Grading of Channel & Final Grading/Road Construct to account for water trucks. Haul truck trip length 15 mi one way.

Grading - 3,075 CY exported during Excavation and Grading of Channel.

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403 minimum reqs, water exposure 3 times per day selected.

Table Name	Column Name	Default Value	NewValue
tblConstructionPhase	NumDays	220.00	25.00
tblConstructionPhase	NumDays	220.00	24.00
tblConstructionPhase	NumDays	and the right were maximum that the right was a second that the right of $6.00$	10.00
tblConstructionPhase	NumDays	6.00	5.00
tblConstructionPhase	NumDays	10.00	2.00
tblGrading	MaterialExported	0.00	3,075.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName	and design over the products were related to the contract of t	Excavation and Grading of Channel
tblOffRoadEquipment	PhaseName	menden in der Anderstanden der Anderstanden der Anderstanden in der der Anderstanden der An	Excavation and Grading of Channel
tblOffRoadEquipment	PhaseName	teksi haki ketis wasi keta ipike papa sata Pata mak gapa jaki dasi sala sata jang ping sata sata dasa dasa dasa	Excavation and Grading of Channel
tblProjectCharacteristics	OperationalYear	norm derivines copy charges and produce produces are compared to the compared compared compared compared to the compared compare	2017
tblTripsAndVMT	HaulingTripLength	To $0.00$	15.00
tblTripsAndVMT	VendorTripNumber	0,00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00

### 2.0 Emissions Summary

# 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction** 

		53	53
CO2e		6,345.2 8	6,345.2 8
N2O		0.0000 6,345.253	1.8036 0.0000 6,319.548 6,319.5486 1.2241 0.0000 6,345.253
CH4	5746	.2241	.2241
NBio- Total CO2 CH4 GO2	lb/day	0.0000   6,319.548   6,319.5486   1.2241 6	3.5486 1
o- Tota اک		548 6,31	.548 6,31
	ě	5 6,319 6	6,319 6
Bio- CO2			0.000
PM2,5 Bi		1.8036	
Exhaust PM2.5		1.4912	1.4912
PM10 Fugitive Exhaust Total PM2.6 PM2.5		0.3124	0.3124
PM10 Total		3.4233	3,4233
Fugitive Exhaust PM10 PM10	ay	1.6208	1.6208
Fugitive PM10	lb/d	1.8024	1.8024
SO2		0.0629	0.0629
CO		24.9384	
XON N		46.5461 24.9384	3.6849 46.5461 24.9384
ROG		3.6849	3.6849
	Year	2017	Total

#### Mitigated Construction

CO2e		0.0000 6,345.253	0.0000 6,345.253 8
NZO			0.0000
CH4	ib/day	1.2241	1.2241
Total CO2	( <b>Q</b> )	6,319,548 6,319,5486 1,2241 6	6,319.5486
Bio-CO2 NBio- Total CO2 CH4 N2O		6,319.548 6	1.7305 0.0000 6,319.548 6,319.5486 1.2241 6
1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		0.0000	0.0000
PM2.5 Total		1.7305	
Exhaust PM2.5		1.4912	1.4912
Fugitive E PM2.5 F		0.2393	0.2393
PM10 Total		2.7552	2.7552
Fugilive Exhaust	o/đay	1.6208	1.6208
Fugitive PM10		1.1343	1.1343
502		0.0629	4 0.0629
တ၁		46,5461 24,9384	46.5461 24.9384
×ON			
ROG		3.6849	3.6849
	Year	2017	Total

Constant	
C028	0.00
N20	0.00
	0.00
	00'0
NBIo-CO2	0.00
Bio- CO2 NBio-CO2 Total CC2	00.0
M2.6 Total	4.05
Exhaust F PM2.5	00'0
Fugitive PM2.6	23.39
PM10 Total	19.52
Exhaust PM10	0.00
Fugitive Phrt0	37.07
802	0.00
00	0.00
NOX	00'0
ROG	0.00
	Percent Reduction
لسنسنا	

### 3.0 Construction Detail

#### Construction Phase

pe Start Date End Date Num Days Num Days Week		6/15/2017	ion 7/20/2017 8/22/2017		8/30/2017 8/31/2017
Phase Type	Grading	Building Construction	Building Construction	Grading	Paving
Phase Name	Excavation and Grading of Channel	Channel Construction	Catch Basin Construction	Final Grading and Road	Paving
Phase Vumber		WT WANT COURSE LAND	and Principle Parliaments 20th		British has and governed for

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating - sqft)

#### OffRoad Equipment

Phase Name	Officed Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Excavation and Grading of Channel	Crawler Tractors	2	8.00	208	0.43
Excavation and Grading of Channel	Excavators	2	8.00	162	0.38
Excavation and Grading of Channel	Rubber Tired Loaders	2	8.00	199	0.36
Channel Construction	Cranes	The same of the sa	8.00	226	0.29
Channel Construction	Excavators	The state of the s	8.00	162	0.38
Channel Construction	Pumps		8.00	84	0.74
Catch Basin Construction	Concrete/Industrial Saws	The state of the s	8.00	81	0.73
Catch Basin Construction	Cranes	And the control of th	8.00	226	0.29
Catch Basin Construction	Off-Highway Trucks		8.00	400	0.38
Catch Basin Construction	Signal Boards	2	8.00	9	0.82
Catch Basin Construction	Tractors/Loaders/Backhoes	The second secon	0.00	26	0.37
Final Grading and Road Construction	Graders		8.00	174	0.41
Final Grading and Road Construction	Off-Highway Trucks		8.00	400	0.38
Final Grading and Road Construction	Skid Steer Loaders		8.00	64	0.37
	Pavers		8.00	125	0.42
Paving	Rollers		8.00	80	0.38

#### **Trips and VMT**

Offroad Equipment Worker Numbe Count 6 1	Trip         Vendor Trip         Hauling Trip           Number         Number           5.00         6.00         384.00           4.00         21.00         0.00	Worker Trip Length 14.70	Length Length  6.90 15.00	Length 15.00 20.00	th Class  T5.00 LD_Mix  20.00 LD_Mix	Venticle Class HDT_Mix HDT_Mix	HHDT HHDT
54.00	21.00 0.00	14.70	06.9	20.00	20.00 LD_Mix	HDT_Mix	HHDT
8.00	0.00 0.00	14.70	06.9	20.00	20.00 LD_Mix	HDT_Mix	HHDT
5.00	00.0 00.0	14.70	6.90	20.00	20.00 LD_Mix	HDT_Mix	HET

# 3.1 Mitigation Measures Construction

Water Exposed Area

# 3.2 Excavation and Grading of Channel - 2017 Unmitigated Construction On-Site

COZe		0.000.0	3,937.899 4	3,937.899 4
NZO				7
CH4	b/day	Province National Association	1.1989	1.1989
Total GO2	lb/e	0.000	3,912,723 3,912,7236 6	3,912.723 3,912.7236 6
Bio- CO2 NBio- CO2			3,912.723 6	3,912.723 6
Bio-CO2				
PM2.5 Total		0.1198	1.3784	1.4982
Exhaust PM2.5		0.000.0	1.3784	1.3784
Fugitive PM2.5		0.1198		0.1198
PM10 Total		1,0953	1,4983	2.5935
Fugitive Exhaust PM10 PM10	lb/day	0.0000	1.4983	1.4983
Fugitive PM10	91	1,0953	And divine the second s	1.0953
203		ny titohon indonesi iliahan	0.0383	0.0383
<b>0</b> 0		an alba d. maldig se boa	15.9186	38.2203 15.9186
NOx		ENTROGEN FAMOUS STORAGE	38.2203	
ROG			3,0213	3.0213
	Category	Fugitive Dust	Off-Road	Total

## **Unmitigated Construction Off-Site**

COze		2,118,512	127.7380	161.1042	2,407.354 3
N20					
CH4	lb/day	0.0158	9.4000e- 004	8.4400e- 003	0.0252
NBio- Total CO2 CO2	lb/	2,118,179 2,118,1798 8	127.7183	160.9269	2,406.825 2,406.8250 0
NBio- CO2		2,118.179 8	127.7183	160.9269	2,406.825 0
PM2,5 Bio-CC2 Total					
		0.2420	0.0177	0.0457	0.3054
Exhaust PM2.5		0.1045	7.0100e- 003	1.2400e- 003	0.1128
Fugitive PM2.5		0.1375	0.0107	0.0445	0.1926
PM10 Total		0.6156	0.0451	0.1690	0.8297
Exhaust PM10	b/day	0.1136	7.6200e- 003	1.3500e- 003	0.1226
Fugitive PW10	)/q[	0.5020	0.0375	0.1677	0.7072
502		0.0214	1.3000e- 003	1.9900e- 003	0.0247
00		7.5290	0.6819	0.8088	9.0198
NOx		7.7622	0.4862	0.0775	8.3258
RÖG		0.5562	0.0502	0.0573	0.6637
	Category	Hauling	Vendor	Worker	Total

### Mitigated Construction On-Site

-205e		0.000.0	3,937.899	3,937.899 4
			8, 9,	3,93
NZO				
CH4			1.1989	1.1989
Total CO2	lb/day	00000.0	1	
		0.0	3,912	3,91
NBio- CO2			3,912.723 3,912.7235 5	3,912.723 5
Blo-CO2	a di di		0.000.0	0.0000 3,912.723 3,912.7235 5
PM2.5 Total		0.0467	1.3784	1,4251
Exhaust PM2.5		0.0000	1.3784	1.3784
Fugitive E PM2.5		0.0467		0.0467
2 Pro 10			ļ	o O
PM10 Total		0.4272	1.4983	1.9254
Fugitive Exhaust PM10 PM10	ay	0.000.0	1.4983	1.4983
Fugitive PM10	lb/day	0.4272		0.4272
SO2			0.0383	0.0383
00			15,9186	15.9186
NOx	4		38.2203	38.2203
ROG			3.0213	3.0213 38.2203 15.9186
	<b>Sategory</b>	Fugitive Dust	Off-Road	Total
	ប៊ី	Fugi	ō	_

### Mitigated Construction Off-Site

C02e		2,118.512 2	127.7380	161.1042	2,407.354 3
N20		7			
СН4	lay	0.0158	9.4000e- 004	8.4400e- 003	0.0252
Total CO2	lb/day	2,118,179 2,118,1798 8	127.7183 127.7183	160.9269	2,406.825 2,406.8250 0
NBio- CO2		2,118,179 8	127.7183	160.9269	2,406.825 0
Bio- CO2		4 /			
PM2.5 Total		0.2420	0.0177	0.0457	0.3054
Exhaust PM2.5		0.1045	7.0100e- 003	1.2400 <del>e-</del> 003	0.1128
Fugitive PM2.5		0.1375	0,0107	0.0445	0.1926
PM10 Total		0,6156	0.0451	0.1690	0.8297
Exhaust PM10	b/day	0.1136	7.6200e- 003	1.3500e- 003	0.1226
Fugitive PM10	lb/	0.5020	0.0375	0.1677	0.7072
202		0 02 14		1.9900e- 003	0.0247
00		7.5290	0.6819	0.8088	9.0198
NON		77622	0.4862	0.0775	8.3258
ROG		3955 O	0.0502	0.0573	0.6637
	Category	Hauling	Vendor	Worker	Total

# 3.3 Channel Construction - 2017

# Unmitigated Construction On-Site

1,749.859 3		0.3964	1,741,534   1,741,5343   0,3964 3	1,741.534 3		0.8120	0.8120		0.8552	0.8552		0.0175	16.2420 10.0090 0.0175	16.2420	1.6088	Total
,749.859 3		0.3964	1,741.534   1,741.5343   0.3964 3	1,741.534 3	** *****	0.8120	0.8120	Ma Vario second series	0.8552	0.8552		0.0175	16.2420   10.0090   0.0175	16.2420	1.6088	Off-Road
		day	/q)							lb/day	/ <u>a</u>					Category
G02e	N2O	CH4	Total CO2.	Bio- CO2 NBio- Total CO2 CH4	Bio-CO2	PM2.5 Total	Fugitive Exhaust PM2.5 PM2.5	Fugitive PM2.5	PM10 Total	Fugitive Exhaust PM10 PM10	Fugitive PM10	SOZ	3	Š N	9 0 1	

# Unmitigated Construction Off-Site

N2O CO2e		0.0000	447.0830	579.9750	1,027.058 0
CH4 N	b/day	0.000	3,2800e- 003	0.0304	0.0337
Total CO2	lb/e	0.000.0	447.0141	579.3368	1,026.350   1,026.3509 9
NBIO- CO2		0.000.0	447.0141	579.3368	1,026.350 9
Blo- CO2					
PM2.5 Total		0,0000	0.0619	0.1646	0.2265
Exhaust PM2.5		0.0000	0.0245	4.4800e- 003	0.0290
Fugitive PM2.5		0,0000	0.0374	0.1601	0.1975
PM10 Total		0.0000	0.1580	0.6085	0.7664
Exhaust PM10	lb/day	0.0000	0.0267	4.8500e- 003	0.0315
Fugitive PM10	<b>4</b>	0.0000	0.1313	0.6036	0.7349
SOZ		00000	4,5300e- 003	7.1600e- 003	0.0117
00		0.0000	2.3868	2.9118	5.2986
×ON		0.0000	1.7016	0.2788	1.9804
ROG		0.0000	0.1756	0.2062	0.3318
	Category	Hauling	Vendor	Worker	Total

### Mitigated Construction On-Site

CO2e		,749.859 3	1,749.859 3
N2O		eri Africalis Alterity, telesida	-
GH4	,	0.3964	0.3964
Total CO2	(lab/qa)	1,741.5343	1,741.5343
NBio- CO2		0.0000   1,741,534   1,741,5343   0,3964	1,741.534
PM10 Fuglive Exhaust PM2.5 Bio-CO2 NBio- Total CO2 CH4 Total PM2.5 PM2.5 Total CO2			0.8120 0.0000 1,741.534 1,741.5343 0.3964
PM2.5 Total		0.8120	0.8120
Exhaust PM2.5		0.8120	0.8120
Fugitive PM2.5		An example suppose description	
PM10 Total		0.8552	0.8552
Fugitive Exhaust	day	0.8552	0.8552
Fugitive PM10	(P)	en Prinsipal komzet beken	
SO2		0.0175	0.0175
00		10.0090	10.0090
NOX		16.2420	16.2420
ROG		1.6088	1.6088
	Category	Off-Road	Total

COZe		0.000.0	447.0830	579.9750	1,027.058 0
N2O					
CH4	ay.	0.000.0	3.2800e- 003	0.0304	0.0337
Total CO2	lb/day	0.000.0	447.0141	579.3368	,026.3509
NBio- CO2		000000	447.0141	579.3368	1,026.350   1,026.3509 9
Blo- CO2					
PM2.5 Total		0.000	0.0619	0.1646	0.2265
Exhaust PM2.5		0.000.0	0.0245	4,4800e- 003	0.0290
Fugitive PM2.5		0.0000	0.0374	0.1601	0.1975
PM10 Total		0.0000	0.1580	0.6085	0.7664
Exhaust PM10	lb/day	0.0000	0.0267	4.8500e- 003	0.0315
Fugitive PM10	/ <u>/</u>	0.0000	0.1313	0.6036	0.7349
s02		0.0000	4.5300e- 003	7.1600 <del>e</del> - 003	0.0117
တ		0.0000	2.3868	2.9118	5.2986
ŇŎŇ		0.0000	1.7016	0.2788	1.9804
ROG		0.0000	0.1756	0.2062	0.3818
	Category	Hauling	Vendor	Worker	Total

3.4 Catch Basin Construction - 2017

# **Unmitigated Construction On-Site**

CO2e		2,866.700 4	2,866.700 4
N2O			
Bio-CO2 NBio- Total CO2 CH4	lb/day	0.7243	0.7243
Total CO2	/gl	2,851,490 2,851,4909 0.7243 9	2,851.490 2,851.4909 0.7243 9
NBio- CO2		2,851,490 9	2,851.490 9
Bio-CO2			
PM2.5 Total		1.1439	1.1439
Fugitive Exhaust PM2.6 PM2.6		1.1439	1.1439
Fugitive PM2.5			
PM19 Total		1.2143	1.2143 1.2143
Fugitive Exhaust PM10 PM10	/day	1.2143	1.2143
Fugitive PM10			
203		0.0288	0.0288
ဝ		24.7903   13.5883	13.5883
YON			2.4532 24.7903 13.5883 0.0288
ROG		2.4532	2.4532
	Category	Off-Road	Total

# **Unmitigated Construction Off-Site**

55740035000000000	CONTROL LIGHT AND THE		į	·	
C02e	÷ħ.	0.0000	447.0830	579.9750	1,027.058 0
N20					-
СН4	b/day	0.000.0	3.2800e- 003	0.0304	0.0337
Total CO2	)/gi	0.000.0	447.0141 447.0141	579.3368	,026.350 1,026.3509 9
NBio- CO2		0.0000	447.0141	579.3368	1,026.350 9
Bio- CO2		* **			
PM2.5		0.0000	0.0619	0.1646	0.2265
Exhaust PM2.5		0.000.0	0.0245	4.4800e- 003	0.0290
Fugitive PM2.5		0.0000	0.0374	0.1601	0.1975
PM10 Total≗		0.000.0	0.1580	0.6085	0.7664
Exhaust - PM10	J/day	0.0000	0.0267	4.8500e- 003	0.0315
Fugitive PM10	/gl	0.0000	0.1313	0.6036	0.7349
s02		0.0000	4.5300e- 003	7.1600e- 003	0.0117
လ		0.0000	2.3868	2.9118	5.2986
ŇŎŇ		0.0000	1.7016	0.2788	1.9804
ROG		0.0000	0.1756	0.2062	0.3818
	Category	Hauling	Vendor	Worker	Total

### Mitigated Construction On-Site

		00	00
CO26		2,866.700 4	2,866.700 4
NZO			
CH4		.7243	0.7243
22	lb/day	0 60	0 60
rotal C		,851.49	,851.49
NBio- Total CO2		.490   2	.490 2
		0.0000   2,851,490   2,851,4909   0,7243	0.3000   2,851.490   2,851.4909
Bio-CO2		0000	0000
Bit			0
PM2.5 Total		1.1439	1.1439
\$ S		1439	1.1439
Exhaust PM2.5		1.14	1.14
Fugitive PM2.5			
PM10 Total		1.2143	1.2143
ust 10	100	43	
Fugitive Exhaust PM10 PM10	o/day	1.2143	1.2143
ngitive •M10	lb/		
π.,		· · ·	
80Z		0.0288	0.0288
O		13.5883	883
03		13.5	13.5
ΧÓΝ		24.7903	24,7903 13,5883
ROG		2.4532	2.4532
		And part of Michigan	
	Category	Off-Road	Total
	Ö	ō	

### Mitigated Construction Off-Site

C02e	er Services	0.000.0	447,0830	579.9750	1,027.058 0
NZO			an house some many in	dan sakrana sucramonana	
CH4	lb/day	0.0000	3.2800e- 003	0.0304	0.0337
Total CO2	q	0.0000	447.0141	579.3368	1,026.350 1,026.3509 9
NBio- CO2	500 ar 2015	0.0000	447.0141	579.3368	1,026.350 9
Bio- CO2					
PM2.5		0.0000	0.0619	0.1646	0.2265
Exhaust PM2.5		0.000.0	0.0245	4,4800e- 003	0.0290
Fugitive PM2.5		0.0000	0.0374	0.1601	0.1975
PM10 Total		0.0000	0.1580	0.6085	0.7664
Exhaust PM10	Ib/day	0.0000	0.0267	4.8500e- 003	0.0315
Fugitive	Maria de la companya	0.0000	0.1313	0.6036	0.7349
802		0.0000	4.5300e- 003	7,1600e- 003	0.0117
00		0.0000	2.3868	2.9118	5.2986
NOX		0.0000	1.7016	0.2788	1.9804
ROG		0,000	0.1756	0.2062	0.3818
	Category	Hauling	Vendor	Worker	Total

# 3.5 Final Grading and Road Construction - 2017 Unmitigated Construction On-Site

10000			_	
		0	121	177
Õ		0.000.0	4. v	5.0
COZe	Arres 4	o.	2,204.077 5	2,204.077 5
24 RECEPT DESCRIPTION			-	
N20				
720				
7-1-1-1				
1356 (1557) (0.004) (0.004)			<b> </b>	
Total CO2 CH4			5	9
i i			.67	.67
	a À		0	o
N	b/day		7	4
8		0	86	986
更		0,000.0	68	89.
2	100	0	2,1	2,1
	46.1		9	9
ბ ჯ			186	86.
NBio- CO2			2,189.986 2,189.9864 0.6710 4	2,189.986 2,189.9864 0.6710 4
10000	100		2	2,
27				
ಕ				
Bio- 002				
CO .	200			
		_		
PM2.5 Total		0.0573	0.9020	0.9592
₹°°	4,000	0.0	6.0	6.0
			<u> </u>	
				_
Exhaust PM2.5	<b>建</b> 爾	0.000.0	0.9020	0.9020
\$ ₹	2.77	ő.	9.9	6.0
			<u> </u>	
Fugitive PM2.5				
\$ \$		0.0573		0.0573
38		,0°C		ő
<b>u.</b> —	100	Ľ		٦
			[	
PM10 Total		0.5303	0.9804	1.5107
₽₽°	100	.53	86.	.51
		9	ľ	-
	100			_
Exhaust PM10		0.0000	0.9804	0.9804
동준		ō.o	6.0	6.0
9	b/day			
Fugitive PM10		0.5303		ဗ
<b>農業</b>		330		0.5303
ž Č		0.5		0.5
	4.4	ļ	<b> </b>	
	WW.E		4	4
<b>SO2</b>	takan a		0.0214	0.021
O)			ŏ	o.
	100	<b> </b> -		
	4 148		1.9312 20.8481 10.9095	20,8481 10,9095
00			06	6
			우	6
100				
NOX			181	<del>18</del>
2			8	8.0
	45000		2	×
o ·			12	1.9312
ROG	3.67		93	93
			-	-
0.5 (600)860 800,000	grande della Transportation		====	
		<u></u>		
	2	Fugitive Dust	D.	
	Category	9	Off-Road	Total
Provide A	att	jį į	Ē	ř
	<b>)</b>	Ψ	٧	

# Unmitigated Construction Off-Site

	04551003				2
CO2e		0.0000	127.7380	85.9222	213.6602
N2O					
СНА	,	0.0000	9.4000e- 004	4.5000e- 003	5.4400e- 003
Total CO2 CH4 N2O	lb/day	0.0000	127.7183	85.8277	213.5460
NBio- CO2		0.000.0	127.7183 1	85.8277	213.5460 2
Bio-CO2			-	ω	Ž.
PM2.5 B Total		0.000.0	0.0177	0.0244	0.0421
Exhaust PM2.5		0.0000	7.0100e- 003	6.6000e- 004	7.6700e- 003
Fugilive PM2.5		0.000.0	0.0107	0.0237	0.0344
PM10 Totel		0.000.0	0.0451	0.0901	0.1353
Exhaust PM10	lay	0.000.0	7.6200 <del>e-</del> 003	7.2000e- 004	8.3400e- 003
Fugitive PM10	lb/day	0.0000	0.0375	0.0894	0.1269
SO2		0.0000	1.3000e- 003	1.0600e- 003	2.3600e- 003
00		0.0000	0.6819	0.4314	1.1133
NOx		0:0000	0.4862	0.0413	0.5275
ROG	de .	0.000.0	0.0502	0.0305	0.0807
	Category	Hauling	Vendor	Worker	Total

## Mitigated Construction On-Site

0026		00000	2,204,077 5	2,204.077 5
N2O		· · · · · · · · · · · · · · · · · · ·		
CH4	lay		0.6710	0.6710
Bio- CO2 NBio- Total CO2 CH4	9/ <b>q</b> l	0.0000	0.0000 2,189.986 2,189.9864 0.6710 4	0.0000 2,189.986 2,189.9864 4
NBlo- CO2			2,189.986 4	2,189.986
Bio- CO2			0.0000	0.000.0
PM2.5 Total		0.0223	0.9020	0.9243
Exhaust PM2,5		0.0000	0.9020	0.9020
Fugitive Exhaust PM2.5 PM2.5		0.0223		0.0223
PM10 Total		0.2068	0.9804	1.1872
Exhaust PM10	Jay	0.0000 0.2068	0.9804	0.9804
Fugitive PM10	15/de	0.2068		0.2068
805			0.0214	0.0214
တ			10.9095	10.9095
XON			20.8481	20.8481
ROG			1.9312	1.9312
	Category	Fugitive Dust	Off-Road	Total

### Mitigated Construction Off-Site

CO2e		0.000	127.7380	85.9222	213.6602
N20					
CH4	lb/day	0.0000		4.5000e- 003	5.4400e- 003
Total CO2	<b>/</b>	0.0000	127.7183	85.8277	213.5460
NBio- GO2		0.0000	127.7183	85.8277	213.5460
Blo-CO2		***************************************			
PM2.5 Total		0.0000	0.0177	0.0244	0.0421
Exhaust PM2.5		0.0000	7.0100 <del>e-</del> 003	6.6000e- 004	7.6700e- 003
Fugilive PM2.5		0.0000	0.0107	0.0237	0.0344
PM10 Total		0.000.0	0.0451	0.0901	0.1353
Exhaust PM10	day	0.0000	7.6200e- 003	7.2000e- 004	8,3400e- 003
Fugitive PM10	/9]	0.0000	0.0375	0.0894	0.1269
SO2	90	0.0000	1.3000e- 003	1.0600e- 003	2.3600e- 003
83		0.0000	0.6819	0.4314	1,1133
NOX		0.0000	0.4862	0.0413	0.5275
ROG		0.0000	0.0502	0.0305	0.0807
	Category	Hauling	Vendor	Worker	Total

#### 3.6 Paving - 2017 Unmitigated Construction On-Site

88		764	000	1764
C02 <b>8</b>		734.8764	0.000	734,8764
N2O				
				2
CH4	o/day	0.2237		0.2237
NBio. Total CO2 CO2	P/qI	.1781	0.000.0	.1781
Tota		1 730	0.0	1 730
NBIO. CO2		730.1781 730.1781		730.1781 730.1781
<b>3</b> 00 -eug		MUE 1803 & KANNI MAN		
<u> </u>				
Flugtive Exhaust PM2.5 PM10 Fotel PM2.5 PM2.5 Total	8 8	0.3759	0.0000	0.3759
15 S:			ļ	
PMS		0.3759	0.0000	0.3759
ugilive PM2.5				
9+		99	0	9
Tota		0.4086	0.0000	0.4086
xnaust PM10		0,4086	0.000.0	0.4086
	l5/day	0	0	
DE L				
802		7.1400e- 003		7.1400e- 003
8		4.8269		4.8269
ŎΝ		6.9321		6.9321
				<u> </u>
80 00 0		0.6710	0.7336	1.4046
			<del> </del>	
	Category	Off-Road	Paving	Total
	و	<u> </u>	and the second s	

# Unmitigated Construction Off-Site

002e		0.0000	0.0000	53.7014	53.7014
N20					
CH4	b/day	0.000.0	0.0000	2.8100e- 003	2.8100e- 003
NBio- Total CO2	Val	0.000.0	0.0000	53.6423	53.6423
NBio- CO2		0.0000	0.0000	53.6423	53.6423
Bio- CO2		d almonos care			
st PM2,5		0.0000	0.000.0	0.0152	0.0152
Fugitive Exhaust PM2.5 PM2.5		0.0000	0.0000	4.1000e- 004	4.1000e- 004
Fugitive PM2.5		0.0000	0.0000	0.0148	0.0148
PM10 Total		0.0000	0.0000	0.0563	0.0563
Fugitive Exhaust PM10 PM10	lb/day	0.000.0	0.000	4.5000e- 004	4.5000e- 004
Fugilive PM10	/ql	0.0000	0.0000	0.0559	0.0559
30S		0.0000	0.0000	6.6000e- 004	6.6000e- 004
8		0.0000	0.0000	0.2696	0.2696
NOX		0.000.0	0.0000	0.0258	0.0258
ROG		0.000.0	0.0000	0.0191	0.0191
	Category	Hauling	Vendor	Worker	Total

## Mitigated Construction On-Site

	5.43	4	T	4
CO2e		734.8764	0.0000	734.8764
N2O				
CH4	/day	0.2237		0.2237
NBio- Total CO2 CH4 CO2	9/ <b>q</b> l	730.1781	0.000.0	0.0000 730.1781 730.1781
NBio- CO2		730.1781   730.1781		730.1781
Bio-CO2		0.0000		0.000.0
PM2.5 . Totel		0.3759	0.0000	0.3759
Exhaust PM2.5		0.3759	0.0000	0.3759
Fugitive PM2.5				
PM10 Total		0.4086	0.0000	0.4086
Fugitive Exhaust PM10 PM10	lb/day	0.4086	0.0000	0.4086
Fugitive PM10	/GI	:		
<b>203</b>		7.1400e- 003		7.1400e- 003
တ္		4.8269		4.8269
NOX		6.9321		6.9321
ROG		0.6710	0.7336	1.4046
	Category	Off-Road	Paving	Total

## Mitigated Construction Off-Site

CO2•		0.000.0	0.0000	53.7014	53.7014
OZN			o	53	63
			<u> </u>		1
СН4	b/day	0.0000	0.0000	2.8100e- 003	2.8100e- 003
Total CO2	/ <b>a</b> l	0.000.0	0.0000	53.6423	53.6423
NBio- CÓ2		0.0000	0.0000	53.6423	53.6423
PM2.5 Bio- CO2 . Total					
PM2.5 . Total		0.000.0	0.0000	0.0152	0.0152
Exhaust PM2.5		0.000.0	0.0000	4.1000e- 004	4.1000e- 004
Fugitive PM2.5		0.0000	0.0000	0.0148	0.0148
PM10 Total		0.0000	0.0000	0.0563	0.0563
Exhaust PMM0	b/day	0.000.0	0.0000	4.5000e- 004	4.5000e- 004
Fugitive PM10	)/q	0.0000	0.0000	0.0559	0.0559
S02		0.000.0	0.000.0	6.6000e- 004	6.6000e- 004
00		0.0000	0.0000	0.2696	0.2696
×ON		0.0000	0.0000	0.0258	0.0258
ROG	i i	0000.0	0.0000	0.0191	0.0191
	Category	Hauling	Vendor	Worker	Total

#### Norco Storm Drain

South Coast Air Basin, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Population	0	0
Floor Surface Area	24,393.60	104,544.00
Lot Acreage	0.56	2.40
Мейнс	Acre	Acre
Size		2.40
Land Uses	Other Asphalt Surfaces	Other Non-Asphalt Surfaces 2.40

# 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2017
Utility Company	Southern California Edison	uo			
CO2 Intensity (Ib/MWhr)	630.89	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

# 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 2.4 acres Other Non-Asphalt Surfaces; 0.56 Other Asphalt Surfaces.

Construction Phase - 10 days Channel Excavation/Grading; 25 days Channel Const; 25 days Catch Basin Const; 5 days Final Grading/Road Const; 2 days

off-road Equipment - Catch Basin Const - 1 crane; 1 tractor/loader/backhoe; 2 signal boards; 1 off-highway truck; 1 concrete saw.

Off-road Equipment - Channel Const: 1 crane, 1 concrete pump, 1 excavator.

Off-road Equipment - Channel Excavation/Grading - 2 excavators; 2 crawler tractors; 2 rubber tired loaders.

Off-road Equipment - Final Grading/Road Const - 1 grader; 1 skid steer loader; 1 off-highway truck.

Off-road Equipment - Paving - 1 paver; 1 roller.

Trips and VMT - 6 vendor trips added to Excavation/Grading of Channel & Final Grading/Road Construct to account for water trucks. Haul truck trip length 15 mi one way.

Grading - 3,075 CY exported during Excavation and Grading of Channel.

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403 minimum reqs, water exposure 3 times per day selected.

New Value	25.00	24.00	10.00	5.00	2.00	3,075.00	1.00	2.00	2.00	2.00	Excavation and Grading of Channel	Excavation and Grading of Channel	Excavation and Grading of Channel	2017	15.00	6.00	6.00
Default Value	220.00	220.00	6.00	6.00	10.00	0.00	2.00	0.00	0.00	0.00	M MARIE MANN THAN THAN THAN THAN THAN THAN THAN T	reproductive design ment of the second secon	en de la company de l'anneau en departe proposition de la company de la company de la company de la company de	2014	20.00	0.00	00'00
Column Name	NumDays	NumDays	NumDays	NumDays	NumDays	MaterialExported	OffRoadEquipmentUnitAmount	OffRoadEquipmentUnitAmount	OffRoadEquipmentUnitAmount	OffRoadEquipmentUnitAmount	PhaseName	PhaseName	PhaseName	OperationalYear	HaulingTripLength	VendorTripNumber	VendorTripNumber
Table Name	tbiConstructionPhase	tblConstructionPhase	tblConstructionPhase	tblConstructionPhase	tblConstructionPhase	tblGrading	tblOffRoadEquipment	tblOffRoadEquipment	tblOffRoadEquipment	tblOffRoadEquipment	tblOffRoadEquipment	tblOffRoadEquipment	(b)OffRoadEquipment	tblProjectCharacteristics	tblTripsAndVMT	tblTripsAndVMT	tblTripsAndVMT

### 2.0 Emissions Summary

### 2.1 Overall Construction Unmitigated Construction

		109.1448	109.1448
		0.0000 109.1448	0.0000 109.1448
	/yr	0.0000   108.7160   168.7160   0.0204	0.0204
505	*	108.7160	0.0000 108.7160 108.7160
C02		108.7160	108.7160
		0.0000	
Total		0.0412	0.0412
PM2.5 PM2.5		0.0347	0.0347
PM2.5		6.5500e- 003	6.5500e- 003
Total	91	0.0653	0.0653
PM10	tons/yr	0.0370	0.0370
PM10	for	0.0283	0.0283
		1.2400e- 003	1,2400e- 003
}		0.5772	0.5772 1.2400e-
		0.8439	0.8439
) } -		0.0833	0.0833
	Year	2017	Total

#### Mitigated Construction

CO2e		109.1447	1.1447
110000000000000000000000000000000000000			0.0000 109.1447
N2O		0.0000	
CH4	íyr	0.0204	0.0204
22 NBio- Total CO2 CH4 CC2	ΜŢ	108.7159   108.7159	08.7159
19- 72		7159 1	7159 10
2 NB		108.7	108.7
Bio-CC		0.000.0	00000
st PM2.5 5 Total		0.0408	0.0408 0.0000 108.7159 108.7159
Fuglitye Exhaust PM:25 PM2.5	186 187 187	0.0347	0.0347
		6.1000e- 003	0.0612 6.1000e- 003
Fugitive Exhaust PM10 PM10 Total		0.0612	
Exhaust PM10	tons/yr	0.0370	0.0370
Fugitive PM10	ton	0.0242	0.0242
S02		1.2400e- 003	1.2400e- 003
00		0.5772	0.5772
NO.		0.8439	0.8439
ROG		0.0833	0.0833
	Vear	2017	Total

1.00	
CO28	0.00
N20	0.00
CH4	0.00
Total CO2	00'0
NBio-CO2	00'0
Bio-CO2 NBio-CO2 Total CO2	0.00
PM2.6 Total	1.09
Exhaust PM2.6	00'0
Fugitive PM2.5	6.87
PM10 Total	6.35
Exhaust PM10	00.0
Fugilive PIN10	14.65
302	0.00
00	0.00
NOX	0.00
ROG	0.00
	Percent Reduction

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days Num Days Week	Phase Description
	ig of		6/1/2017	6/14/2017	S	10	
2	Channel Construction	Building Construction	6/15/2017	7/19/2017	ಬ	25	
And Department of the Anniest Control of the		Building Construction	7/20/2017	8/22/2017	5	24	
4	Final Grading and Road	Grading	8/23/2017	8/29/2017	5	5	
5		Paving	8/30/2017	8/31/2017	5	2	3.

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

#### Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating - sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Excavation and Grading of Channel	Crawler Tractors	2	8.00	208	0.43
Excavation and Grading of Channel	Excavators	2	8.00	162	0.38
Excavation and Grading of Channel	Rubber Tired Loaders	2	8.00	199	0.36
Channel Construction	Cranes	AND THE PROPERTY OF THE PROPER	8.00	226	0.29
Channel Construction	Excavators		8.00	162	0.38
Channel Construction	Pumps		8.00	84	0.74
Catch Basin Construction	Concrete/Industrial Saws		8.00	81	0.73
Catch Basin Construction	Cranes		8.00	226	0.29
Catch Basin Construction	Off-Highway Trucks	A primary designation about a business against stages or many	8.00	400	0.38
Catch Basin Construction	Signal Boards	2	8.00	9	0.82
Catch Basin Construction	Tractors/Loaders/Backhoes	The state of the s	00.9	26	0.37
Final Grading and Road Construction	Graders		8.00	174	0.41
Final Grading and Road Construction	Off-Highway Trucks		8.00	400	0.38
Final Grading and Road Construction	Skid Steer Loaders		8.00	64	0.37
	Pavers		8.00	125	0.42
Paving	Rollers	1	8.00	80	0.38

#### **Trips and VMT**

# 3.1 Mitigation Measures Construction

Water Exposed Area

# 3.2 Excavation and Grading of Channel - 2017 Unmitigated Construction On-Site

C02e	Pre-	0.0000	17.8620	17.8620
NZO		0.0000	0.0000	0.0000
CH4	/yr	0.0000	5.4400e- 003	5.4400e- 003
Total CO2	W	0.0000	17.7478	17.7478
NBio- CO2		0.0000	17.7478	17.7478
Bio-CO2		0.0000	0.0000	0.000.0
PM2.5 Fotal	a-ve	6.0000e- 004	6.8900e- 003	7,4900e- 003
Exhaust PM2.5		0.000.0	6.8900e- 003	6.8900e- 003
Fugrive PM2.5		6.0000e- 004		6.0000e- 004
PM10 Total		5.4800e- 003	7.4900e- 003	0.0130
Fugitive Exhaust PM10 PM10	slyr	0.0000	7.4900e- 003	7.4900e- 003
Fugitive PM10	tons/y	5.4800e- 003		5.4800e- 003
205			1.9000e- 004	1.9000e- 004
00		M COMPANY A PLAN	0.0796	0.0796
NOx			0.1911	0.1911
ROG			0.0151	0.0151
	Category	Fugitive Dust	Off-Road	Total

## **Unmitigated Construction Off-Site**

C02e	9.6270	0.5823	0.7421	10.9514
NZO	0.0000	0.0000	0.0000	0.000.0
CH4	7.0000e- 005	0.0000	4.0000e- 005	1.1000e- 004
NBio- Total CO2 CO2 NM	9.6255	0.5822	0.7413	10.9490
NBio- CO2	9.6255	0.5822	0.7413	10.9490
Bio- CO2	0.000	0.0000	0.0000	0.0000
PM2.5 Total	1.2000e- 003	9.0000e- 005	2.2000e- 004	1.5100e- 003
Exhaust PM2.5	5.2000e- 004	3.0000e- 005	1.0000e- 005	5.6000e- 004
Fugitive PM2;5	6.8000e- 004	5.0000e- 005	2.2000e- 004	9,50()0e- 004
PM10 Total	3.0400e- 003	2.2000e- 004	8.3000e- 004	4.0900e- 003
e Exhaust PM10 tons/yr	5.7000e- 004	4.0000e- 005	1.0000e- 005	6.2000e- 004
Fugitive PM10 ton	2.4700e- 003	1.8000e- 004	8.2000e- 004	3,4700e- 003
S02	1.1000e- 004	2.4000e- 2.4800e- 3.3100e- 1.0000e- 004 003 003 005	1.0000e- 005	1.3000e- 004
8	0.0369	3.3100e- 003	4.0000e-         4.1400e-         1.0000e-           004         003         005	0.0443
×ON	0.0395	2.4800e- 003	J	0.0424
ROG	2.7400e- 003	2.4000e- 004	2.7000e- 004	3.2500e- 003
Category	Hauling	Vendor	Worker	Total

### Mitigated Construction On-Site

C02e		0.0000	17.8620	17.8620
NZO		0.0000	0.0000	0.0000
CH4	lyr	0.000.0	5.4400e- 003	5,4400e- 003
NBio- Total CO2 CH4.	M	0.000.0	17.7478	17.7478
NBIO- CO2		0.0000	17.7478	17.7478
Bio- CO2		0.0000	0.0000	0,000.0
PM2.5 Total		2.3000e- 004	6.8900e- 003	7.1200e- 003
Exhaust PM2.5		0.0000	6.8900e- 003	6.8900e- 003
Fugitive PM2.5		2.3000e- 004		2.3000e- 004
PM10 Total		2.1400e- 2.3000e- 003 004	7.4900 <del>e-</del> 003	9.6300e- 003
Fugitive Exhaust PM10 PM10	lon <b>s</b> /yr	0.000.0	7.4900e- 003	7.4900e- 003
Fugitive PM10	ton	2.1400 <del>6-</del> 003		2.1400e- 003
SO2			1.9000e- 004	1.9000e- 004
00	P.		0.0796	0.0796
NO.			0.1911	0.1911
ROG			0.0151	0.0151
	Category	Fugitive Dust	Off-Road	Total

### Mitigated Construction Off-Site

	ROG	NOX	ဝ၁	<b>20</b> 5	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	PM2.5 Blo- CO2 Total	NBio- CO2	NBio- Total CO2 CH4		N20	C02e
Category					tons/y	, joye							ĽW	/yr		in the second
Hading	2.7400e- 003	0.0395	0.0369	1.1000e- 004	2.4730e- 003	5.7000e- 004	3.3400e- 003	6.3000e- 004	5.2000e- 004	1.2000e- 003	0.000.0	9.8255	9.6255	7.3000e- 005	0.000.0	9.6270
Vendor	2.4000e- 004	2.4800e- 003	3.3100e- 003		1.8000e- 004	4.0000e- 005	2.2000e- 004	5.0000e- 005	3.0000e- 005	9,0000e- 005	0.0000	0.5822	0.5822	0.0000	0.0000	0.5823
Worker	2.7000e- 004	2.7000e- 4.0000e- 4.1400e- 004 004 003	4.1400e- 003	1.0000e- 005	8.2000e- 004	1.0000e- 005	8.3000e- 004	2.2000e- 004	1.0000e- 005	2.2000e- 004	0.0000	0.7413	0.7413	4.0000e- 005	0.0000	0.7421
Total	3.2500e- 003	0.0424	0.0443	1.3000e- 004	3.4700e- 003	6.2000e- 004	4.0900e- 003	9.5000e- 004	5.6000e- 004	1.5100e- 003	0.000	10.9490	10.9490	1.1000e- 004	0.0000	10,9514

### 3.3 Channel Construction - 2017

### **Unmitigated Construction On-Site**

C02e		19.8431	19,8431
OZN		0.0000	0.0000
CH4	/yr	4.5000e-   003	4.5000e- 003
Total CO2	MT	0.0000 19.7487 14.5000e-	19.7487
NBio- CO2		19.7487	19.7487 19.7487
PM2.5 Bio-CO2 NBio- Total CO2 CH4 Total		0.000.0	0.0102 0.0000
PM2.5 Total		0.0102	0,0102
Fugitive Exhaust PM2.5 PM2.5		0.0102	0.0102
Fugitive PM2.5			
PM10 Total		0.0107	0.0107
Exhaust PM10	ıyı.	0.0107	0.0107
Fugitive Exhaust PM10 PM10	tons/yr		
S02	90 (18	2.2000e- 004	2.2000e- 004
೦೨		0.1251 2.2000e- 004	0.1251 2.2000e-
×ÖN	143 143	0.2030	0.2030
ROG	4. P	0.0201	0.0201
	Category	Off-Road	Total
		_	

### Unmitigated Construction Off-Site

	ROG	NOX	<b>0</b> 0	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugilive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio- GO2	Total CO2	CH4	N20	CO2e
Category					(veno)	JA/9							W	W		
Hauling	0.0000	0.0000	0.0000	0,000.0	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000	0.000.0	0.000.0
Vendor	2.1400e- 003	0.0217	0.0290	6.0000e- 005	1.6200e- 003	3.3000e- 004	1.9500e- 003	4.6000e- 004	3.1000e- 004	7.7000e- 004	0.0000	5.0940	5.0940	4.0000e- 005	0.0000	5.0947
Worker	2.4200e- 003	3.5900e- 003		0.0373 9.0000e- 005	7.4100e- 003	6.0000e- 005	7.4700e- 003	1.9700e- 003	6.0000e- 005	2.0200e- 003	0.000	6.6720	6.6720	3.4000e- 004	0.0000	6.6792
Total	4,5600e- 003	0.0253	0.0663	1.5000e- 004	9.0300e- 003	3.9000e- 004	9.4200e- 003	2.4300e- 003	3.7000e- 004	2.7900e- 003	0.0000	11.7659	11.7659	3.8000e- 004	0.0000	11.7739

### Mitigated Construction On-Site

CO2e		19.8431	19.8431
N2O		0.000.0	0.0000
CH4	T/yr	4.5000e- 003	4.5000e- 003
Total CO2	Ø	19.7486	19.7486
NBio- CO2		0.0000 19.7486 19.7486	0.0000 19.7486 19.7486
Bio-CO2			
PM2.5 Bio Total		0.0102	0.0102
PM10 Fugitive Exhaust Total PM2.5 PM2.5		0.0102	0.0102
Fugitive PM2.5			
PM10 Total		0.0107	0.0107
Fugitive Exhaust PM10 PM10	J/ysuo.	0.0107	0.0107
Fugitive PIN10	ΙQ		
žos	in a	2.2000e- 004	2.2000e- 004
S		0.1251	0.1251
XON		0.2030	0.2030
ROG		0.0201	0.0201
	Category	Off-Road	Total
		L	L

### Mitigated Construction Off-Site

## 3.4 Catch Basin Construction - 2017

### Unmitigated Construction On-Site

_				
*600			31.2075	31.2075
Viol			0.0000	0.0000
200	1	lyr	7.8800e- 003	0.0000 31.0420 31.0420 7.8800e-
Total CO3	roal coa	W	31.0420	31.0420
C/G/N	CO2		31.0420	31.0420
ala. COs	Too ole		0.000.0	
DAI S	PMZ.5 PMZ.5 Total CO2		0.0137	0.0137
TV-hamet	PM2.5		0.0137	0.0137
Elimitera	PM2.5			
DM40	Total		0.0146	0.0146
Evholret	PM10 PM10	tons/yr	0.0146	0.0146
Limitiva	PM10	ton		
1000			3.5000e- 004	3.5000e- 004
100	}		0.1631	0.1631
AUN			0,2975	0.2975
DUG			0.0294	0.0294
		Sategory	Off-Road	Total
		ទី	5	

### Unmitigated Construction Off-Site

				1	
9200		0.000	4.8909	6.4120	11.3030
N20		0.0000	0.0000	0.0000	0.0000
CH¢	/yr	0.0000	4.0000e- 005	3.3000e- 004	3,7000e- 004
Total CO2	M	0.0000	4.8902	6.4051	11.2953
NBIo- GO2		0.0000	4.8902	6.4051	11,2953
Bio-CO2		0.0000	0.000.0	0.0000	0.000
PM2.5 Bio-CO2		0.0000	7.4000e- 004	1.9400 <del>e-</del> 003	2.6800e- 003
Exhaust PM2.5		0.0000	2.9000e- 004	5.0000e- 005	3.4000e- 004
Fugitive PM2.5		0.000	4.4000e- 004	1.8900 <del>e-</del> 003	2.3300e- 003
PM10 Total		0000'0	1.8700e- 003	7.1700e- 003	9.0400e- 003
Exhaust PM10	tons/yr	0.0000	3.2000e- 004	6.0000e- 005	3.8000e- 004
Fugitive PM10	(ou	0.0000	1.5500e- 003	7.1100e- 003	8.6600e- 003
SO2		0,0000	5.0000 <del>6-</del> 005	9.0000e- 005	1,4000e- 004
ဝ၁		0.0000	0.0278	0.0358	0.0636
NOx		0.0000	0.0208	3.4500e- 003	0.0243
ROG		0.0000	2.0500e- 003	2.3300e- 003	4.3800e- 003
	Category	Hauling	Vendor	Worker	Total

### Mitigated Construction On-Site

or or many Free	PHYSION 68 186		
C02e	er State	31.2075	31,2075
N2O		0.0000	
		.0e-   0.	.0e- 3
2 CH	VIT/yr	7.8800e- 003	7.8800
Total CO2 CH4	1100	31.0419	31.0419
NBio- CO2		31.0419 31.0419	0.0137 0.0000 31.0419 31.0419 7.8800e- 0.0000
Bio-CO2		0.0000	0.0000
PM2,5 Total		0.0137	0.0137
Fugitive Exhaust PM2.5 Bio-CO2 PM2.5 FM2.5 Total		0.0137	0.0137
Fugilive PM2.5			
PM10 Total		0.0146	0.0146
Fugitive Exhaust PM10 PM10 PM10 Total	JAys	0.0146	0.0146
Fugitive PM10	(ions/		·
802		3.5000e- 004	3,5000e- 004
00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.1631	0.1631
XON		0.2975	0.2975
ROG		0.0294	0.0294
	Category	Off-Road	Total
	Ö	Ö	

### Mitigated Construction Off-Site

C02e		0.0000	4.8909	6.4120	11.3030
N2O		0.0000	0.0000	0.0000	0.0000
CH4	ΛΤίγι	0.000.0	4.0000e- 005	3,3000e- 004	3.7000e- 004
Total CO2	I.W.	0.000.0	4.8902	6.4051	11.2953
NBio- CO2		0.0000	4.8902	6.4051	11.2953
Bio-CO2		0.000.0	0.000.0	0.000.0	0.0000
Exhaust PM2.5 Bio-CO2 PM2.5 Total		0.000.0	7.4000e- 004	1.9400e- 003	2.6800e- 003
Exhaust PM2,5		0.000.0	2.9000e- 004	5.0000e- 005	3,4000e- 004
Fugitive PM2.5		0.0000	4,4000e- 004	1.8900e- 003	2.3300e- 003
PM10 Total	9.85	0.000.0	1.8700e- 003	7,1700e- 003	9.0400e 003
Exhaust PM10	tonstyr	0.0000	3.2000e- 004	6.0000e- 005	3,8000e- 004
Fugitive PM10	(e)	0.0000	1.5500e- 003	7.1100e- 003	8.5600e- 003
20S		0.0000	5.0000e- 005	9.0000e- 005	1,4000e- 004
8		0.0000	0.0278	0.0358	0.0636
NOX		0.0000	0.0208	3.4500e- 003	0.0243
ROG		0.0000	2.0500e- 003	2.3300e- 003	4,3800e- 003
	Category	Hauling	Vendor	Worker	Total

# 3.5 Final Grading and Road Construction - 2017

**Unmitigated Construction On-Site** 

C02e		0.0000	4.9988	4.9988
N20		0.0000	0.0000	0.000.0
CH4	<b>.</b>	0.000.0	1.5200e- 003	1.5200e- 003
Bio-CO2 NBio- Total CO2 CH4	LW.	0.0000 0.0000	4.9668	4.9668
NBio- CO2		0.0000	4.9668	4.9668
Bio- CO2		00000	0.000.0	00000
PM2.5 Total		1.4000e- 004	2.2500e- 003	2.3900e- 003
Fugitive Exhaust PM2.5 PM2.5		0.0000	2.2500e- 003	1,4000e- 2,2500e- 004 003
Fugitive PM2.5		1.4000e- 004		1,4000e- 004
PM10 Total		1.3300e- 003	2.4500e- 003	3.7800e- 003
Fugitive Exhaust	tons/yr	0.0000	2.4500e- 003	1.3300e- 2.4500e- 3.7800e- 003 003 003
Fugitive PM10	ton	1.3300e- 003		
\$02			5.0000e- 005	0.0273 5.0000e- 005
ဝ			0.0273	
NOX			0.0521	0.0521
ROG			4.8300e- 003	4.8300e- 003
	Category	Fugitive Dust	Off-Road	Total

### **Unmitigated Construction Off-Site**

9		00	11	79	06
COZe		0.0000	0.2911	0.1979	0.4890
N2O	Library (	0.0000	0.0000	0.0000	0.0000
CH4	1/95	0.000.0	0.0000	1.0000 <del>e-</del> 005	1.0000e- 005
Total CO2	Ľ <b>M</b> ÷	0.0000	0.2911	0.1977	0.4888
NBIO- CO2		0.0000	0.2911	0.1977	0.4888
Bio-CO2		00000	0.0000	0,000.0	0.0000
PM2.5 Total		0.000	4.0000e- 005	6,0000e- 005	1,0000e- 004
Exhaust PM2.5		0.0000	2.0000e- 005	0.000	2.0000e- 005
Fugitive PM2.5		0.0000	3.0000e- 005	6.0000e- 005	9.0000e- 005
PM10 Total		0.0000	1.1000e- 004	2.2000e- 004	3.3000e- 004
Exhaust PM10	ions/yr	0.0000	2.0000 <del>e-</del> 005	0.0000	2,0000e- 005
Fugitive PM10	tòn	0.0000	9.0000e- 005	2.2000e- 004	3.1000e- 004
SO2		0.000	0.0000	0.000.0	0.0000
CO		0.0000 0.0000.0	1.6600e- 003	1,1100e- 003	1,3500e- 2,7700e- 003 003
×ON			1.2400e- 003	1.1000e- 1.1100e- 004 003	
ROG		0.0000	1.2000e- 004	7.0000e- 005	1.9000e- 004
	Calegory	Hauling	Vendor	Worker	Total

### Mitigated Construction On-Site

GG2e		0.000.0	4.9988	4.9988
N2O		0.0000	0.0000	0.000.0
CH4		0.0000	1.5200e- ( 003	1,5200e- ( 003
) 0	MT/yr			
Total C	1	0.0000	4.9668	4.9668
NBio- Total CO2		0.0000	4,9668	4.9668
Bio-CO2	1	0.000.0	0.0000	0.0000
PM2.5 Total		6,0000e- 005	2.2500 <b>e-</b> 003	2,3100e- 003
Fugitive Exhaust PM2.5 PM2.5		0.0000	2.2500e- 003	2.2500e- 003
Fugitive PM2.5		6.0000e- 005		5.2000e- 2.4500e- 2.9700e- 6.0000e- 2.2500e- 004 003 005 005
PM10 Total		0.0000   5.2000e-   6.0000e-   0.05	2.4500e- 003	2.9700e- 003
Exhaust • PM10	tons/yr		2.4500e- 2.4500e- 003 003	2,4500e- 003
Fugitive PM10	ton	5.2000e- 004		5.2000e- 004
502	19 19 19		5.0000e- 005	5,0000e- 005
co			0.0273	0.0273
NOX			0.0521	0.0521
ROG	ga a gay		4.8300e- 003	4.8300e- 003
	Category	Fugitive Dust	Off-Road	Total

### Mitigated Construction Off-Site

	ROG	XON N	00	802	Fugitive PM10	Fugitive Exhaust PM10 PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBIO- CO2	Tetal CO2	OHA	N20	COZe
Category				Į.	tone	ons/yr							M	/yr		
Hauling	0.0000	0.000.0	0,0000	0.0000	0.0000	0,0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.000.0	0.0000
Vendor	1.2000e- 004	1.2000e- 1.2400e- 1.6600e- 0.0000 004 003 003	1.6600e- 003		9.0000e- 005	2.0000e- 005	1.1000e- 004	3.0000e- 005	2.0000e- 005	4.0000e- 005	0.0000	0.2911	0.2911	0.0000	0.0000	0.2911
Worker	7.0000e- 005	7.0000e- 1.1000e- 1.1100e- 0.0000 005 004 003	1.1100e- 003		2.2000e- 004	0.0000	2.2000e- 004	6.0000e- 005	0,000.0	6.0000 <del>e-</del> 005	0.0000	0.1977	0.1977	1.0000 <del>e-</del> 005	0.0000	0.1979
Total	1.9000e- 004	1.3500e-   2.7700e- 003   003	2.7700e- 003	0.0000	3.1000e- 004	2.0000e- 005	3.3000e 004	9.0000e- 005	2.0000e- 005	1.0000e- 004	0.0000	0.4888	0.4888	1.0000e- 005	0.0000	0.4890

3.6 Paving - 2017 Unmitigated Construction On-Site

	ROG	NOX	O)	502	Fugitive Exhaust	Exheust PM10	PM10 Total	Fugline PMR:5	Fuglive Exhaust PMR:5 PM2:5	PM2.5 Total	Bio-CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Category					tons/y/	lyt.							M	//*		
Off-Road	6.7000e- 004	6.9300e- 4.8300e- 1.0000e- 003 003 005	4.8300e- 003	1.0000e- 005		4.1000e- 004	4.1000e- 004		3.8000e- 004	3.8000e- 004	0,000.0	0.6624	0.6624	2.0000e- 004	0.000.0	0,6667
Paving	7.3000e- 004	The second house and				0.0000	0.0000		0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.4000e- 003	6.9300e- 003	4.8300e- 1.0000e- 003 005	1,0000e- 005		4.1000e- 004	4.1000e- 004	-	3.8000e- 004	3.8000e- 004	0.000.0	0.6624	0.6624	2.0000e- 004	0.0000	0.6667

### Unmitigated Construction Off-Site

1989/158996-1-1-A		_			
-CO2		0.0000	0.0000	0.0495	0.0495
NZO		0.000.0	0.0000	0.0000	0.0000
CH4	/yr	0.0000	0.0000	0.0000	0.0000
Total CO2	M	0.0000	0.0000	0.0494	0.0494
NBio- CO2		0.000.0	0.000.0	0.0494	0.0494
Bio. CO2		0.000.0	0.0000	0.0000	0.0000
PM2.5 Total		0.000.0	0.000.0	1.0000e- 005	1.0000e- 005
Exhaust PM2.5		0.0000	0.0000	0.0000	0.0000
Fugitive PM2.5		0.0000	0.0000	1.0000e- 005	1.0000e- 005
PM10 Total		0.0000	0.0000	6.0000e- 005	6.0000e- 005
Exhaust PM:10	síyr	0.000	0.0000	0.0000	0.0000
Fugitive PM10	tons/	0.000.0	0.0000	5.0000e- 005	5.0000e- 005
802		0.000.0	0.0000	0.0000	0.0000
00		0.0000	0.000.0	2.8000e- 004	2.8000e- 004
NOX		0.0000	0.000.0	3.0000e- 2.8000e- 005 004	3.0000e- 2.8000e- 005 004
ROG		0000'0	0.000.0	2.0000e- 005	2.0000e- 005
	Category	Hauling	Vendor	Worker	Total

### Mitigated Construction On-Site

	ROG	Ŏ N	<b>0</b> 0	<b>20</b> 5	Fugliive PM10	Fuglive Exhaust PM10 PM10	PM10 Total	Fugitive PNI2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBIA- CO2	NBio- Total CO2 CO2	CH4	N2O	9 <b>2</b> 00
Category					(cua)	J.V.e							ĽΜ	/yr		
Off-Road   6.7	7000e-   6 004	6.7000e- 6.9300e- 4.8300e- 1.0000e- 004 003 003 005	4.8300e- 003	1.0000e- 005		4.1000e- 004	4.1000e- 004		3.8000e- 004	3,8000e- 004	0.000.0	0.6624	0.6624	2.0000e- 004	0.000.0	0.6667
Paving 7.3	7.3000e- 004					0.0000	0.0000		0.000.0	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000
Total 1.4	003 003	1.4000e- 6.9300e- 4.8300e- 1.0000e- 003 003 003	4.8300e- 003	1,0000e- 005		4.1000e- 004	4.1000e- 004		3.8000e- 004	3.8000e- 004	0.0000	0.6624	0.6624	2.0000e- 004	0.000.0	0.6667

### Mitigated Construction Off-Site

C02e		0.0000	0.0000	0.0495	0.0495
N20		0.0000	0.0000	0.0000	0.0000
CH4	1/1	0.0000	0.0000	0.0000	0.0000
Tetal CO2	LΜ	0.0000	0.0000	0.0494	0.0494
NBio- CO2		0.000.0	0.000.0	0.0494	0.0494
Bio-CO2		0.000.0	0.000.0	0.0000	0.0000
PM2.5 Total		0.000	0.0000	1.0000e- 005	1,0000e- 005
Exhaust PM2.5		0.0000	0.0000	0.0000	0.0000
Fugitive PM2.5		0.000.0	0.0000	1.0000e- 005	1,0000e- 005
PM10 Total		0.0000	0.0000	6.0000e- 005	6.0000e- 005
Exhaust PM10	tons/yr	0.000.0	0.0000	0.0000	0.0000
Fugitive PM10	not	0.0000	0.0000	5.0000e- 005	5.0000e- 005
205		0.0000	0.0000	0.0000	0.0000
ဝ၁		0.0000	0,0000	2.8000e- 004	2.8000e- 004
Ŏ N		0.0000	0.0000	2.0000e- 3.0000e- 2.8000e- 005 005 004	2.0000e- 3.0000e- 2.8000e- 005 005 004
ROG		00000	0.0000	2.0000e- 005	2.0000e- 005
	Category	Hauling	Vendor	Worker	Total

### Appendix B

Noise Technical Memorandum

### VISTA ENVIRONMENTAL

December 5, 2016

Josephine Alido Psomas 3 Hutton Centre Drive, Suite 200 Santa Ana, CA 92707

Subject:

Riverside County Flood Control and Water Conservation District (District) – North Norco Channel Line NB, Stage 3 Project Noise Technical Memorandum.

Dear Ms. Alido:

Vista Environmental has conducted an analysis to evaluate whether the North Norco Channel Line NB, Stage 3 project (proposed project) would cause significant noise impacts. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.).

### **Project Description**

The proposed project would consist of channel improvements to an existing 1,750-foot long channel located along the westerly extension of Gallop Way, east of Interstate 15 in the City of Norco. The proposed channel would consist of approximately 200 lineal feet of reinforced concrete box (RBC), 370 feet of concrete lined rectangular channel, and 1,180 feet of concrete lined trapezoidal channel. The project will also incorporate numerous catch basins for the safe introduction of flow from the surrounding neighborhoods into the channel. Catch basins would be located on Fortuna Road, Sierra Avenue, Gallop Way, and Valley View Avenue in close proximity to the channel.

The project site is surrounded by residential uses that are designated Residential Agricultural (RA) in the Norco General Plan and the nearest offsite sensitive receptors to the project site consist of single-family homes located as near as 10 feet from the project site. The nearest school to the project site is Sierra Vista Elementary School, located as near as 0.4 mile northeast of the project site.

### **Environmental Setting**

Currently, the primary sources of noise within the study area consists of vehicle traffic on Interstate 15, Sierra Avenue, and Valley View Avenue. In order to determine the existing noise levels, three short-term ambient noise measurements were taken in the vicinity of the proposed project between 10:46 a.m. and 11:40 a.m. on Wednesday, November 2, 2016. The results of the noise level measurements are presented in Table A and the noise measurement printouts are attached to this letter along with a photo index showing the locations of the noise measurements.

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Table A – Existing (Ambient) Noise Level Measurements

Site No.	Description	Primary Noise Source	Start Time of Measurement	Noise Level (dBA L <sub>eq</sub> /L <sub>max</sub> )
1	Located approximately 25 feet north of Fortuna Road center line and 35 feet east of Melanie Avenue center line.	Interstate 15	10:46 a.m.	55.0/61.1
2	Located approximately in 85 feet west of Sierra Avenue center line and 20 feet north of the Channel center line.	Sierra Avenue	11:05 a.m.	57.6/68.4
3	Located approximately 75 feet southwest of Valley View Avenue centerline and 30 feet north of the Channel center line.	Valley View Avenue	11:25 a.m.	53.4/63.2

Source: Noise measurements taken with a Larson Davis Model 831 Type 1 precision sound level meter on Wednesday, November 2, 2016.

### **Impact Analysis**

### CEQA Thresholds of Significance

Consistent with CEQA and the State CEQA Guidelines, a significant impact related to noise would occur if the proposed project is determined to result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels:
- A substantial permanent increase in ambient noise levels in the project vicinity above existing levels without the proposed project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above noise levels existing without the proposed project; or
- Exposure of persons residing or working in the project area to excessive noise levels from aircraft.

### Impact 1: Generation of Noise Levels in Excess of Standards

The proposed project would not expose persons to or generate noise levels in excess of standards established in the Norco General Plan or Noise Ordinance or applicable standards of other agencies. The following section calculates the potential noise emissions associated with the construction and operations of the proposed project and compares the noise levels to the City standards.

### Construction-Related Noise

The construction activities for the proposed project are anticipated to include excavation and grading of the existing dirt lined channel, construction of a concrete channel and catch basins, grading of existing access roads, and paving of onsite roads. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The

### VISTA ENVIRONMENTAL

1021 DIDRIKSON WAY LAGUNA BEACH CALIFORNIA 92651 PHONE 949 510 5355 FACSIMILE 949 494 3150 EMAIL GREG@VISTALB.COM nearest sensitive receptors to the project site consist of single-family homes located as near as 10 feet from the project site.

Section 9.07.020(B) of the City of Norco Municipal Code (Municipal Code) exempts capital improvement project construction noise carried out by a governmental agency. However, it should be noted that construction activities for the proposed project would adhere to the District's Standard Operating Procedures that limit construction activities to between the hours of 7:00 a.m. and 5:00 p.m., which are consistent with the time of day limitations to construction activities performed by non-governmental entities within the City that are detailed in Section 9.07.020 of the Municipal Code. Therefore, construction of the proposed project would not exceed any construction noise standards provided in the City of Norco Municipal Code or General Plan. Impacts would be less than significant.

### Operational-Related Noise

The proposed project would consist of improvements to the existing 1,750-foot long dirt lined channel, including the development of a concrete channel and catch basins. The on-going operation of the proposed project would not result in a long-term increase in noise levels. The only noise sources associated with the long-term operations of the project are annual routine maintenance trips to the project site by District personnel in a small truck. No change in the routine maintenance schedule would occur from implementation of the proposed project. Therefore, no long-term increase in operational noise levels is anticipated and there would be no impact.

### Level of Significance

Less than significant impact.

### **Impact 2: Groundborne Vibration**

The proposed project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels. Since neither the Municipal Code nor the General Plan provide a quantifiable vibration threshold, the thresholds provided in *Transportation and Construction Vibration Guidance Manual*, prepared by Caltrans, 2013 has been utilized that defines the threshold of perception from transient sources at 0.25 inch per second peak particle velocity (PPV). The following section analyzes the potential vibration impacts associated with the construction and operations of the proposed project.

### Construction-Related Vibration Impacts

The construction activities for the proposed project are anticipated to include excavation and grading of the existing dirt lined channel, construction of a concrete channel and catch basins, grading of existing access roads, and paving of onsite roads. Vibration impacts from construction activities associated with the proposed project would typically be created from the operation of heavy off-road equipment. The nearest sensitive receptors to the project site consist of single-family homes located as near as 10 feet from the project site.

The construction equipment that would be used for the project would only include concrete/industrial saws, cranes, crawler tractors, excavators, graders, concrete pump, pavers, rollers, rubber tired loaders, dump trucks, signal boards and skid steer loaders. (see page 26 of 30 of the EIP) The *Transit Noise and Vibration Impact Assessment*, prepared by the Federal Transit Administration, 2006 analyzed vibration levels created by various types of construction equipment and from this list a loaded truck would be the equipment that would produce the largest level of vibration that would be utilized during construction of

### VISTA ENVIRONMENTAL

1021 Didrikson Way Laguna beach California 92651 phone 949 510 5355 facsimile 949 494 3150 email greg@vistalb.com the proposed project. A loaded truck would create a vibration level of 0.076 inch per second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest offsite receptor (10 feet away) would be 0.21 inch per second PPV. The vibration level at the nearest offsite receptor is within the 0.25 inch per second PPV threshold for transient sources. Therefore, construction-related vibration impacts would be less than significant.

### **Operations-Related Vibration Impacts**

The proposed project would consist of improvements to the existing 1,750-foot long dirt lined channel, including the development of a concrete channel and catch basins. The on-going operation of the proposed project would not include the operation of any known vibration sources. Therefore, no vibration impact is anticipated from the operation of the proposed project.

### Level of Significance

Less than significant impact.

### **Impact 3: Permanent Increase in Ambient Noise Levels**

The ongoing operation of the proposed project would not result in a potential substantial permanent increase in ambient noise levels in the project vicinity above existing levels without the proposed project. The only noise sources associated with the long-term operations of the project are annual routine maintenance trips to the project site by District personnel in a small truck. No change in the routine maintenance schedule would occur from the proposed project. As such, the proposed project would not result in a substantial permanent increase in ambient noise levels and no impact would occur.

### Level of Significance

No impact.

### Impact 4: Temporary or Periodic Increase in Ambient Noise

The proposed project would not create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above noise levels existing without the proposed project. The construction activities for the proposed project are anticipated to include excavation and grading of the existing dirt lined channel, construction of a concrete channel and catch basins, grading of existing access roads, and paving of onsite roads. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The nearest sensitive receptors to the project site consist of single-family homes located as near as 10 feet from the project site.

Section 9.07.020(B) of the City of Norco Municipal Code (Municipal Code) exempts capital improvement project construction noise carried out by a governmental agency. The City construction noise standards do not provide any limits to the noise levels that may be created during construction activities at the nearby sensitive receptors. Thus, the resultant construction noise levels may result in a significant substantial temporary noise increase at the nearby sensitive receptors.

In order to determine if the proposed construction activities would create a significant substantial temporary noise increase, the OSHA limits for noise exposure have been utilized. The use of a significance threshold using an OSHA standard is considered conservative. The OSHA standard limits

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1021 DIDRIKSON WAY LAGUNA BEACH CALIFORNIA 92651 PHONE 949 510 5355 FACSIMILE 949 494 3150 EMAIL GREG@VISTALB.COM noise exposure of workers to 90 dB or less over eight continuous hours or 105 dB or less over one continuous hour. This standard has been utilized to analyze the construction noise impacts to the sensitive receptors located at the nearby offsite residences as a result of the proposed project. According to the District, the excavation and grading activities that would occur near the offsite residences would consist of the use of excavators and loaders that would make several passes over each portion of the project site, which would limit channel excavation and grading activities near any particular offsite residence to less than one hour intervals. However, channel and catch basin construction and paving activities would have the potential to occur in the proximity of the same offsite residence for eight continuous hours. Therefore, the one-hour standard of 105 dB has been utilized as the threshold for channel excavation and grading and final grading and road construction and the eight-hour standard of 90 dB has been utilized as the threshold for channel construction, catch basin construction, and paving activities.

Construction noise impacts to the nearby sensitive receptors have been calculated through use of the FHWA's Roadway Construction Noise Model (RCNM) and the results are shown below in Table B and the RCNM printouts are attached to this Memorandum.

Table B Worst-Case Construction Noise Levels at Nearest Offsite Residences

Construction Phase	Distance to Nearest Offsite Residence <sup>1</sup> (feet)	Construction Noise Level (dBA Leq)	Threshold <sup>2</sup> (dBA Leq)
Excavation and Grading of Channel	25	84	105
Channel Construction	25	80	90
Catch Basin Construction	30	80	90
Final Grading and Road Construction	15	92	105
Paving	30	79	90

Notes:

Table B shows that greatest noise impacts would occur during the final grading and road construction phase of construction, with a noise level as high as 92 dBA Leq at the nearest offsite residential use. However, none of the construction phases would exceed the OSHA noise standards for each particular use, which is based on the anticipated duration of each impact. Therefore, the proposed project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the Proposed Project and impacts would be less than significant.

### Level of Significance

Less than significant impact.

### **Impact 5: Aircraft Noise**

The proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. The proposed project is not located within an airport land use plan, and is not within two miles of an airport. There are no private airstrips in the area and the closest airport is the Corona Municipal Airport located 3.1 miles to the southwest. The project site is located outside of the 65 dBA CNEL noise contours of this airport and site observations during the noise measurements found that although aircraft noise is occasionally audible at the project site, the noise created by the aircraft is not

### VISTA ENVIRONMENTAL

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<sup>1.</sup> The nearest offsite residences are single-family homes as near as 10 feet from the project site.

<sup>&</sup>lt;sup>2</sup> Threshold for Excavation and Grading activities are based on the OSHA one hour standard of 105 dB and the threshold for building channel and catch basin construction and paving activities are based on the OSHA eight hour standard of 90 dB. Source: RCNM, Federal Highway Administration, 2006.

loud enough to measurably increase the ambient noise levels, which is primarily created by vehicles on the nearby roads. Impacts would be less than significant.

### Level of Significance

Less than significant impact.

Please let me know if you have any questions or need additional information with regard to the above analysis. I can be reached at (949) 510-5355, or email me at <a href="mailto:greg@vistalb.com">greg@vistalb.com</a>.

Sincerely,

Greg Tonkovich, INCE

Bry Townsell

Senior Analyst

Vista Environmental

Encl.: Noise Measurement Printouts and a Photo Index of Noise Measurement Locations

**RCNM Printouts** 

1021 Didrikson Way Laguna Beach California 92651 PHONE 949 510 5355 FACSIMILE 949 494 3150 EMAIL GREG@VISTALB.COM



Noise Measurement Site 1 - Looking North



Noise Measurement Site 1 - Looking Northeast



Noise Measurement Site 1 - Looking East



Noise Measurement Site 1 - Looking Southeast



Noise Measurement Site 1 - Looking South



Noise Measurement Site 1 - Looking Southwest



Noise Measurement Site 1 - Looking West



Noise Measurement Site 1 - Looking Northwest



Noise Measurement Site 2 - Looking North



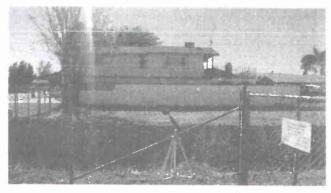
Noise Measurement Site 2 - Looking Northeast



Noise Measurement Site 2 - Looking East



Noise Measurement Site 2 - Looking Southeast



Noise Measurement Site 2 - Looking South



Noise Measurement Site 2 - Looking Southwest



Noise Measurement Site 2 - Looking West



Noise Measurement Site 2 - Looking Northwest



Noise Measurement Site 3 - Looking North



Noise Measurement Site 3 - Looking Northeast



Noise Measurement Site 3 - Looking East



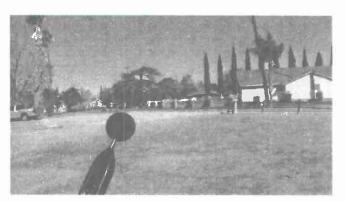
Noise Measurement Site 3 - Looking Southeast



Noise Measurement Site 3 - Looking South



Noise Measurement Site 3 - Looking Southwest



Noise Measurement Site 3 - Looking West

```
General Information
Serial Number
Model
                                                                                                                 831
Firmware Version
                                                                                                                2.301
Filename
                                                                                                        831_Data.001
Job Description
                                                                                  Gallop Way Channelization Project
Location
                                                                                      Front Yard at 1451 Fortuna Rd
Measurement Description
Start Time
                                                                              Wednesday, 2016 November 02 10:46:51
Stop Time
                                                                              Wednesday, 2016 November 02 11:01:52
Duration
                                                                                                          00:15:00.6
Run Time
                                                                                                          00:15:00.6
Pause
                                                                                                          00:00:00.0
Pre Calibration
                                                                              Wednesday, 2016 November 02 10:44:45
Post Calibration
                                                                                                                 None
Calibration Deviation
Approx 25 feet north of Fortuna Rd CL and 35 feet east of Melanie Ave CL 75F, 29.38 in
Hg, 23% Hu, 8 mph wind, clear sky
Overall Data
LAeq
                                                                                                                 55.0
                                                                        2016 Nov 02 10:53:30
                                                                                                                 61.1
LApeak (max)
                                                                        2016 Nov 02 10:54:42
                                                                                                                 81.0
                                                                                                                         đВ
                                                                        2016 Nov 02 11:01:12
                                                                                                                 50.8
LCeq
                                                                                                                 69.6
                                                                                                                         dВ
LAeq
                                                                                                                 55.0
LCeq - LAeq
                                                                                                                 14.6
LATeq
                                                                                                                 56.6
LAeq
                                                                                                                 55.0
LAIeq - LAeq
                                                                                                                  1.6
                                                                                                                 55.0
LDay 07:00-23:00
                                                                                                                 55.0
                                                                                                                         dВ
LNight 23:00-07:00
Lden
                                                                                                                 55.0
                                                                                                                         dB
LDay 07:00-19:00
LEvening 19:00-23:00
                                                                                                                         dB
LNight 23:00-07:00
                                                                                                                         đВ
LAE
                                                                                                                 84.5
# Overloads
Overload Duration
# OBA Overloads
OBA Overload Duration
Statistics
                                                                                                                 57.6
                                                                                                                         dBA
LAS33 30
                                                                                                                 55.1
                                                                                                                         dBA
                                                                                                                         dBA
                                                                                                                 54.5
LAS66.60
                                                                                                                         dBA
                                                                                                                 54.0
LAS90.00
                                                                                                                 52.9
                                                                                                                         dBA
LAS > 65 0 dB (Exceedence Counts / Duration)
                                                                                                                  0.0
LAS > 85.0 dB (Exceedence Counts / Duration)
                                                                                                           0 /
                                                                                                                  0.0
                                                                                                                         S
LApeak > 135.0 dB (Exceedence Counts / Duration)
                                                                                                           0 /
                                                                                                                  0.0
LApeak > 137.0 dB (Exceedence Counts / Duration)
                                                                                                                  0.0
LApeak > 140.0 dB (Exceedence Counts / Duration)
                                                                                                           0 /
                                                                                                                  0.0
Settings
                                                                                                         A Weighting
Peak Weight
                                                                                                         A Weighting
                                                                                                              Linear
OBA Range
                                                                                                              Normal
OBA Freq Weighting
                                                                                                         Z Weighting
OBA Max Spectrum
Under Range Limit
Under Range Peak
Noise Floor
Overload
                                                                                                                142.7
                                                                                                                8k
                         74 - 2
                                                                                             45.1
                                            60.6
                                                      55.8
                                                                         52.1
                                                                                   51.8
                                                                                                      40 0
                                                                         62.7
                                                                                   56.8
                                                                                             50.9
                                                                                                                44.3
                                                                                                                          43.3
                                                                         47.1
```

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	76.3	74.5	72.8	71.2	69.3	66.6	64.4	61.7	59.3	56.8	54.6	55.6
LZSmax	89.8	89.0	87.7	87.2	84.4	83.4	78.5	78.2	75.3	71.8	67.8	73.5
LZSmin	47.1	45.7	47.1	46.1	47.6	47.6	45.9	46.4	46.5	47.1	43.8	41.5
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZeq	51.7	51.3	50.0	47.4	48.1	47.7	47.1	47.5	47.4	48.1	47.5	45.2
LZSmax	62.0	65.2	60.9	57.6	59.4	59.7	61.0	57.2	55.0	53.9	52.4	49.5
LZSmin	45.2	44.3	41.1	40.3	39.7	38.3	40.9	41.9	42.8	43.4	42.0	40.8
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	42.4	39.6	37.5	36.3	35.1	34.2	34.3	34.8	35.6	36.6	37.4	39.0
LZSmax	47.6	45.8	44.5	45.2	46.2	40.9	40.0	39.4	38.5	38.4	38.2	39.8
LZSmin	36.8	35.7	33.2	30.4	31.4	31.9	32.8	33.9	34.2	35.9	37.1	38.8

Calibration History	1000				1507		
	Dat				dB	re.	1V/Pa
PRM831	02	Nov	2016	10:44:45			-25.2
PRM831	22	Sep	2016	15:49:59			-26.5
PRM831	24	Aug	2016	19:03:10			-26.1
PRM831	26	Jul	2016	10:53:46			-26.0
PRM831	26	Jul	2016	09:33:01			-26.4
PRM831	26	Jul	2016	07:41:35			-25.1
PRM831	25	Jul	2016	14:18:53			-26.4
PRM831	25	Jul	2016	12:49:23			-25.2
PRM831	25	Jul	2016	09:43:52			-24.8
	25	Jul	2016	07:24:48			-25.6
PRM831	22	Jul	2016	1.:22:38			-25.1

```
Seneral information
                                                                                                    02509
Serial Number
                                                                                                      831
Model
                                                                                                    2.301
Firmware Version
                                                                                             831_Data.003
Filename
User
                                                                                                      GT
Job Description
                                                                         Gallop Way Channelization Project
                                                 West Portion of Channel - South of Home at 3092 Sierra Ave
Location
Measurement Description
                                                                      Wednesday, 2016 November 02 11:05:56
Start Time
                                                                      Wednesday, 2016 November 02 11:20:57
Stop Time
Duration
                                                                                               00:15:00.5
Run Time
                                                                                               00:15:00.5
Pause
                                                                                               00:00:00.0
Pre Calibration
                                                                      Wednesday, 2016 November 02 10:44:45
Post Calibration
Calibration Deviation
Approx 85 feet west of Sierra Ave CL and 20 feet north of Channel CL
75F, 29.38 inHg, 23% Hu., 8 mph wind, clear sky
Overall Data
                                                                                                     57.6
                                                                                                             dB
LAeq
                                                                                                     68.4
                                                                                                             dB
LASmax
                                                                 2016 Nov 02 11:18:54
LApeak (max)
                                                                 2016 Nov 02 11:18:54
                                                                                                    100.3
                                                                                                             dB
LASmin
                                                                 2016 Nov 02 11:19:33
                                                                                                     53.6
                                                                                                             Яħ
                                                                                                     73.7
                                                                                                             dB
LCeq
                                                                                                     57.6
                                                                                                             dB
LAeq
                                                                                                     16.1
                                                                                                             ďВ
LCeq - LAeq
                                                                                                     59.9
                                                                                                             dB
LATeq
                                                                                                     57.6
                                                                                                             đВ
LAeq
LAIeq - LAeq
                                                                                                      2.3
                                                                                                             dB
                                                                                                     57.6
                                                                                                             4B
LDay 07:00-23:00
                                                                                                     57.6
                                                                                                             dB
                                                                                                             ďВ
LNight 23:00-07:00
                                                                                                     57.6
                                                                                                             đВ
Lden
                                                                                                     57.6
                                                                                                             đВ
LDay 07:00-19:00
                                                                                                             đВ
LEvening 19:00-23:00
                                                                                                      ---
                                                                                                             dB
LNight 23:00-07:00
LAE
                                                                                                     87.1
                                                                                                             dB
                                                                                                        0
# Overloads
                                                                                                       0.0
Overload Duration
                                                                                                             s
# OBA Overloads
                                                                                                        0
                                                                                                      0.0
OBA Overload Duration
LAS5.00
                                                                                                     60 1
                                                                                                             dRA
LAS10.00
                                                                                                     59.2
                                                                                                             dra
                                                                                                     57.7
                                                                                                             dBA
LAS33.30
LAS50.00
                                                                                                     57.0
                                                                                                             dBA
                                                                                                     56.4
                                                                                                             dBA
LAS66.60
                                                                                                     55.4
                                                                                                             dBA
LAS90.00
LAS > 65.0 dB (Exceedence Counts / Duration)
                                                                                                 1 /
                                                                                                      1.6
                                                                                                             s
LAS > 85.0 dB (Exceedence Counts / Duration)
                                                                                                 0 /
                                                                                                      0.0
                                                                                                             s
LApeak > 135.0 dB (Exceedence Counts / Duration)
                                                                                                 0
                                                                                                       0.0
                                                                                                             s
LApeak > 137.0 dB (Exceedence Counts / Duration)
                                                                                                 0
                                                                                                       0.0
                                                                                                             s
LApeak > 140.0 dB (Exceedence Counts / Duration)
                                                                                                 0 /
                                                                                                       0.0
Settings
                                                                                                            A Weighting
RMS Weight
                                                                                               A Weighting
Peak Weight
                                                                                                     Slow
Detector
Preamp
                                                                                                    PRM831
Integration Method
                                                                                                    Linear
                                                                                                   Normal
OBA Range
                                                                                               1/1 and 1/3
OBA Bandwidth
                                                                                               Z Weighting
OBA Freq. Weighting
                                                                                                   Bin Max
OBA Max Spectrum
                                                                                                             dΒ
                                                                                                       +0
Gain
                                                                                                             ďΒ
Under Range Limit
                                                                                                     26.1
Under Range Peak
                                                                                                      75.2
                                                                                                             ďΒ
                                                                                                      16.9
                                                                                                             đΒ
Noise Floor
                                                                                                     142.7
                                                                                                             đВ
Overload
I/I spectra ...
                                                                                                     8k
                                                                                                              16k
Freq. (Hz):
              8.0
                       16.0
                                31.5
                                        63.0
                                                 125
                                                         250
                                                                  500
                                                                           1 k
                                                                                    2k
                                                                                             4k
                                                                                                              42.6
                                                                           54.7
                                                                                             43.4
                                                                                                     41.3
LZea
              83.4
                       78.0
                               71.4
                                        65.7
                                                 59.0
                                                         54.1
                                                                  53.4
                                                                                    48 4
LZSmax
              99.4
                       94.7
                               86.0
                                        79.7
                                                 68.3
                                                          63.7
                                                                  61.9
                                                                           61.7
                                                                                    60.9
                                                                                             61.4
                                                                                                     56.0
                                                                                                              48.7
                                        57.5
                                                                  47.9
                                                                           51.0
                                                                                    43.7
                                                                                             37.0
                                                                                                     38.9
                                                                                                              42.3
LZSmin
              58.0
                       58.2
                               57.9
                                                 51.9
                                                          48.7
```

1/3.Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	79.9	78.4	77.1	75.1	72.9	70.8	68.6	66.3	63.9	62.1	61.1	58.9
LZSmax	95.1	95.1	98.0	91.8	89.5	86.2	84.1	80.1	78.8	77.1	74.9	70.6
LZSmin	52.3	50.2	48.5	50.9	54.7	52.1	53.5	51.7	52.0	41.2	50.7	48.8
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZeq	56.2	53.6	51.2	49.9	49.5	48.5	48.1	48.6	49.1	50.6	50.5	48.5
LZSmax	67.7	64.6	61.8	62.3	60.2	58.0	56.2	57.7	59.5	59.0	56.1	60.6
LZSmin	47.2	46.9	42.0	44.0	43.3	42.8	43.1	43.3	45.1	46.5	46.5	43.2
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	45.8	42.9	40.4	39.3	38.9	37.4	36.8	36.4	36.3	36.8	37.5	39.1
LZSmax	55.9	56.1	55.3	55.7	59.5	54.1	53.5	52.1	46.0	45.3	43.1	42.5
LZSmin	41.2	37.9	34.3	32.2	31.8	32.2	33.0	33.5	35.2	36.2	37.2	38.5

Calibration History		
Preamp	Date	dB re. 1V/Pa
PRM831	02 Nov 2016 10:44:45	-25.2
PRM831	22 Sep 2016 15:49:59	-26.5
PRM831	24 Aug 2016 19:03:10	-26.1
PRM831	26 Jul 2016 10:53:46	-26.0
PRM831	26 Jul 2016 09:33:01	-26.4
PRM831	26 Jul 2016 07:41:35	-25.1
PRM831	25 Jul 2016 14:18:53	-26.4
PRM831	25 Jul 2016 12:49:23	-25.2
PRM831	25 Jul 2016 09:43:52	-24.8
PRM831	25 Jul 2016 0 <sup>-</sup> :24:48	-25.6
PRM831	22 Jul 2016 11:22:38	-25.1

```
General Information
Serial Number
                                                                                            02509
Mode 1
                                                                                             831
Firmware Version
                                                                                            2.301
Filename
                                                                                     831 Data.004
User
                                                                                              GT
Job Description
                                                                   Gallop Way Channelization Project
Location
                                           East Portion of Channel - Front yard of 3100 Valley View Ave
Measurement Description
Start Time
                                                                Wednesday, 2016 November 02 11:25:05
Stop Time
                                                                Wednesday, 2016 November 02 11:40:05
Duration
                                                                                       00:15:00.5
Run Time
                                                                                       00:15:00 5
Pause
                                                                                       00:00:00.0
Pre Calibration
                                                                Wednesday, 2016 November 02 10:44:45
Post Calibration
                                                                                            None
Calibration Deviation
NoLe
Approx 75 feet SW of Valley View Ave CL and 30 feet north of Channel CL
75F, 29.38 inHg, 23% Hu., 8 mph wind, clear sky
overall Bata
LAeg
                                                                                             53.4
                                                                                                   dB
LASmax
                                                                                                   dB
                                                                                             63.2
                                                           2016 Nov 02 11:38:41
LApeak (max)
                                                           2016 Nov 02 11:38:41
                                                                                             80.2
                                                                                                   ďB
LASmin
                                                           2016 Nov 02 11:32:15
                                                                                             46.4
                                                                                                   dB
LCeq
                                                                                             67.6
                                                                                                   dB
LAeq
                                                                                             53.4
                                                                                                   đB
LCeq - LAeq
                                                                                             14.2
                                                                                                   dB
LAIeq
                                                                                             54.7
LAeq
                                                                                             53.4
                                                                                                   dB
LAIeq - LAeq
                                                                                                   đВ
                                                                                             1.3
                                                                                                   đВ
Ldn
                                                                                             53 4
LDay 07:00-23:00
                                                                                             53.4
                                                                                                   ďВ
LNight 23:00-07:00
                                                                                                   dB
Lden
                                                                                             53.4
                                                                                                   đВ
LDay 07:00-19:00
                                                                                             53,4
                                                                                                   dB
LEvening 19:00-23:00
                                                                                                   ďΒ
LNight 23:00-07:00
                                                                                                   dB
LAE
                                                                                             82.9
                                                                                                   dB
# Overloads
                                                                                               n
Overload Duration
                                                                                              0.0
                                                                                                   s
# OBA Overloads
                                                                                               0
OBA Overload Duration
                                                                                              0.0
Statistics
LAS5.00
                                                                                             58.2
                                                                                                   dBA
LAS10.00
                                                                                             56.8
                                                                                                   dBA
T-AS33 30
                                                                                             53.3
                                                                                                    dBA
LAS50.00
                                                                                             51.3
                                                                                                    dBA
LAS66.60
                                                                                             49.7
                                                                                                    dBA
LAS90.00
                                                                                                   dBA
                                                                                             48.0
LAS > 65.0 dB (Exceedence Counts / Duration)
                                                                                        0
                                                                                              0.0
                                                                                                   S
LAS > 85.0 dB (Exceedence Counts / Duration)
                                                                                              0.0
                                                                                        0
                                                                                                   s
LApeak > 135.0 dB (Exceedence Counts / Duration)
LApeak > 137.0 dB (Exceedence Counts / Duration)
                                                                                        0
                                                                                              0.0
                                                                                                   s
                                                                                        0
                                                                                              0.0
                                                                                                   s
LApeak > 140.0 dB (Exceedence Counts / Duration)
                                                                                        0
                                                                                              0.0
Settings.
                                                                                                  RMS Weight
                                                                                       A Weighting
Peak Weight
                                                                                       A Weighting
Detector
                                                                                            Slow
Preamp
                                                                                           PRM831
Integration Method
                                                                                           Linear
OBA Range
                                                                                           Normal
OBA Bandwidth
                                                                                       1/1 and 1/3
OBA Freq. Weighting
                                                                                       Z Weighting
OBA Max Spectrum
                                                                                          Bin Max
Gain
                                                                                              +0
                                                                                                    ďB
Under Range Limit
                                                                                             26.1
                                                                                                    dВ
Under Range Peak
                                                                                             75.2
                                                                                                    dB
Noise Floor
                                                                                             16.9
                                                                                                    dB
Overload
                                                                                            142.7
                                                                                                    dB
1/1 Special Profile
                  Freq. (Hz):
                                                                                             8k
                                                                                                     16k
            8.0
                    16.0
                            31.5
                                    63.0
                                            125
                                                                    1k
                                                                            2k
                                                                                     4k
                                                    250
                                                            500
LZeq
             76.8
                     71.4
                            63.8
                                    60.2
                                            57.4
                                                            51.6
                                                                    49.0
                                                                            42.8
                                                                                     40.3
                                                                                             39.7
                                                                                                     42.5
                                                    53.3
LZSmax
                                                                                                     42.6
             91.9
                            78.2
                                                                                             42.4
                    84.8
                                    73.5
                                            70.0
                                                    64.9
                                                            64.5
                                                                    56.8
                                                                            50.3
                                                                                     46.7
LZSmin
            52 2
                    52.3
                            49.0
                                    50.8
                                            47.7
                                                    43.1
                                                            42.8
                                                                    42.7
                                                                            36.2
                                                                                     38 0
                                                                                             39 0
                                                                                                     42 0
```

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	73.6	71.9	70.2	68.0	66.0	65.5	60.4	58.1	58.1	55.1	55.9	55.1
LZSmax	88.5	86.5	86.3	83.4	80.6	79.4	75.8	73.3	73.4	70.6	72.7	65.1
LZSmin	44.3	44.1	44.7	45.5	46.3	46.4	44.6	43.1	43.3	45.2	45.2	42.9
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZeq	54.5	51.6	50.3	49.9	47.6	47.8	47.4	46.9	46.1	45.7	44.3	41.7
LZSmax	68.4	67.3	61.6	62.5	59.1	60.5	61.5	60.8	57.9	55.2	51.3	50.2
LZSmin	44.2	41.8	40.6	39.2	38.0	37.5	35.8	37.4	38.0	39.3	37.9	35.6
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	39.3	37.6	36.7	36.2	35.4	34.7	34.4	34.7	35.6	36.5	37.4	39.1
LZSmax	47.9	44.7	43.7	43.0	42.1	40.2	38.7	37.4	36.9	36.8	37.6	39.3
LZSmin	32.8	30.1	29.8	30.3	31.0	31.9	32.8	33.6	35.2	35.7	36.7	38.9

Calibration History		
Preamp	Date	dB re. 1V/Pa
PRM831	02 Nov 2016 10:44:45	-25.2
PRM831	22 Sep 2016 15:49:59	-26.5
PRM831	24 Aug 2016 19:03:10	-26.1
PRM831	26 Jul 2016 10:53:46	-26.0
PRM831	26 Jul 2016 09:33:01	-26.4
PRM831	26 Jul 2016 0°:41:35	-25.1
PRM831	25 Jul 2016 14:18:53	-26,4
PRM831	25 Jul 2016 12:49:23	-25.2
PRM831	25 Jul 2016 09:43:52	-24.8
PRM831	25 Jul 2016 07:24:48	-25.6
PRM831	22 Jul 2016 1%:22:38	-25.1

Report date:

11/4/2016

Case Description: Gallop Way Channel - Excavation & Grading of Channel

---- Receptor #1 ----

Baselines (dBA)

Description Land Use Nearest Home Residential

Daytime

Evening Night 55 55

55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)		,	Estimated Shielding (dBA)
Excavator	No	40	1	,	80.7	25	0
Excavator	No	40	1		80.7	75	0
Dozer	No	40	ì		81.7	125	0
Dozer	No	40	)		81.7	175	0
Front End Loader	No	40	)		79.1	225	0
Front End Loader	No	40	)		79.1	275	0

			Results			
	Calculated (dBA)			Noise Lir	nits (dBA)	
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	86.7	82.8	N/A	N/A	N/A	N/A
Excavator	77.2	73.2	N/A	N/A	N/A	N/A
Dozer	73.7	69.7	N/A	N/A	N/A	N/A
Dozer	70.8	66.8	N/A	N/A	N/A	N/A
Front End Loader	66.0	62.1	N/A	N/A	N/A	N/A
Front End Loader	64.3	60.	3 N/A	N/A	N/A	N/A
Total	87	8	4 N/A	N/A	N/A	N/A

<sup>\*</sup>Calculated Lmax is the Loudest value.

Report date:

11/4/2016

Case Description: Gallop Way Channel - Channel Construction

					Red	epto	r#1			
		Baselines (dBA	)							
Description	Land Use	Daytime	Evening		Night					
Nearest Home	Residential	5	5	55	i	55				
					Equipm	ont				
					Spec		Actual		Recentor	Estimated
		Impact			Lmax	-	-max		Distance	Shielding
Description		Device	Usage(%)		(dBA)		dBA)		(feet)	(dBA)
Crane		No	03agc(70)	16	, ,	'	(ub)	80.6	, ,	, ,
Concrete Pump T	ruck	No		20				81.4		
Excavator		No		40				80.7	125	-
					Results					
		Calculated (dBA	<b>(</b> )			1	Voise	Limits	s (dBA)	
					Day				Evening	
Equipment		*Lmax	Leq		Lmax	L	_eq		Lmax	Leq
Crane		86.60	78.60		N/A	1	N/A		N/A	N/A
Concrete Pump T	ruck	77.90	70.90		N/A	1	N/A		N/A	N/A
Excavator		72.80	68.80		N/A	1	N/A		N/A	N/A
	Total	87	80		N/A	1	N/A		N/A	N/A
	*Calculate	ed Lmax is the Lo	udest value.							

Report date:

11/4/2016

Case Descriptio Gallop Way Channel - Catch Basin Construction

	Rece	ptor	#1	
--	------	------	----	--

		Baselines (dBA	<b>A</b> )
Description	Land Use	Daytime	Evening

Description Land Use
Nearest Home Residential

Daytime Evening Night 55 55 55

	Impact		Equipme Spec Lmax	ent Actual Lmax		•	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)		(feet)	(dBA)
Crane	No	16			80.6	30	0
Dump Truck	No	40			76.5	80	0
All Other Equipment > 5 HP	No	50		85		130	0
All Other Equipment > 5 HP	No	50		85		180	0
Tractor	No	40		84		230	0
Concrete Pump Truck	No	20			81.4	280	0

### Results

	Calculated (dBA)			Noise Limits	(dBA)	
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	85	77	N/A	N/A	N/A	N/A
Dump Truck	72.40	68.40	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	76.70	73.70	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	73.90	70.90	N/A	N/A	N/A	N/A
Tractor	70.70	66.80	N/A	N/A	N/A	N/A
Concrete Pump Truck	66.40	59.40	N/A	N/A	N/A	N/A
Total	85	80	N/A	N/A	N/A	N/A

<sup>\*</sup>Calculated Lmax is the Loudest value.

Report date:

11/4/2016

Case Description: Gallop Way Channel - Final Grading and Road Construction

•				•							
		Baselines (dBA	۸.			Receptor #1		4			
Description Nearest Home	Land Use Residential	Daytime	,	Evenin	g 55	Night	55				
***************************************	· (coldonila)		55		00						
						Equipment					
						Spec		Actual		Receptor	Estimated
		Impact				Lmax		Lmax		Distance	Shielding
Description		Device	ŧ	Usage(	(%)	(dBA)		(dBA)		(feet)	(dBA)
Grader		No			40		85			15	0
Front End Loader		No			40				79.1	65	0
Dump Truck		No			40				76.5	115	0
						Results					
		Calculated (dB.	A)					Noise Limits (	dBA)		
						Day				Evening	
Equipment		*Lmax	l	Leq		Lmax		Leq		Lmax	Leq
Grader		9	5.5	9	1.5	N/A		N/A		N/A	N/A
Front End Loader		76	6.8	7:	2.9	N/A		N/A		N/A	N/A
Dump Truck		69.2		65.2	2	N/A		N/A		N/A	N/A
	Total	96		92		N/A		N/A		N/A	N/A
	*Calculate	ed Lmax is the L	oud	est val	ue						

Report date:

11/4/2016

Case Description: Gallop Way Channel - Paving

oddo booonpaon.	Canop way	Onamici - Lavin	9						
		Baselines (dBA	.)		Rece	ptor #1	-		
Description Nearest Home	Land Use Residential	Daytime	Evenin 55	ng 55	Night	55			
Description Paver Roller		Impact Device No No	Usage	e(%) 50 20	Equipme Spec Lmax (dBA)	nt Actual Lmax (dBA)	77.2 80	Distance (feet)	-
		Calculated (dBA	۹)		Results	Noise I	_imits	,	
Equipment Paver Roller	Total	*Lmax 81. 75.		8.9	Day Lmax N/A N/A N/A	Leq N/A N/A N/A		Evening Lmax N/A N/A N/A	Leq N/A N/A N/A

\*Calculated Lmax is the Loudest value.

Appendix C

**Response to Comments** 

### North Norco Channel Line NB Stage 3 Project Response to Comments

The Draft CEQA Initial Study for the North Norco Channel Line NB, Stage 3 Project was circulated for public review and comment from April 27, 2017 through May 29, 2017. During the public review period, the Riverside County Flood Control and Water Conservation District (RCFC&WCD) received three comment letters:

- Southern California Edison Company May 1, 2017
- AT&T May 26, 2017
- Governor's Office of Planning and Research May 30, 2017

These comment letters are provided below, followed by responses to the individual letters.

From:

Evan Risorto < Evan.Risorto@sce.com>

Sent:

Monday, May 1, 2017 10:55 AM

To:

Wong, Mike

Subject:

SCE Project Submittal NORCO CHANNEL PHASE 3

Attachments:

Customer Forms v2 1 Evan R (003).pdf

Hello Mike,

I have received a package for a project titled NORCO CHANNEL PHASE 3. Attached are some SCE documents I need submitted in order to begin the process. Please let me know if you have any questions regarding this submittal.

R/

Evan Risorto Planner - SCE Ontario SWEC Rep – Metro East

> 1351 E Francis Ontario, CA 91761 909-930-8513



### In Regards to: North Norco Channel Line Stg 3

Dear Mike Wong,

My name is Evan Risorto and I will be the Service Planner for your project. My job is to coordinate the design and installation of the electrical system to serve your new project. I am committed to completing your project in a timely and economical manner, and to meet your design and construction time frames. I intend to communicate with you on a regular basis. If you need to contact me for any reason you may do so via any of the following methods:

Office:

(909) 930-8513

Cellular:

(909) 660-0691

E-mail:

Evan.Risorto@sce.com

I have indicated below the plans and information necessary to proceed with the electrical design for your project. Please provide me with the following information at your earliest convenience:

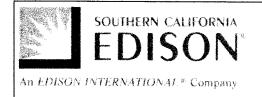
Item	Qty	Needed Plans	Item	Qty	Needed Information
<b>V</b>	1	Attached Customer / Project Information Sheet	1	1	Assessor Parcel Map
✓	2	Site/Piot (scaled if available)	1	1	Copy of Grant Deed
<b>√</b>	2	Street Improvement	✓	2	Recorded Tract Maps (all pages)
<b>√</b>	1	Grading & Elevation	✓	1	Attached Design Option Letter (Signed)
✓	1	Sewer & Storm Drain		1	Attached Installation Option Letters (Signed)
<b>✓</b>	1	Load Schedules and Panel Drawings	1	1	Attached Street Light Authorization Letter (Signed)
✓	1	Landscape, Sprinkler, Pedestal Locations	<b>√</b>	1	Address Sequence List
✓	1	Street Light Plan	<b>√</b>	1	Digital File AutoCAD v9 or earlier

Once I receive this information I will provide you with a schedule for completion of the electrical design and installation of your project.

I would like to thank you for allowing Southern California Edison Company to assist you with your electrical needs.

Sincerely,

Evan Risorte Service Planner 1351 E. Francis St. Ontario, Ca., 91761



Individual or Business Name:

### **Customer/Project Information Sheet**

Date Received by SCE: \_\_\_\_\_

(Customer / Developer — Tract DBA or LLC )				1			
Address:		Email Address:					
City:		State:	State: Zip Coo				
Attn:				Phone No:			
Legal Contact:				Phone No:			
(Individual responsible for signing contracts, paying fees and receiving potential refunds)  Address:				Email Address:			
City:		State: Zip Code:		Zin Code:			
Primary Field / Site Superintendent / Job Contact:							
Relationship to Project:		Phone No:					
E-mail Address:		FAX No:					
Project Address:							
City:				State:		Zip Code:	
TG Map # or GPS			Major Cross Street:				
Detailed Project Information							
Residential:	Commercial:		Industrial: 🔲		Agricultural:		
Overhead:	Undergrou	und: 🔲	Tract: Lo		Lot(s	ot(s):	
Temporary Service Required: Yes No Approximate date you would like the job completed and energized:							
Approximate start work date for SCE crews: Your Construction Start Date:							
Is this project eligible for FHWA, FTA or FRA funding under the Buy America program: Yes No							
Scope of Project:							
Solar or Generation Equipment to be installed (If yes, please attach additional descriptions/specifications): Yes No							
Electric Vehicle:							
			Service Voltage/Phase:				
		Total # of A/C Units:		Largest A/C Unit (tons):			
Total HP of Pumps: Total # of Pump U			its: Largest Pump (HP):				
Installing Gas or Electric: Heater:			Water Heater: Range: ☐				
Square Footage of Buildings (if multiple buildings give all footages):  Homes over 5000 sq ft larger lots require a Load Schedule. Please contact your electrician for assistance.							

### APPLICANT DESIGN OPTION FOR DISTRIBUTION AND/OR SERVICE EXTENSIONS LETTER OF AUTHORIZATION

### TO SOUTHERN CALIFORNIA EDISON COMPANY (SCE)

Applicant understands that for facilities designed in accordance with SCE's Rules 13, 15, and/or 16, the Applicant can elect:

Option (1) SCE to design the distribution and/or service extension; or

Option (2) A Competitive Bidding Procedure for the distribution and/or service extension design.

Under **Option (1)** above, SCE completes the project design. SCE's design costs are included in the total project cost to serve subject to refund / allowance. Under **Option (2)** above, Competitive Bidding, Applicant shall receive a bid amount from SCE and secure Competitive Bids from Qualified Designers for the *design* of the distribution and/or service extension. The SCE bid amount provided will be used as the job-specific cost estimate for design services. Either SCE or a Qualified Designer can design the distribution line and/or service extension under Option (2). The Applicant should have a thorough understanding of the Applicant Design Terms and Conditions prior to choosing Option (2) – Competitive Bid. Copies are available upon request.

If Applicant elects SCE to design the distribution and/or service extension and then later secures a third-party Qualified Designer under Option (2) Competitive Bidding, Applicant shall pay to SCE any and all costs incurred by SCE for design work already performed as a result of Applicant originally requesting SCE's design.

Regardless of the design option chosen, all speculative projects are subject to the advance collection of engineering fees.

Applicant understands the above Options and hereby select	ts the following Option:
Option (1) Design by SCE	
Option (2) Competitive Bidding for App	olicant Design
The elected Option is for the distribution line and/or service	e extension to be located at and/or described as follows:
Applicant acknowledges the option selected above and understatif SCE incurs interim design costs as a result of Applicant third-party Qualified Designer and electing Option (2).	
Applicant (Print or Type)	Title (Print or Type)
Signature	Date

Rev. 12/03/2014 DS-101

### Southern California Edison CAD File Requirements

To our valued customers:

SCE employees develop project base maps from digital files supplied by our customers. The process of reviewing and performing clean-up of these files takes time and effort, and directly impacts our ability to turn around a product to our customers in a reasonable time frame.

In support of our commitment to continuous improvement, SCE has established a set of requirements for digital file submission. It is the customer's responsibility to submit files that comply with these requirements and to ensure the files provided contain the most accurate and current information available.

The attached requirements list identifies the layer name and color to use for each entity within the submitted CAD file. SCE requires all related files for a single project be submitted as one comprehensive file. All projects must be saved in AutoCad 2009 or earlier.

Submitted files that do not meet the listed requirements or that contain cross-referenced drawings (XREF's) are subject to rejection.

Thank you for your efforts in assuring the information provided meets the requirements included.

Rev. 8/29/11 Page 1 of 5

### STANDARD DIGITAL FILE REQUIREMENTS:

Drawings submitted must be provided in a single file and per the AutoCAD standards listed in the AutoCad File Requirements section of this document.

The following information, if available, must be displayed on separate layers:

\*Required layer name for the item per Table 1-1 is enclosed in brackets.

- Street Right Of Way lines [RW]
- Property Lines, Tract Boundaries, Assessment District, Easements, and Boundary lines for the city, county, etc. [BOUNDARY]
- Street names specify "private street, government enties such as" if applicable; specify governing entity when applicable (County Road, State Highway, etc) [TEXT-STREET]
- Street width dimensions [DIMENSIONS]
- Street Centerline and Centerline Stationing on all streets. Centerline Stationing should not be broken and should show reference stationing at street intersection. [CL]

Note: Wet utilities stationing is not required.

- Lot, Tract or Parcel numbering [TEXT-LOTS]
- Existing SCE Underground structures and existing OH poles [ELECTRIC]
- Existing SCE Underground conduits [COND-EX]
- Existing SCE Overhead Conductors [OH-EX]
- Building Outlines on separate layer file must show exterior walls, doors, and windows only (no interior walls) [BUILD]
- Building Numbers where applicable (i.e. Apartments and Commercial) [BUILD]
   Note: Also show Electrical Room when panel is located inside the building as well as the preferred structure placement
- Meter Locations [BUILD]
- Driveways [DWY]
- Sidewalks [SW]
- Walkways [WALK]
- Curbs [CURB]
- Gutter [GUTTER]
- Edge of pavement [EP]

- Driveway aprons [WALK]
- Walls i.e. decorative walls, retaining walls, etc. [WALL]
- Fences or fence lines [FENCE]
- Trash enclosures where applicable. Trash enclosures are usually shown in areas such as apartments where they would affect structure and/or trench placement. [Per customer layer name]
- Landscape obstructions that need to be considered for proper electrical planning [LANDSCAPE]
- Vicinity Map [MISC]
- North Arrow and Scale Bar [DECAL]
- Detailed Street Cross Sections (if available) [DECAL]
- Topography [TOPO]
- Location of any future or proposed utility, building and/or structure locations labeled accordingly (if available.)

### Location of all other utilities, etc. as applicable including proposed and existing:

- Catch basins (separate layer from storm drains) [SD]
- Storm drains (separate layer from catch basins) [CB]
- Cable TV [CATV]
- Fire Hydrants [FH]
- Gas [GAS]
- Manholes [MH]
- Oil [OIL]
- Railroad [RAILROAD]
- Sanitary Sewer [SEWER]
- Telephone [TEL]
- Traffic Control /Traffic Signal [TS]
- Water [WATER]
- Existing utility, service and street poles [per customer name]

### NOTES:

- Show utility lines eight inches (8") or wider to full width with size and material indicated.
- 2. Storm drain lines should be dashed, all others continuous.
- 3. Do not show utility lines smaller than 8" in full width, but size and material should be indicated.

The AutoCAD File Requirements are listed below as well as the Layer Descriptions for each layer. These requirements must be followed to ensure consistency with regard to digital files submitted by customers.

No X-Refs or Nested X-Refs (External Referenced Drawings)

- Drawings must only be in a single file with entities separated by layers per Table 1-1
- Drawing Scale must be 1'-1' AutoCAD Engineering Unit (decimal), not Architectural scale
- No 3<sup>rd</sup> Party Software Entities such as Express Tools "Acad Proxy Entities" (Note: Software provided with AutoCad but not supported by Autodesk)
- Images such as Bitmap, JPEG, PDF, etc., should be added using "Copy" from Microsoft Photo Editor and then a "PasteClip" into the active model drawing or an active viewport. That will ensure that the graphic is embedded in the drawing and not referenced to as the AutoCAD "Image" command does. Do not add images using the AutoCAD "Image" command.
- No duplicate base objects
- No "TextMask" due to potential plotter incompatibility.

Entities must be separated by layers per SCE AutoCad Layering Standard. However, for instances where a drawing is converted from Microstation to AutoCAD, a layer legend which indicates the firm's layer name and description may be provided in lieu of SCE's Layering Standard.

TABLE 1-1

	Layer	Layer
	Names	Color
Layer Descriptions	(UPPERCASE)	
Sheet setup & Title Block Border	BASE	7
Buildings	BUILD	131
Boundaries - City, County, etc.	BOUNDARY	10
Cable TV	CATV	157
Catch basin	СВ	157
Center Line of Streets & Stationing	CL	1
SCE existing conduits	COND-EX	11
Curbs	CURB	10
Driveway (not including aprons)	DWY	221
Edison Decals	DECAL	7
Edison Decals	DECALS	157
Easement	EASEMENT	7
SCE underground structures or OH poles	ELECTRIC	11
Edge of Pavement	EP	10
Fence	FENCE	157
Fire Hydrant	FH	35
Gas Line	GAS	157
Gutter	Gutter	35
Hatching - Buildings, etc.	HATCH	131
Landscape	LANDSCAPE	157

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Manhole	MH	157
Match lines	MATCHLINE	252
Oil Line	OIL	157
SCE existing overhead lines	OH-EX	11
Property line, Lot Lines	PL	2
Railroad	RR	7
Right-of-Way Lines	RW	2
Slope	SLOPE	157
Storm drain (Separate CB Lay)	SD	157
Sanitary Sewer	SEWER	157
Sidewalk & Driveway Aprons	SW	35
Telephone	TEL	157
Topography	TOPO	157
Traffic Signals	TS	157
Walkway & Driveway Aprons		
(SEPARATE)	WALK	35
Walls	WALL	5
Water	WATER	157
Misc. Vicinity Maps, Hatching, etc.	MISC	7
All other existing non-SCE conduits	APPROPRIATE LAYER	11
TOVE DELIATED		
TEXT RELATED		_
TEXT - STREET NAMES	TEXT-STREET	7
TEXT - Lot Numbers	TEXT-LOTS	7
Text - Misc.	TEXT	7
DIMENSIONING - AutoCAD related with DIM	DIMENSION	7

Rev. 8/29/11 Page 5 of 5

### Response to Southern California Edison Company (SCE) letter dated May 1, 2017

The RCFC&WCD appreciates SCE's review of the Draft IS/MND. This SCE letter provides direction on the design and installation of new electrical systems. The long-term operation of the proposed North Norco Channel Line NB, Stage 3 project will not require electrical service from the Southern California Edison Company (SCE). Thus, the RCFC&WCD will not need to fill in the customer forms nor provide the information requested. With consideration of this comment letter, no changes to the significance determination of the IS/MND are required.



### NO CONFLICT

22311 Brookhurst Street Suite203 Huntington Beach Ca 92646

May 26, 2017

County of Riverside Flood Control & Water Conservation Attn: Mike Wong 1955 Market St. Riverside, CA 92501

Re: North Norco Channel Line NB Stage 3... Norco, CA

Dear Mr. Wong,

This is in response to your Inquiry Letter dated May 19, 2017, regarding the above referenced project. After reviewing your location maps, please be advised that AT&T Network Services (long distance) has no active facilities (Transcontinental Fiber Optics Lines) within the vicinity of this project.

Thank you for notifying AT&T of the pending project referenced above. Notification of future proposed work, performed in this vicinity should be directed to:

## AT&T INQUIRIES 22311 Brookhurst Street, Suite 203 Huntington Beach, CA 92646 joef@forkertengineering.com

Should you have any questions or concerns regarding this project, please contact Mr. Joseph Forkert at (714) 963-7964 or me at your earliest convenience.

### Please Note

AT&T Drawings are Proprietary Information Pursuant to Company instructions—This Office does not distribute drawings for Pre—Planning and Design Engineering purposes.

Please contact your local City, County, Utility Notification Center or AT&T on Site Plant Protection Workforce to identify AT&T facilities prior to contacting AT&T Engineering. If you are referred to our office because of a possible conflict with AT&T lines, we will confirm and provide you with the appropriate drawings and pertinent information required to avoid a conflict with AT&T lines prior to the start of your construction project.

Sincerely,

Joseph Forkert for Tanya Hernandez OSP Maintenance Engineer (619) 200-7896

### Response to AT&T Letter dated May 26, 2017

The RCFC&WCD appreciates AT&T's review of the Draft IS/MND. The comment letter acknowledges that there are no active AT&T facilities in the vicinity of this project. With consideration of this comment letter, no changes to the significance determination of the IS/MND are required.



### STATE OF CALIFORNIA

### GOVERNOR'S OFFICE of PLANNING AND RESEARCH

### STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX DIRECTOR

RIVERSIDE COUNTY FLOOD CONTROL

AND WATER CONSERVATION DISTRICT

EDMUND G. BROWN JR. GOVERNOR

May 30, 2017

Mike Wong Riverside County Flood Control and Water Conservation 1995 Market Street Riverside, CA 92501

Subject: North Norco Channel Line NB, Stage 3 Project

SCH#: 2017041077

Dear Mike Wong:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on May 26, 2017, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan

Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044 (916) 445-0613 FAX 916) 323-3018 www.opr.ca.gov

### Document Details Report State Clearinghouse Data Base

SCH# 2017041077

Project Title North Norco Channel Line NB, Stage 3 Project

Lead Agency Riverside County Flood Control and Water Conservation

Type MND Mitigated Negative Declaration

Description The Riverside County Flood Control and Water Conservation District proposes to replace an existing

interim dirt-lined trapezoidal flood control channel with a concrete lined trapezoidal and rectangular channel, including concrete culverts, across Valley View Ave and Sierra Ave and an Armorflex, gabion, or rock lined invert at the western end where the line reconstructed on Sierra Ave, Fortuna Rd, Valley

View Ave, and Gallop Lane.

Lead Agency Contact

Name Mike Wong

Agency Riverside County Flood Control and Water Conservation

**Phone** 951-955-1233 **Fax** 

ernail

Address 1995 Market Street

City Riverside

State CA Zip 92501

**Project Location** 

County Riverside

City Norco

Region

Lat / Long 33° 55' 37" N / 117° 33' 11" W

Cross Streets Sierra Ave/Fortuna Rd and Valley View Ave/Man O War Dr

Parcel No. 127-040-049, 050, etc.

Township 3S Range 6W Section 7 Base SBM

Proximity to:

Highways I-15

**Airports** 

Railways

Agencies

Waterways North Norco Channel, Santa Ana River

Schools Sierra Vista ES

Land Use north norco channel line NB drainage channel/ag-low density/res ag

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Geologic/Seismic; Noise;

Public Services; Recreation/Parks; Soil Erosion/Compaction/Grading; Toxic/Hazardous;

Traffic/Circulation; Vegetation; Water Quality; Wetland/Riparian; Landuse

Reviewing Resources Agency; Department of Fish and Wildlife, Region 6; Department of Conservation;

Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services,

California; California Highway Patrol; Caltrans, District 8; State Water Resources Control Board, Division of Drinking Water, District 20; Regional Water Quality Control Board, Region 8; Native

American Heritage Commission; State Lands Commission

Date Received 04/27/2017

Start of Review 04/27/2017

End of Review 05/26/2017

### Response to Office of Planning and Research (OPR) Letter dated May 30, 2017

The RCFC&WCD appreciates the OPR letter, which notes that no State agencies submitted comments by the end of the IS/MND review period and acknowledges that the RCFC&WCD has complied with the review requirements pursuant to the California Environmental Quality Act. With consideration of this comment letter, no changes to the IS/MND are required.

### MITIGATED NEGATIVE DECLARATION

State Clearinghouse Number: 2017041077  Lead Agency and Project Sponsor: Riverside County Flood Control and V	Randy Sheppeard	Telephone Number: (951) 955-1200 Email: rsheppea@rivco.org
Address:	City:	Zip:
1995 Market Street	Riverside	92501

Project Title and Description:

North Norco Channel Line NB, Stage 3

The Riverside County Flood Control and Water Conservation District (District) proposes to replace an existing interim dirt-lined trapezoidal flood control channel with a concrete-lined trapezoidal and rectangular channel, including concrete culverts, across Valley View Avenue and Sierra Avenue and an Armorflex, gabion, or rock-lined invert at the western end where the Line NB channel ties into the North Norco Channel. Storm drain lines, inlets, and catch basins would also be constructed/reconstructed on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane. The existing channel is currently inadequate for the conveyance of ultimate condition flow rates, and the project would eliminate this deficiency. The project expands upon previously constructed Stages 1 and 2 to replace the current remaining dirt-lined channel and construct a larger concrete-lined channel that would accommodate the 100-year runoff flow from multiple local drainages within the City of Norco to address the City's drainage issues. The project would continue to direct storm water runoff that emanates from the hills located in the eastern portion of the City and areas north and south of the channel for conveyance to the North Norco Channel that ties into the Prado Dam Reservoir.

Project Location: The North Norco Channel Line NB is located in the City of Norco, south of Fifth Street, north of Fourth Street, east of the Interstate (I) 15 Freeway and the North Norco Channel, and west of the intersection of Half Circle Road and Gallop Lane. It ties to Line NA to the east (upstream) and to the North Norco Channel to the west (downstream). Improvements are also proposed to storm drain lines, inlets, and catch basins on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane. In addition, four parcels adjacent to the channel are proposed for use as temporary construction staging areas. The project site is located within Section 7, Township 3 South, Range 6 West of the San Bernardino Meridian.

Lead Agency Finding: The General Manager-Chief Engineer of the Riverside County Flood Control and Water Conservation District has made a finding that the proposed North Norco Channel Line NB, Stage 3 project will not have a significant adverse effect on the environment. An Initial Study supporting this finding is attached. This finding will become final upon adoption of this Mitigated Negative Declaration by the Board of Supervisors of the Riverside County Flood Control and Water Conservation District. Mitigation measures are as follows:

Refer to attached Mitigation Monitoring and Reporting Program.

Signature:

JASON UHLEY
General Manager-Chief Engineer

Dated: 8-28-17

	ood Control and Water Conservation District, assembled ed that the North Norco Channel Line NB, Stage 3 project onment and has adopted this Mitigated Negative
Signature:  KECIA HARPER-IHEM  Clerk of the Board	Dated:
Attachment	
Copies to: 1) County Clerk 2) Flood Control	

## RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT NORTH NORCO CHANNEL LINE NB, STAGE 3

## MITIGATION MONITORING AND REPORTING PROGRAM

NSS.	Potential Impact	Environmental Commitment, Avoidance, Minimization, and/or Mitigation Measures	Action	Implementation Responsibility	Governing Agency	Implementation Timing
Biological Resources	A substantial adverse effect on biological resources involved within a jurisdictional water feature	MM 1: Prior to initiation of construction activities, the District shall obtain all necessary permits from the Santa Ana Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) for impacts to jurisdictional resources. Mitigation for the loss of jurisdictional resources shall be negotiated with the resource agencies during the regulatory permitting process and shall ensure mitigation to compensate for permanent impacts on jurisdictional resources is equivalent or superior to the biological functions and values impacted by the project. Potential mitigation options may include, but are not limited to, payment of an in-lieu mitigation fee to a mitigation bank or regional riparian enhancement program (e.g., invasive plant or wildlife species removal).	The District shall obtain the necessary permits from Santa Ana RWQCB and CDFW and comply with the permits.	RCFC&WCD	Santa Ana RWQCB and CDFW	Prior to construction

Implementation Timing	During
Governing Agency	RCFC&WCD
Implementation Responsibility	Contractor
Action	The District shall include this mitigation in the contractor specifications for the contractor to implement during construction.
Environmental Commitment, Avoidance, Minimization, and/or Mitigation Measures	impacts to paleontological resources that may exist subsurface of the project area, the Project Paleontologist shall attend the pre-grade meeting to determine the level of monitoring required for the project in accordance with the following:  I. Monitoring shall be conducted during all grading and excavations deeper than one foot below current ground level in previously undisturbed ground by a qualified paleontological monitor.  Paleontological monitor. Paleontological monitors should be equipped to salvage fossils as they are unearthed, to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontological
Potential Impact	Destroy a unique paleontological resource or site or unique geologic feature
Issue	Cultural Resources

	Π														******									
Implementation Timing																								
Coverning Agency		terretain.							•							***************************************		*****						
Implementation Responsibility						-																		
Action													THE ALL OF											
Environmental Commitment, Avoidance, Minimization, and/or Militation Measures	potential to contain fossil	resources.	2. Preparation of all	recovered specimens shall be	made to a point of identification	and permanent preservation	including washing of sediments	to recover small invertebrates	and vertebrates.	3. Identification and curation	of specimens into an	established, accredited museum	repository with permanent	retrievable paleontological	storage [e.g., Western Science	Center, Hemet] shall be	completed at the	recommendation of the Project	Paleontologist.	4. A report of findings shall	be prepared with an appended	itemized inventory of	specimens and submitted to the	RCFC&WCD.
Potential Impact																								
Issue				North Office	TO ATO SAFOGRA			- Parison																

# RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT NORTH NORCO CHANNEL LINE NB, STAGE 3 MITIGATION MONITORING AND REPORTING PROGRAM

Issue	Potential Impact	Environmental Commitment, Avoidance, Minimization, and/or MHigation Measures	Action	Implementation Responsibility	Governing Agency	Implementation Timing
Biological Resources	A substantial adverse effect on biological resources involved within a jurisdictional water feature	MM 1: Prior to initiation of construction activities, the District shall obtain all necessary permits from the Santa Ana Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) for impacts to jurisdictional resources. Mitigation for the loss of jurisdictional resources shall be negotiated with the resource agencies during the regulatory permitting process and shall ensure mitigation to compensate for permanent impacts on jurisdictional resources is equivalent or superior to the biological functions and values impacted by the project. Potential mitigation options may include, but are not limited to, payment of an in-lieu mitigation fee to a mitigation bank or regional riparian enhancement program (e.g., invasive plant or wildlife	The District shall obtain the necessary permits from Santa Ana RWQCB and CDFW and comply with the conditions of the permits.	RCFC&WCD	Santa Ana RWQCB and CDFW	Prior to construction

Implementation Timing	During
Governing Agency	RCFC&WCD
Implementation Responsibility	Contractor
Action	The District shall include this mitigation in the contractor specifications for the contractor to implement during construction.
Environmental Commitment, Avoidance, Minimization, and/or Mitigation Measures	MM 2: To mitigate potential impacts to paleontological resources that may exist subsurface of the project area, the Project Paleontologist shall attend the pre-grade meeting to determine the level of monitoring required for the project in accordance with the following:  1. Monitoring shall be conducted during all grading and excavations deeper than one foot below current ground level in previously undisturbed ground by a qualified paleontological monitor.  Paleontological monitor. Paleontological monitors should be equipped to salvage fossils as they are unearthed, to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitoring may be reduced if the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontological
Potential Impact	Destroy a unique paleontological resource or site or unique geologic feature
Issue	Cultural

Implementation Timing																								
Governing Agency									***************************************															
Implementation Responsibility																				-				
Action																								
Environmental Commissiont, Avoidance, Minimization, and/or Mitigation Measures	potential to contain fossil	resources.	2. Preparation of all	recovered specimens shall be	made to a point of identification	and permanent preservation	including washing of sediments	to recover small invertebrates	and vertebrates.	3. Identification and curation	of specimens into an	established, accredited museum	repository with permanent	retrievable paleontological	storage [e.g., Western Science	Center, Hemet] shall be	completed at the	recommendation of the Project	Paleontologist.	4. A report of findings shall	be prepared with an appended	itemized inventory of	specimens and submitted to the	RCFC&WCD.
Potential Impact		1																						
Issue																							-	

### Notice of Determination

To: Office of Planning and Research

P.O. Box 3044

Sacramento, CA95812-3044

From: Riverside County Flood Control and Water Conservation District

1995 Market Street Riverside, CA92501

Contact: Randy Sheppeard, 951.955.1306

Lead Agency Same asabove

Riverside County Clerk County of Riverside 2724 Gateway Drive Riverside, CA 92507

Subject: Filing of Notice of Determination in compliance with Public Resources Section 21152

State Clearinghouse Number:2017041077

Project Title: North Norco Channelline NB, Stage 3

### **Project Location**

The project site is located in the ty of Norco, Riverside County and is bounded to the the by Fifth Street, on the south by Fourth Street, on the east by Valley View Avenue, and to the west by North Norco Champroject is located in Township 3 South, RangeWest, Section 5f the Corona North 7.5 Series Topographic Quadrangle maps. The latitude/longitude for the proximate project center 33°55' 36.17' N 117°33' 09.46" W.

### Project Description

The Project willreplace the previously constructed earthen channel with a concrete-lined trapezoidal and rectangular channel that would convey the 100-year flow ratpacity. The channel would continue to convey stormwater runoff from the existing upstream Line NB and outlet into the existing concrete-lined North Norco Channel vious concrete block systemivert will be used for water quality purposes at the western end of the channel and just upstream of the North Norco Channel. In addition, existing concrete culverts will be reconstructed across Valley View Avenue and Sierra Avenue. Storm drain lines, inlets, and catch basins would also be constructed/reconstructe on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Latthe project may also involve the acquisition of apropertyeasement of utility relocations.

### De termination

This is to advise that the verside County Flood Control and Water Conservation Districted Agency) has approved and certified pursuant to the California Environmental Quality Act (CEQtA): above-describe Project on December 5, 2017 and has made the following determinations regarding the e-describe Project:

- 1) The Project will not have a significant effect on the environment.
- 2) A Mitigated Negative Declaration as prepare for this Project pursuant to the provision CEQA
- 3) Mitigation measures were made a condition of the approval o
- 4) A Mitigation Monitoring Programwas adopted for th Broject.
- 5) A Statement of Overriding Considerations was adopted for this roject.
- 6) Findings werenot made pursuant to the provisions of CEQA.

### Public Access to Environmental Document

The Mitigated Negative Declaration available to the General Public anter Office of the Clerkof the Board, County Administrative Center, 4080Lemon Street, Riverside, CA2501. The MND is also available at the Riverside County Flood Control and Water Conservation District office located at 1995 Market Street, Riverside, CA 92501

Signature (Public Agency)	Title
Date	Date Received for Filing at OPR

### **Notice of Determination**

To: Office of Planning and Research

P.O. Box 3044

Sacramento, CA 95812-3044 Determination was routed to County

From: Riverside County Flood Control and Water Conservation District

> 1995 Market Street Riverside, CA 92501

Contact: Randy Sheppeard, 951.955.1306

Lead Agency: Same as above

Riverside County Clerk 18 for 108 in Con-

County of Riverside 2724 Gateway Drive Riverside, CA 92507

Subject: Filing of Notice of Determination in compliance with Public Resources Code Section 21152

State Clearinghouse Number: 2017041077

Project Title: North Norco Channel Line NB, Stage 3

### **Project Location**

The project site is located in the city of Norco, Riverside County and is bounded to the north by Fifth Street, on the south by Fourth Street, on the east by Valley View Avenue, and to the west by North Norco Channel. The project is located in Township 3 South, Range 6 West, Section 7 of the Corona North 7.5 Series Topographic Quadrangle maps. The latitude/longitude for the approximate project center is 33° 55' 36.17" N 117° 33' 09.46" W.

### **Project Description**

The District proposes to construct, operate and maintain the North Norco Channel Line NB, Stage 3 Project (Project). The Project will replace the previously constructed earthen channel with a concrete-lined trapezoidal and rectangular channel that would convey the 100-year flow rate capacity. The channel would continue to convey stormwater runoff from the existing upstream Line NB and outlet into the existing concrete-lined North Norco Channel. A pervious concrete block system invert will be used for water quality purposes at the western end of the channel and just upstream of the North Norco Channel. In addition, existing concrete culverts will be reconstructed across Valley View Avenue and Sierra Avenue. Storm drain lines, inlets, and catch basins would also be constructed/reconstructed on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane. The project may also involve the acquisition of a property easement and utility relocations.

### **Determination**

This is to advise that the Riverside County Flood Control and Water Conservation District (Lead Agency) has approved and certified, pursuant to the California Environmental Quality Act (CEQA), the above-described Project on December 5, 2017 and has made the following determinations regarding the above-described Project:

- The Project will not have a significant effect on the environment.
- 2) A Mitigated Negative Declaration was prepared for this Project pursuant to the provisions of CEQA.
- 3) Mitigation measures were made a condition of the approval of the Project.
- A Mitigation Monitoring Program was adopted for this Project.
- A Statement of Overriding Considerations was not adopted for this Project.
- Findings were not made pursuant to the provisions of CEQA.

### **Public Access to Environmental Document**

The Mitigated Negative Declaration is available to the General Public at the Office of the Clerk of the Board, County Administrative Center, 4080 Lemon Street, Riverside, CA 92501. The MND is also available at the Riverside County Flood Control and Water Conservation District office located at 1995 Market Street, Riverside, CA 92501.

Date

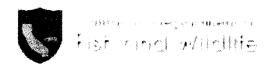
Date Received for Filing at OPR

-11.0

### RIVERSIDE COUNTY CLERK-RECORDER

### AUTHORIZATION TO BILL

DATE: 10/23/2017	BUSINESS UNIT/AGENCY:	FLOOD CONT	FROL - FCARC	
ACCOUNTING STRING:				
ACCOUNT: 526410	- The state of the	FUND:	25120	
DEPT ID: 947420 ✔		PROGRAM:		
AMOUNT: \$2,266.25				
REF: CEQA CDFW filing Fees for Nor	th Norco Line NB. Stage	3 (222-44101-2-8-	00145-03-30-0000-0	22)
•	arrived Eme (18, oldge	0 (222-44 (0)-2-0-1	00143-03-30-0000-9.	22)
THIS AUTHORIZES THE COUNTY CLERK &	RECORDER TO ISSUE	AN INVOICE FOR	PAYMENT OF ALL	DOCUMENTS INCLUDED
NUMBER OF DOCUMENTS INCLUDED:		1		
AUTHORIZED BY:	Lorena Alandy	Ext 51261	ma	10/23/17
AUTHORIZED BY: PRESENTED BY:	Lorena Alandy  Carol Thompson	Ext 51261 Ext 52313	ppa	10/23/17
			ppa	10/23/17
PRESENTED BY: CONTACT:	Carol Thompson		no	10/23/17
PRESENTED BY: CONTACT:	Carol Thompson  Lorena Alandy		noa	10/23/17
PRESENTED BY: CONTACT:	Carol Thompson  Lorena Alandy		noa	10/23/17
PRESENTED BY: CONTACT:	Carol Thompson  Lorena Alandy		noa	10/23/17
PRESENTED BY: CONTACT: TO BE FILLED OUT BY COUNTY CLE	Carol Thompson  Lorena Alandy			10/23/17
PRESENTED BY: CONTACT:	Carol Thompson  Lorena Alandy		noa	10/23/17
PRESENTED BY: CONTACT: TO BE FILLED OUT BY COUNTY CLE	Carol Thompson  Lorena Alandy			10/23/17
PRESENTED BY: CONTACT: TO BE FILLED OUT BY COUNTY CLE ACCEPTED BY:	Carol Thompson  Lorena Alandy		noa .	10/23/17



Home (/) Conservation (https://www.wildlife.ca.gov/Conservation) CEQA (https://www.wildlife.ca.gov/Conservation/CEQA) Fees (#)

Login

### CEQA Environmental Document Filing Fees

CDFW imposes and collects a filing fee to defray the costs of managing and protecting California's vast fish and wildlife resources, including, but not limited to, consulting with other public agencies, reviewing environmental documents, recommending mitigation measures, and developing monitoring programs.

	Fees Effective	Fees Effective	
CEQA Document	January 1, 2016January 1, 2017		
Negative Declaration (ND)	\$2,210.25	\$2,216.25	
Mitigated Negative Declaration (MND)	\$2,210.25	\$2,216.25	
Environmental Impact Report (EIR)	\$3,070.00	\$3,078.25	
Environmental Document pursuant to a Certified Regulatory Program (CRP)	* \$1,043.75	\$1,046.50	
County Clerk Processing Fee**	\$50.00	\$50.00	

<sup>\*</sup> CRPs include certain state agency regulatory programs as defined in section 21080.5 of the Public Resources Code and section 15251 of the CEQA Guidelines. Beginning July 1, 2013, CEQA/CRP Filing Fees will no longer apply to the filing of Notices of Decision or Determination for Forest Practice Rules and Timber Harvest Plans (Pub. Resources Code, § 4629.6, added by Stats. 2012, ch. 289, § 3).

### Annual Fee Adjustments

CDFW is required to adjust the fees annually (Fish & G. Code, § 713). The annual fee adjustments are based on changes in the Implicit Price Deflator for State and Local Government Purchases of Goods and Services, as published by the U.S. Department of Commerce. Annual filling fee adjustments are posted on CDFWs website prior to November 1 of the year before they become effective.

### Payment of Fees

The project proponent is responsible for payment of the filing fee (Fish & G. Code, § 711.4). Filing Fees are due at the time a Notice of Determination is filed with the county clerk's office (local lead agency), or with the State Clearinghouse (state lead agency). Fees due for <u>Certified Regulatory Program</u>

(https://www.wildlife.ca.gov/Conservation/CEQA/Procedures/Commission) notices are due to CDFW directly and before the respective Notice of Decision is filed with the Secretary for Natural Resources.

For more information on filing fees and No Effect Determinations, please refer to <u>California Code of Regulations</u>, title 14, section 753.5 (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=14965&inline=1).

### **Exemptions and No Effect Determinations**

<sup>\*\*</sup> Additional county fees may apply. Please check with your county clerk's office for details.

The CEQA filing fee will be waived if a project will have no effect (https://www.wildlife.ca.gov/Conservation/CEQA/NED) on fish and wildlife (Fish & G. Code, § 711.4, subd. (c)(2)(A)). Additionally, projects that are statutorily or categorically exempt from CEQA are also not subject to the filing fee and do not require a no effect determination (Cal. Code Regs., tit. 14, §§ 15260-15333; Fish & G. Code, § 711.4, subd. (d)(1)). Only CDFW staff is responsible for determining whether a project will qualify for a No Effect Determination and if the CEQA filing fee will be waived.

### Instructions for County Clerks

 County Clerk instructions for properly collecting and transmitting CEQA filling fees (https://www.wildlife.ca.gov/Conservation/CEQA/Fees/County).

Contact CDFW's CEQA Program: CEQA@wildlife.ca.gov (mailto:CEQA@wildlife.ca.gov)

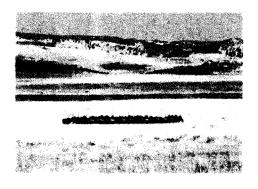
NOTE: CDFW staff cannot make decisions or intercede on CEQA projects under the jurisdiction of another lead agency.

Please address project-specific comments to the project's lead agency.

Habitat Conservation Planning Branch (https://www.wildlife.ca.gov/Explore/Organization/HCPB)

1416 Ninth Street, 12th Floor, Sacramento, CA 95814

(916) 653-4875



**CEQA Review** 

The California Environmental Quality Act (https://www.wildlife.ca.gov/Conservation/CEQA/Purpose)

External CEQA Project Review Procedures (https://www.wildlife.ca.gov/Conservation/CEQA/External-Review)

CEQA Filing Fees (https://www.wildlife.ca.gov/Conservation/CEQA/Fees)

Process for No Effect Determinations (https://www.wildlife.ca.gov/Conservation/CEQA/NED)

Federal Project Review (https://www.wildlife.ca.gov/Conservation/CEQA/Federal-Review)

CDFW's Internal CEQA Procedures (https://www.wildlife.ca.gov/Conservation/CEQA/Procedures)

Other Types of CEQA Project Reviews (https://www.wildlife.ca.gov/Conservation/CEQA/Other)

### **Related Links**

- 2016 CEQA Statutes and Guidelines (PDF) (https://nrm.dfg.ca.gov/FileHandler.ashx?
   DocumentID=117044&inline)
- CEQA FAQ (PDF) (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=4009&inline)
- CEQA Public Notices (https://www.wildlife.ca.gov/Notices)
- SB 1535 (PDF) (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=76455&inline) Changes in filing fees
- Fish and Game Code Section 711.4 and Section 713 (https://nrm.dfg.ca.gov/FileHandler.ashx?
   DocumentID=71768&inline) Legal information on filing fees

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## OFFICE OF THE CLERK OF THE BOARD OF SUPERVISORS 1st FLOOR, COUNTY ADMINISTRATIVE CENTER P.O. BOX 1147, 4080 LEMON STREET RIVERSIDE, CA 92502-1147 PHONE: (951) 955-1060 FAX: (951) 955-1071

KECIA HARPER-IHEM
Clerk of the Board of Supervisors

KIMBERLY A. RECTOR Assistant Clerk of the Board

November 9, 2017

THE PRESS ENTERPRISE ATTN: LEGALS P.O. BOX 792 RIVERSIDE, CA 92501

TEL: (951) 368-9229 E-MAIL: legals@pe.com

RE: NOTICE OF PUBLIC HEARING: RESOLUTION NO. F2017-14 NORTH NORCO CHANNEL LINE NB, STAGE 3

To Whom It May Concern:

Attached is a copy for publication in your newspaper for <u>TWO (2) TIMES</u> on: TUESDAYS: NOVEMBER 14 AND NOVEMBER 21, 2017.

We require your affidavit of publication immediately upon completion of the last publication.

Your invoice must be submitted to this office, WITH TWO CLIPPINGS OF THE PUBLICATION.

NOTE:

PLEASE COMPOSE THIS PUBLICATION INTO A SINGLE COLUMN FORMAT.

Thank you in advance for your assistance and expertise.

Sincerely,

Cecilia Gil

Board Assistant to:

KECIA HARPER-IHEM, CLERK OF THE BOARD

11.1 of 09/26/17

11.2

### Gil, Cecilia

From:

Legals < legals@pe.com>

Sent:

Wednesday, November 8, 2017 4:19 PM

To:

Gil, Cecilia

Subject:

Re: FOR PUBLICATION: Res. F2017-14 North Norco Channel Line

Received for publication on 11/14 and 11/21. Proof with cost to follow.

Nick Eller

### **Thanksgiving Deadlines 2017**

**Publishing Day** 

Deadline

Thurs-Fri 11/23-11/24 Monday

Sat-Mon 11/25-11/27

11/20 10:30am Tuesday 11/21 10:30am

Tues-Wed 11/28-11/29

Wednesday 11/22 10:30am

Legal Advertising Phone: <u>951-368-9222</u> / Fax: <u>951-368-9018</u> / E-mail: <u>legals@pe.com</u> \*\*Employees of The Press-Enterprise are not able to give legal advice of any kind\*\*

### The Press-Enterprise PE.com / La Prensa

Notice of Public Hearing, for publication on 2 Tuesdays: Nov. 14 and 21, 2017. Please confirm. THANK YOU!

### Cecilia Gil

**Board Assistant** 

Clerk of the Board of Supervisors

4080 Lemon St., 1st Floor, Room 127

Riverside, CA 92501

(951) 955-8464 Mail Stop# 1010



### NOTICE OF PUBLIC HEARING BEFORE THE BOARD OF SUPERVISORS OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT.

### RESOLUTION NO. F2017-14

SCHEDULING A PUBLIC HEARING DATE FOR NORTH NORCO CHANNEL LINE NB, STAGE 3 PROJECT IN ACCORDANCE WITH SECTION 18 OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT ACT

WHEREAS, Section 18 of the Riverside County Flood Control and Water Conservation District Act ("District Act") requires that the Riverside County Flood Control and Water Conservation District ("District") give public notice and conduct a public hearing prior to undertaking construction of District facilities; and

WHEREAS, this Board of Supervisors ("Board") intends to undertake a project within the city of Norco designated as the North Norco Channel Line NB, Stage 3 Project ("Project"); and

WHEREAS, the Project is generally bounded to the north by Fifth Street, on the south by Fourth Street, on the east by Valley View Avenue, and to the west by North Norco Channel; and

WHEREAS, the Project consists of replacing the previously constructed earthen channel with a concrete-lined trapezoidal and rectangular channel in order to increase the capacity to convey the 100-year flow rate. The channel would continue to convey stormwater runoff from the existing upstream Line NB and outlet into the existing concrete-lined North Norco Channel. A pervious concrete block system invert will be used for water quality purposes at the western end of the channel and just upstream of the North Norco Channel. In addition, existing concrete culverts will be reconstructed across Valley View Avenue and Sierra Avenue. Storm drain lines, inlets, and catch basins would also be constructed/reconstructed on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane; and

WHEREAS, the Section 18 Map dated August 2017, bearing the name and showing the general location (attached hereto as Attachment "A"); and typical cross sections (attached hereto as Attachment "B"), of the Project, are on file with the Clerk of the Board; and

WHEREAS, the engineering cost estimate of the Project, titled "Engineer's Statement" (attached hereto as Attachment "C"), is on file with the Clerk of the Board; and

WHEREAS, in accordance with the California Environmental Quality Act ("CEQA"), the District has prepared an Initial Study which demonstrates that, with the incorporation of required mitigation, the Project will not have a significant effect on the environment. Therefore, a Mitigated Negative Declaration ("MND") is proposed; and

WHEREAS, pursuant to CEQA, the Notice of Intent to Adopt an MND, the Initial Study, the Mitigation Monitoring and Reporting Plan ("MMRP") and the MND (SCH No. 2017041077) were made available for a 30-day public review period from April 27, 2017 to May 29, 2017; and

WHEREAS, on December 5, 2017, the date of the Section 18 Public Hearing, the Board will consider the MND under Resolution No. F2017-15; and

WHEREAS, the Section 18 Map and the Engineer's Statement for the Project are posted on the District's website at <a href="http://rcflood.org">http://rcflood.org</a> under the CEQA/Section 18 tab and may be inspected at the District's office located at 1995 Market Street, Riverside, California 92501 or at the Norco Public Library located at 3240 Hamner Avenue, Suite 101B, Norco, California 92860; and

WHEREAS, pursuant to Section 18 of the District Act, prior to making a decision on the Project, this Board will consider all written and oral comments; and

WHEREAS, pursuant to Section 18 of the District Act, any person wishing to comment on the Project may do so in writing between the date of this notice and the public hearing, or may appear and be heard at the time and place noted below.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED by the Board of Supervisors of the Riverside County Flood Control and Water Conservation District in regular session assembled on September 26, 2017 that:

- 1. A public hearing in accordance with Section 18 of the District Act to approve the Project will be held on **December 5, 2017 at 9:00 a.m.** or as soon as possible thereafter, at the meeting room of this Board, 1<sup>st</sup> Floor, County Administrative Center, 4080 Lemon Street, Riverside, California 92501, at which time, all public comments shall be heard.
- 2. The District shall cause a copy of this Resolution and copies of the Section 18 Map and Engineer's Statement to be posted at least 21 days before said hearing at the Norco Public Library 3240 Hamner Avenue, Suite 101B, Norco, California 92860.
- 3. The District shall cause a copy of this Resolution and copies of the Section 18 Map and Engineer's Statement to be posted at least 21 days before said hearing at the Riverside County Flood Control and Water Conservation District located at 1995 Market Street, Riverside, California 92501.
- 4. The District shall cause a copy of this Resolution and copies of the Section 18 Map and Engineer's Statement to be posted at least 21 days before said hearing at the Riverside County Clerk and Recorder's Office, 2724 Gateway Drive, Riverside, California 92507.
- 5. The Clerk of this Board is directed to cause a copy of this Resolution to be published twice, once at least 21 days before said hearing and once 7 days following the initial publication, in a newspaper of general circulation in accordance with Section 18 of the District Act.

### **ROLL CALL**:

Ayes:

Jeffries, Tavaglione, Washington, Perez and Ashley

Nays:

None

Absent:

None

The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on September 26, 2017.

KECIA HARPER-IHEM, Clerk of said Board

By: Cecilia Gil, Board Assistant

Any person affected by the above matter(s) may submit written comments to the Clerk of the Board before the public hearing or may appear and be heard in support of or opposition to the project at the time of the hearing. If you challenge the above item(s) in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence, to the Board of Supervisors at, or prior to, the public hearing.

Alternative formats available upon request to individuals with disabilities. If you require reasonable accommodation, please contact Lisa Wagner at (951) 955-1063, at least 72 hours prior to the hearing.

Please send all written correspondence to: Clerk of the Board, 4080 Lemon Street, 1st Floor, Post Office Box 1147, Riverside, CA 92502-1147.

Dated: November 9, 2017

Kecia Harper-Ihem, Clerk of the Board

By: Cecilia Gil, Board Assistant



### <u>M E M O R A N D U M</u>

### RIVERSIDE COUNT Y FLOOD CONTROL AND WATER CONSTRUCT

September 14, 2017

TO:

Kecia Harper-Ihem, Clerk of the Board

FROM:

Beth DeHayes, Executive Assistant II

RE:

September 26, 2017 Agenda

11-1 MT 4994

FLOOD CONTROL DISTRICT: Adopt Resolution No. F2017-14 and

Schedule a Public Hearing for the North Norco Channel Line NB, Stage 3 Project Pursuant to Section 18 of the District Act, Project No. 2-0-00145-03

[2nd District] [\$0] CLERK TO ADVERTISE

With regard to MT 4994, I would normally have attached Resolution No. F2017-14 for your execution and return to the District, however, County Counsel has informed us that they will be forwarding the hard copy to your office from now on. Please let me know if this is not the correct procedure and I will forward a copy expeditiously.

We plan to continue to forward agreements for your execution until we hear otherwise.

If you have any questions, please contact me at 51292 or <u>badehaye@rivco.org</u>. I appreciate your assistance. Thank you.

P8/50012

## SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD OF SUPERVISORS COUNTY OF RIVERSIDE, STATE OF CALIFORNIA



ITEM 11.1 (ID # 4994)

### **MEETING DATE:**

Tuesday, September 26, 2017

FROM: FLOOD CONTROL DISTRICT:

SUBJECT: FLOOD CONTROL DISTRICT: Adopt Resolution No. F2017-14 and Schedule a Public Hearing for the North Norco Channel Line NB, Stage 3 Project Pursuant to Section 18 of the District Act, Project No. 2-0-00145-03, 2nd District [\$0] CLERK TO ADVERTISE

### **RECOMMENDED MOTION:** That the Board of Supervisors:

- Adopt Resolution No. F2017-14, which sets December 5, 2017 as the date for a public hearing concerning the approval of the above-referenced project in accordance with Section 18 of the Riverside County Flood Control and Water Conservation District Act ("District Act"); and
- 2. Direct the Clerk of the Board to advertise and post said notice of public hearing to approve the project in accordance with Section 18 of the District Act.

### **ACTION:**

9/14/2017

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Ashley, seconded by Supervisor Washington and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended, and is set for public hearing Tuesday, December 5, 2017 at 9:00 a.m. or as soon as possible thereafter.

Ayes:

Jeffries, Tavaglione, Washington, Perez and Ashley

Nays:

None

Absent:

None

Date:

September 26, 2017

XC:

Flood, COB

Kecia Harper-Ihem Clerk of the Board By:

Deputy

نہ

134.1

## SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD OF SUPERVISORS COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:		Ongoing Cost
COST	\$0	\$0	\$0		\$0
NET DISTRICT COST	\$0	\$0	\$0		\$0
	<u> </u>		Вι	Budget Adjustment: N/A	
			For Fiscal Year: N/A		

C.E.O. RECOMMENDATION: Approved

### **BACKGROUND:**

### Summary

Section 18 of the District Act requires the Board of Supervisors to hold a public hearing for the purpose of considering all comments regarding any proposed facilities before authorizing the construction of such facilities.

The District proposes to replace the previously constructed earthen channel with a concrete-lined trapezoidal and rectangular channel that would convey the 100-year flow rate. The channel would continue to convey storm water runoff from the existing upstream Line NB and outlet into the existing concrete-lined North Norco Channel. A pervious concrete block system invert will be used for water quality purposes at the western end of the channel and just upstream of the North Norco Channel. In addition, existing concrete culverts will be reconstructed across Valley View Avenue and Sierra Avenue. Storm drain lines, inlets, and catch basins would also be constructed/reconstructed on Sierra Avenue, Fortuna Road, Valley View Avenue, and Gallop Lane.

In accordance with the California Environmental Quality Act, the District prepared and made available for a 30-day public review period an Initial Study, which analyzes potential impacts the project may have on the environment, a Mitigation Monitoring and Reporting Plan ("MMRP"), a Notice of Intent to Adopt a Mitigated Negative Declaration ("MND") and an MND. The result of the Initial Study shows this project will not significantly impact the environment and an MND is proposed. On December 5, 2017, the date of the Section 18 public hearing, the Board will also consider the MND under Resolution No. F2017-15.

### Impact on Residents and Businesses

Improved flood protection in the project vicinity.

### **ATTACHMENTS:**

Resolution No. F2017-14

## SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD OF SUPERVISORS COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

Ryan Carter 9/19/2017 Gregory V. Priamos, Director County Counsel 9/7/201