

**Appendix D:
Biological Resources Supporting Information**

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D.1 - CNDDDB Search

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Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad IS (Patterson (3712142))



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Blepharizonia plumosa</i> big tarplant	PDAST1C011	None	None	G1G2	S1S2	1B.1
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Caulanthus lemmonii</i> Lemmon's jewelflower	PDBRA0M0E0	None	None	G3	S3	1B.2
<i>Ceratochrysis menkei</i> Menke's cuckoo wasp	IIHYM71050	None	None	G1	S1	
<i>Eremophila alpestris actia</i> California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
<i>Eryngium spinosepalum</i> spiny-sepaled button-celery	PDAP10Z0Y0	None	None	G2	S2	1B.2
<i>Eschscholzia rhombipetala</i> diamond-petaled California poppy	PDPAP0A0D0	None	None	G1	S1	1B.1
<i>Falco mexicanus</i> prairie falcon	ABNKD06090	None	None	G5	S4	WL
<i>Lanius ludovicianus</i> loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Masticophis flagellum ruddocki</i> San Joaquin coachwhip	ARADB21021	None	None	G5T2T3	S2?	SSC
<i>Navarretia nigelliformis ssp. radians</i> shining navarretia	PDPLM0C0J2	None	None	G4T2	S2	1B.2
<i>Rana boylei</i> foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
<i>Spea hammondi</i> western spadefoot	AAABF02020	None	None	G3	S3	SSC
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	

Record Count: 20

D.2 - CNPS Inventory Results

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*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

Plant List

6 matches found. *Click on scientific name for details*

Search Criteria

Found in Quad 3712142

[Modify Search Criteria](#)
[Export to Excel](#)
[Modify Columns](#)
[Modify Sort](#)
 [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	State Listing Status	Federal Listing Status	Habitats	Lowest Elevation	Highest Elevation
Blepharizonia plumosa	big tarplant	Asteraceae	annual herb	Jul-Oct	1B.1	S1S2			<ul style="list-style-type: none"> Valley and foothill grassland 	30 m	505 m
Caulanthus lemmonii	Lemmon's jewelflower	Brassicaceae	annual herb	Feb-May	1B.2	S3			<ul style="list-style-type: none"> Pinyon and juniper woodland Valley and foothill grassland 	80 m	1580 m
Clarkia breweri	Brewer's clarkia	Onagraceae	annual herb	Apr-Jun	4.2	S4			<ul style="list-style-type: none"> Chaparral woodland Coastal scrub 	215 m	1115 m
Eryngium spinosepalum	spiny-sepaled button-celery	Apiaceae	annual / perennial herb	Apr-Jun	1B.2	S2			<ul style="list-style-type: none"> Valley and foothill grassland Vernal pools 	80 m	975 m
Eschscholzia rhombipetala	diamond-petaled California poppy	Papaveraceae	annual herb	Mar-Apr	1B.1	S1			<ul style="list-style-type: none"> Valley and foothill grassland (alkaline, clay) 	0 m	975 m
Navarretia nigelliformis ssp. radians	shining navarretia	Polemoniaceae	annual herb	(Mar)Apr-Jul	1B.2	S2			<ul style="list-style-type: none"> Cismontane woodland Valley and foothill grassland Vernal pools 	65 m	1000 m

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Appendix E: Cultural Resources Supporting Information

Appendix E contains sensitive information pertaining to cultural resources and has been withheld from public distribution pursuant to Public Resources Code, Sections 5097.9 and 5097.993.

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**Appendix F:
Hydrological Supporting Information**

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Memo

To: Grant Gruber and Jason Brandman, FCS
From: Eric Riedner, P.E. and Edward Ballman, P.E.
Date: January 6, 2020
Subject: **Summary of Hydrologic and Hydraulic Modeling of Del Puerto Creek for the Zacharias Master Planning Area Annexation, City of Patterson**

This technical memo summarizes the hydrologic and hydraulic modeling work completed to support the Zacharias Master Planning Area Annexation located adjacent to the City of Patterson. The overarching purpose of the work was to more accurately assess the actual flood hazard within the planning area that would result from overflow of Del Puerto Creek in major storm events. Information from that assessment was then used to evaluate potential options for reducing or eliminating that hazard, with the preferred approach consisting of an appropriately sized and located retention basin that could eliminate the flood hazard from Del Puerto Creek overflows both in the planning area as well as in existing portions of the City to the south and east.

Earlier analyses of flooding along Del Puerto Creek are limited to the floodplain mapping prepared by the Federal Emergency Management Agency (“FEMA”) described in the Flood Insurance Study for Stanislaus County and depicted on the associated Flood Insurance Rate Map Panels 06099C0730E, 06099C0731E, 06099C0732E, and 06099C0520E. The FEMA study, prepared in 1987, was reviewed and updated for the purposes of this analysis and revised modeling was developed to take advantage of more recent hydrologic data and current hydraulic modeling tools. The updated analysis utilizes peak flood flow estimates available for Del Puerto Creek based on data through 2006 and recently collected topographic information along a portion of the study reach.

Included below are summaries of the existing conditions modeling approach, assumptions underlying the modeling, and a discussion of the modeling results. The memo concludes with an overview of the proposed flood hazard minimization concept.

Flood Hydrograph Development

An inflow hydrograph to Del Puerto Creek was developed using information contained in the Orestimba Creek Hydrology Study (U.S. Army Corps of Engineers, 2008), which, despite the title, also includes Army Corps analysis of the flood hydrology of Del Puerto Creek. It is important to note that the 2008 study includes a statistical analysis of a longer duration set of stream gauge data (from the U.S. Geological Survey gauging station on Del Puerto Creek located just west of U.S. I-5) than was used in the earlier FEMA study. Significantly, the longer gauging record results in a predicted 100-year peak discharge of 5,905 cubic feet per second (“cfs”) compared to a predicted value of 7,960 cfs uses in the FEMA Flood Insurance Study.¹

¹ We use the term “100-year flood” here to refer to the flood event that has a one percent chance of occurring in any given year. In fact, FEMA now prefers use of the term “1-percent chance flood event”, but the older 100-year reference is still commonly used.

The 2008 study also includes detailed synthetic flood hydrographs for Orestimba Creek, and the time series ratios of instantaneous flow rate to the overall peak from those hydrographs were used to create a synthetic 100-year hydrograph for Del Puerto Creek (shown on the attached Figure 1). Back-checks were carried out to confirm that the synthetic Del Puerto Creek hydrograph with a 5-day duration matched the predicted discharge volumes for the 1-day and 3-day periods that were presented in the 2008 study.

Strictly speaking, the derived flood hydrograph is appropriate at the location of the U.S.G.S gauge station, which is located upstream of a significant flow constraint at the California Aqueduct. The aqueduct crosses the wide and deep Del Puerto valley at the canyon mouth with a single 16-foot diameter pipe culvert to convey the creek under the more than 40-foot high embankment. Thus, the aqueduct includes a flow restriction (the culvert) and provides a large detention storage area upstream, both of which would work to attenuate peak flow rates passing to the modeled reach of Del Puerto Creek to the east. This flow attenuation was modeled using the U.S. Army Corps of Engineers HEC-HMS version 4.2 platform. The synthetic flood hydrograph was routed through the storage area located upstream from the California Aqueduct, with the model parameterized to include a storage element defined by elevation-storage-discharge curves attached as Figure 2.²

The resulting 100-year peak flow downstream of the California Aqueduct is estimated to be 5,390 cfs with the outflow hydrograph also plotted on Figure 1.

Existing Conditions Hydraulic Modeling Approach and Assumptions

A hydraulic model was developed to route the 100-year flood hydrograph through Del Puerto Creek in the reach that can potentially impact the planning area and incorporated portions of the City. Modeling was completed using the Army Corps of Engineers HEC-RAS modeling platform version 5.0.7 and utilizes both one- and two-dimensional hydrodynamic routing ability within the unsteady state routine of the model.

A number of assumptions were used in this hydraulic analysis. Several of the most important are summarized below:

- *One-dimensional channel cross sections.* The channel portion of Del Puerto Creek was defined in the model using one-dimensional elements. A total of 51 cross-sections were used to define the channel along the approximately 4.5-mile long study reach extending from the Delta Mendota Canal to a point approximately 8,000 feet downstream from Highway 33. A workmap is attached as Figure 3 that includes the model reach and cross-section locations.

Station-elevation data applied to Stations 319+05 through 236+29 were defined using topographic mapping covering the project site from a ground survey carried out in 2016. Station-elevation data for Stations 345+27 through 335+92 and 228+05 through 110+26 were defined using cross-section geometry information extracted from the currently effective FEMA HEC-2 model. Manning's 'n' values were uniformly set to 0.045 along the creek channel.

² The creek culvert under the aqueduct was modeled as 300-foot long, 16-foot diameter concrete pipe with a surveyed inlet elevation of 186.75 feet (NAVD 88). The surveyed outlet elevation is 183.0 feet and a Manning's n value of 0.011 was used with an entrance loss of 0.1.

- *Channel crossings.* Eight channel crossings were modeled along the study reach including at Rogers Road, the pipeline immediately downstream from Rogers Road, the weir structure downstream from Rogers Road, an agricultural crossing at Station 237+50, an agricultural crossing at Station 203+60, the railroad tracks upstream from Highway 33, the Highway 33 bridge, and Vineyard Avenue. Crossing geometries are based on spot elevation data included with the project topography as well as information provided in the FEMA HEC-2 model.
- *Lateral weirs.* A total of 55 lateral weirs were defined in the model to route overflows from the one-dimension channel portion of the model to the two-dimensional overbank areas. Weir elevations were defined using the project survey topography as well as bounding elevations along the FEMA HEC-2 modeled sections.
- *Two-dimensional overbank areas.* The overbank portion of the study reach was defined using two two-dimensional (2-D) flow areas, one north of Del Puerto Creek and the other to the south of the creek (the latter representing the planning area). The North Overbank 2D Area consisted of 28,000 grid cells covering an area of approximately 1,600 acres while the South Overbank 2D Area included 102,000 cells covering an area of approximately 4,800 acres. The average cell size across the 2D areas was set to 2,500 square feet (i.e. 50-foot by 50-foot grid).

The model terrain across the 2D Areas is based primarily on topographic mapping developed for the project in 2016 with areas further upstream and downstream from the project topography defined using a USGS NED 1/3 arc-second DEM. Manning's 'n' values across the 2D Areas were uniformly set to 0.06.

- *Boundary conditions.* The 100-year flood hydrograph calculated at the culvert under the California Aqueduct was loaded to the upstream end of the model at Station 34,527. Downstream boundary conditions in the model were applied to Station 11,026 and at the extents of the 2D Areas with starting water surface elevations defined by a normal depth calculation parameterized with friction slopes between 0.003 and 0.005.

Existing Conditions Hydraulic Modeling Results

Estimates of maximum depth of flooding and water surface elevations resulting from the simulated 100-year flood event are included as Figures 4 and 5 with a hydrograph of the overtopping flow onto the south overbank near the project site included as Figure 6.

Model results indicate that the 100-year flood will overtop Del Puerto Creek south towards the planning area with a peak overflow rate of 410 cfs and a total overflow volume of 182 acre-feet. Overflows onto the south overbank area are predicted to be generally well-dispersed over the relatively uniform terrain with maximum flood depths generally less than 2 feet.

Flood Hazard Reduction Concept Overview and Modeling

In order to minimize the flood hazard south of Zacharias Road, a retention basin is proposed along the south overbank flow path. The proposed retention basin would consist of an excavated area immediately north of Zacharias Road as shown on Figure 7. This retention basin would be designed and sized to intercept and retain most, if not all, of the overflow from Del Puerto Creek that is predicted to occur during the 100-year flood event.

As shown, the basin would cover an area of approximately 27 acres, with a bottom elevation of 125 feet, a flow containment berm with a top elevation of 135 feet, yielding a total storage volume of 189 acre-feet at an elevation of 134 feet. Berming would be included along Zacharias Road to route flow into and contain flow within the basin. Additionally, the elevation of the access road along the western edge of the basin would need to be lowered to minimize flood impacts to the property immediately to the west. The retention basin concept shown on Figure 7 was developed solely for the purpose of assessing the efficacy of the concept, estimating the storage volume required to minimize the flood hazard across the planning area, and to identify the general locations where berms would be needed to divert flow into the basin. It is anticipated that this concept will be used to guide a more detailed and potentially multi-objective retention basin design to be developed by others.

The retention basin concept was parameterized in the hydraulic model by updating the terrain along the South Overbank 2D Area to include the basin grading shown in Figure 7. The average cell size in and around the retention basin was also reduced to 100 square feet (10-foot by 10-foot cell size) to improve model stability.

Estimates of maximum depth of flooding and water surface elevations resulting from the simulated 100-year flood event with the flood retention basin are included as Figures 8 and 9. The model estimates the basin would capture all but 0.7 acre-feet of the south bank overflow, filling the basin to an elevation of 133.8 feet. Interception of the overbank flow would essentially eliminate the flood hazard from Del Puerto Creek within the planning area and would have the significant collateral benefit of removing the same flood hazard from existing portions of the City to the south and east.

Closing

We appreciate the opportunity to provide this analysis related to flood hazards within the Zacharias Master Planning Area that would result from overflows originating in Del Puerto Creek. The modeling shows that a suitably sited and sized flood retention basin north of Zacharias Road could essentially eliminate the associated flood hazard in the planning area and other areas to the south and east.

Do not hesitate to contact us if you have any questions or comment related to the items discussed here.

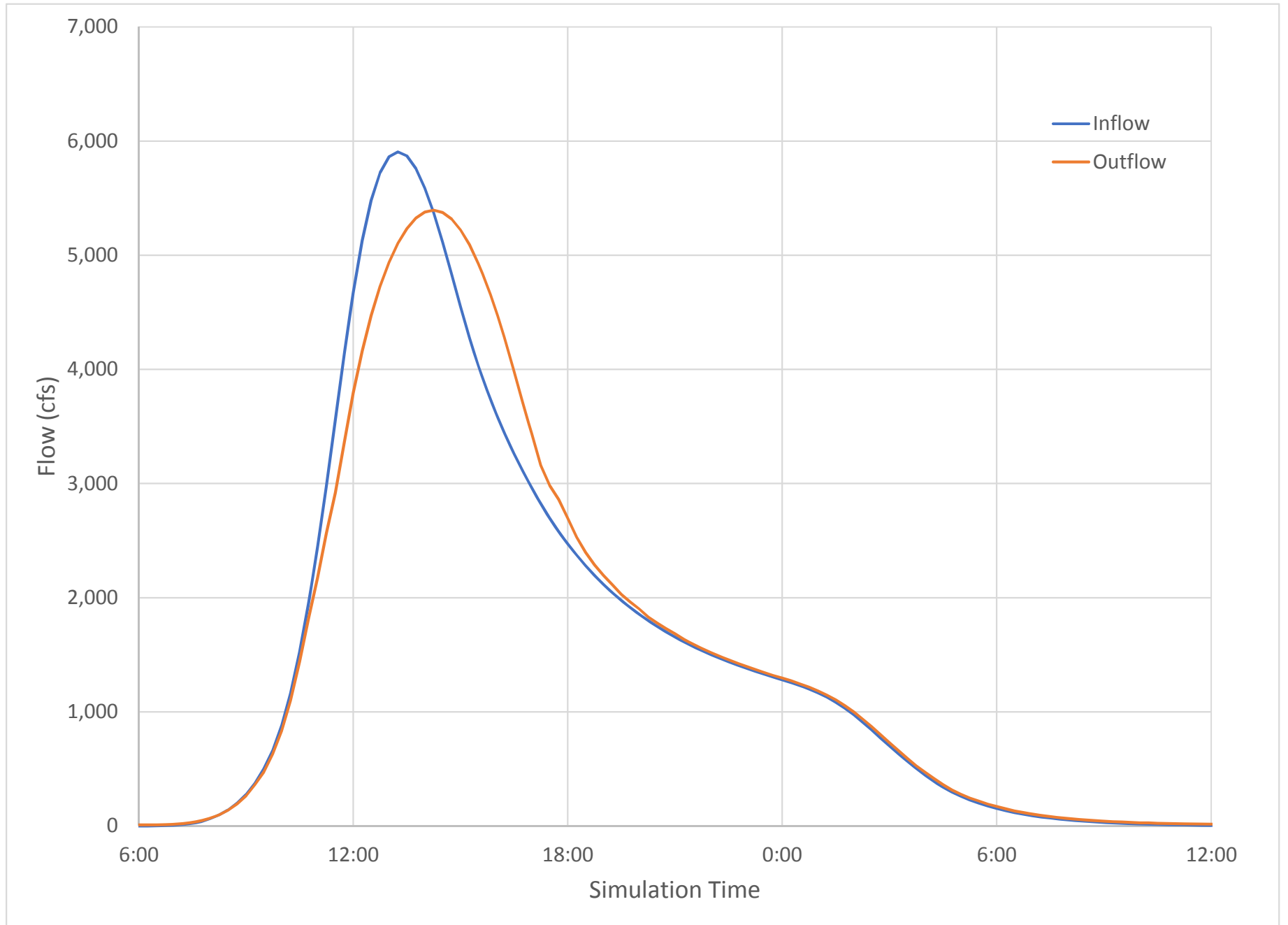


Figure 1. Inflow and outflow hydrographs from the storage area upstream from the California Aqueduct

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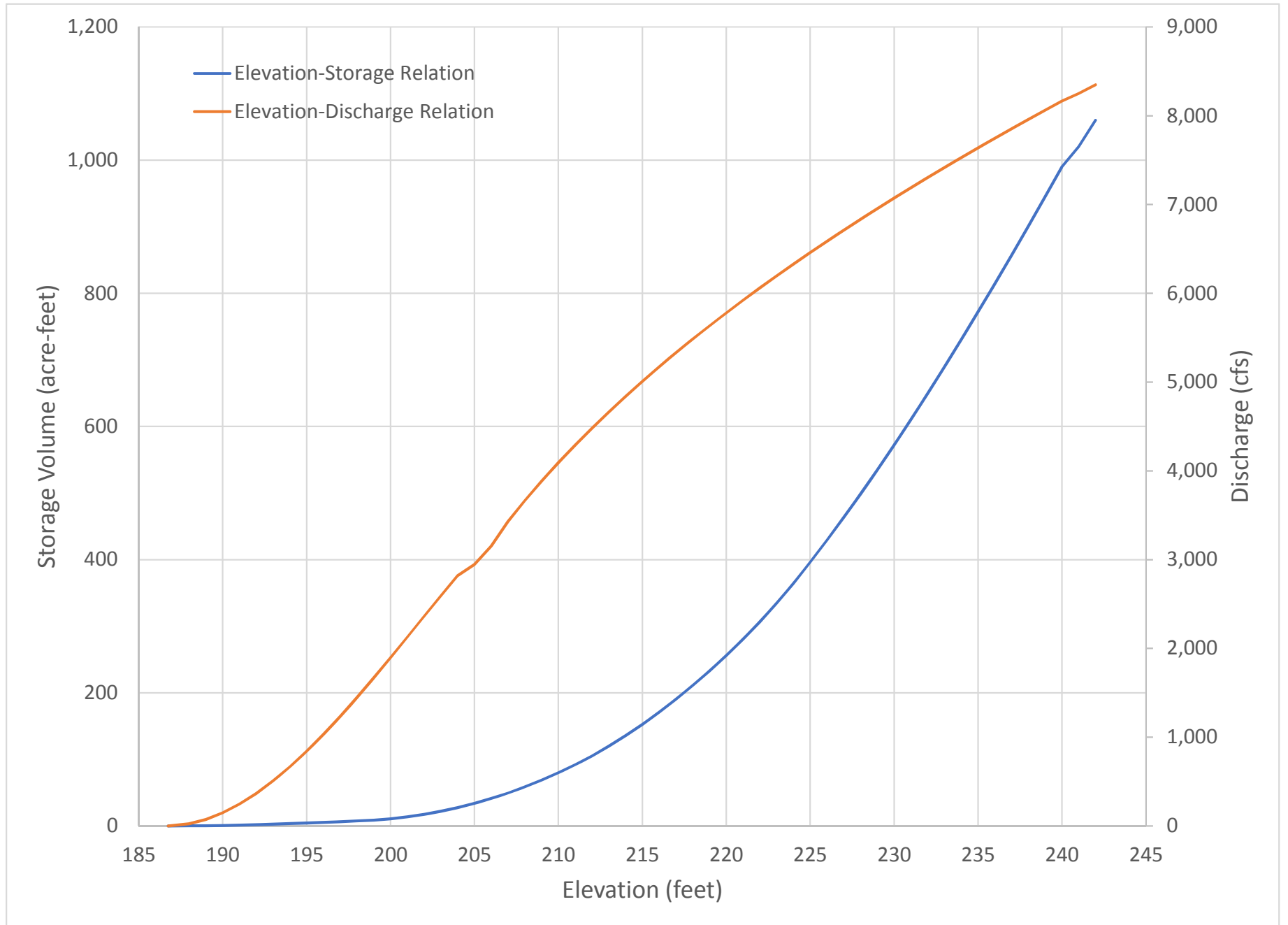


Figure 2. Elevation-Storage-Discharge relation for the storage area upstream from the California Aqueduct

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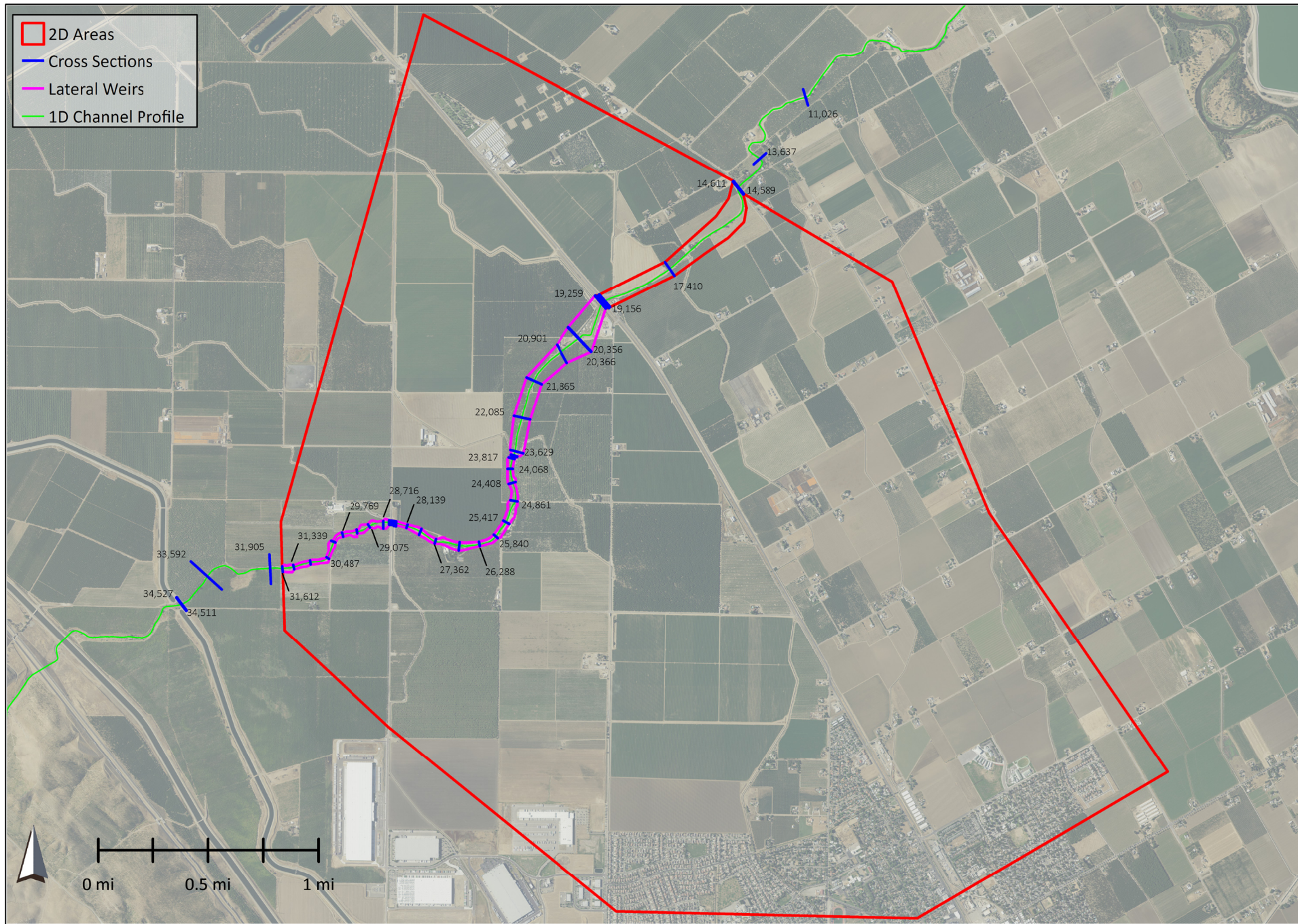


Figure 3. HEC-RAS model workmap

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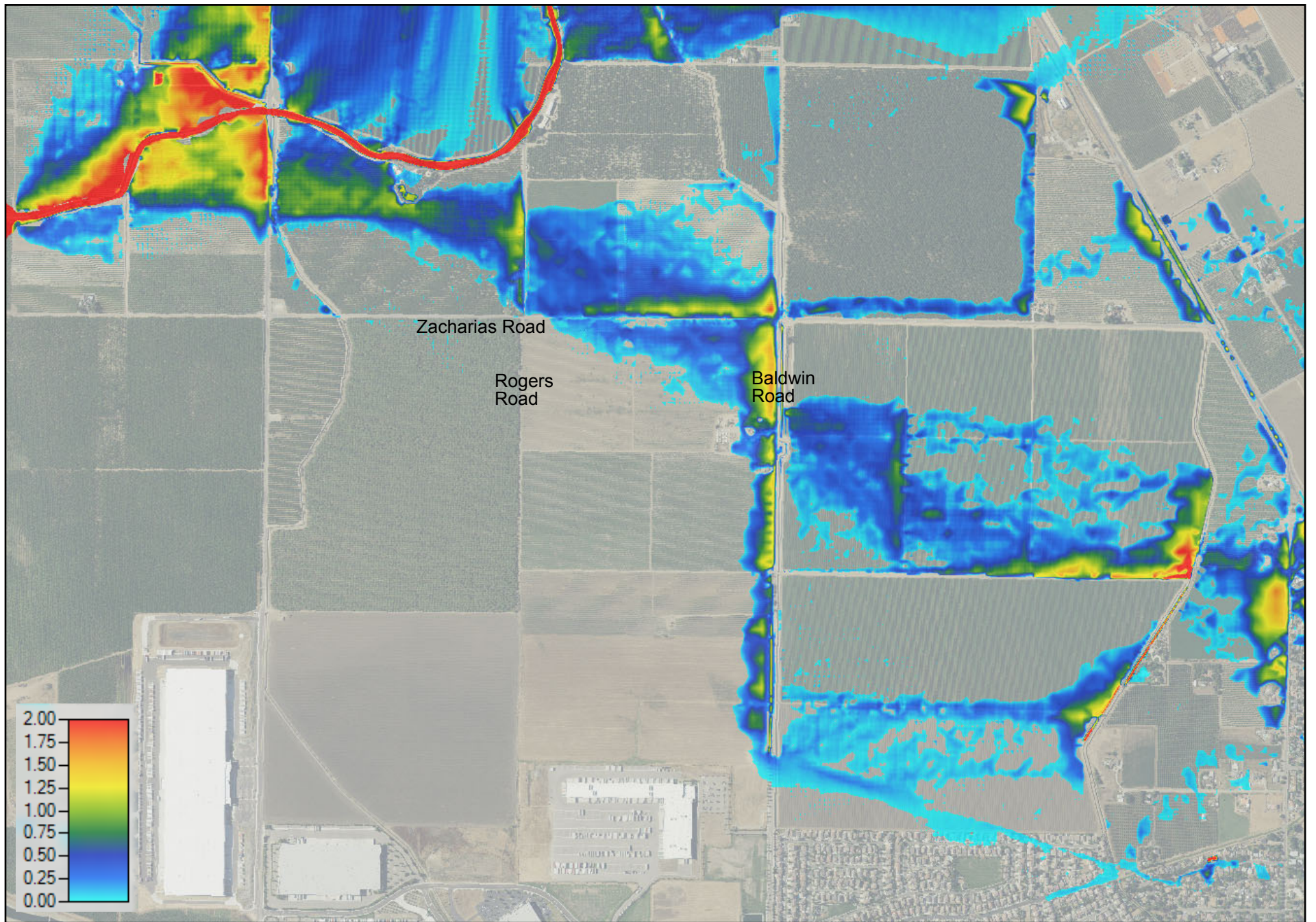


Figure 4. Existing condition 100-year flood maximum flood depths

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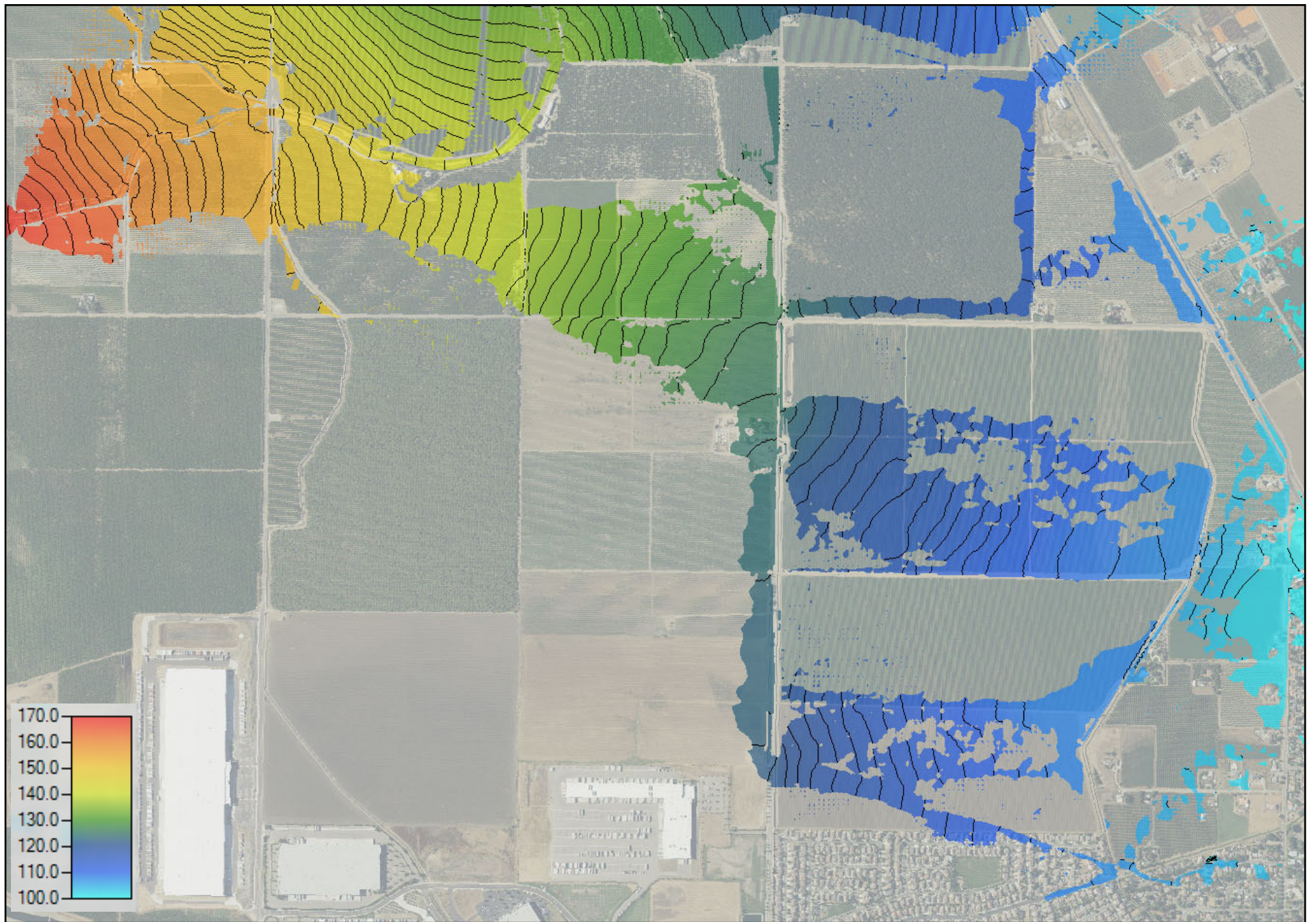


Figure 5. Existing condition 100-year flood maximum water surface elevations

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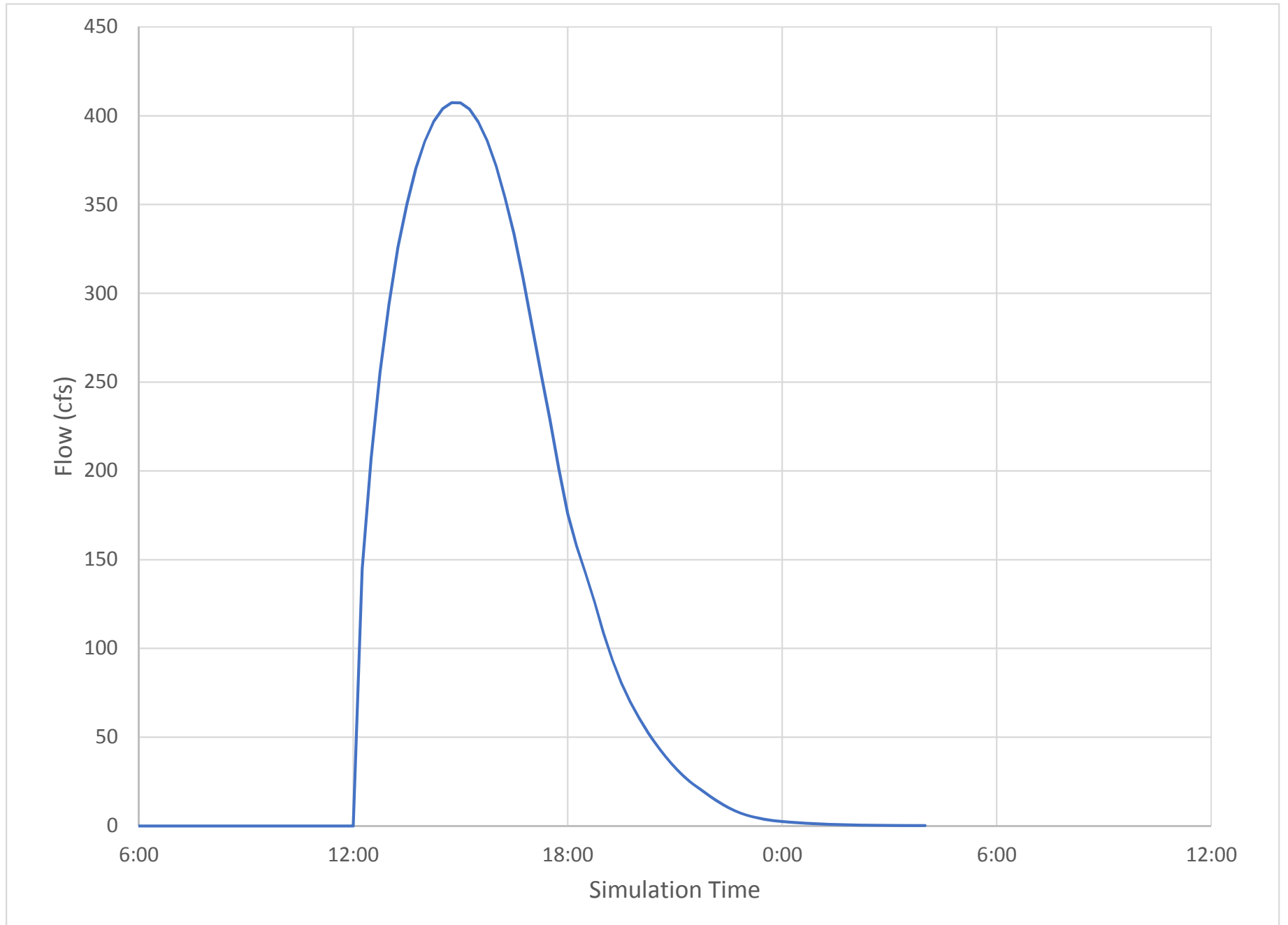


Figure 6. Modeled 100-year flood hydrograph of the overtopping flow onto the south overbank near the project site

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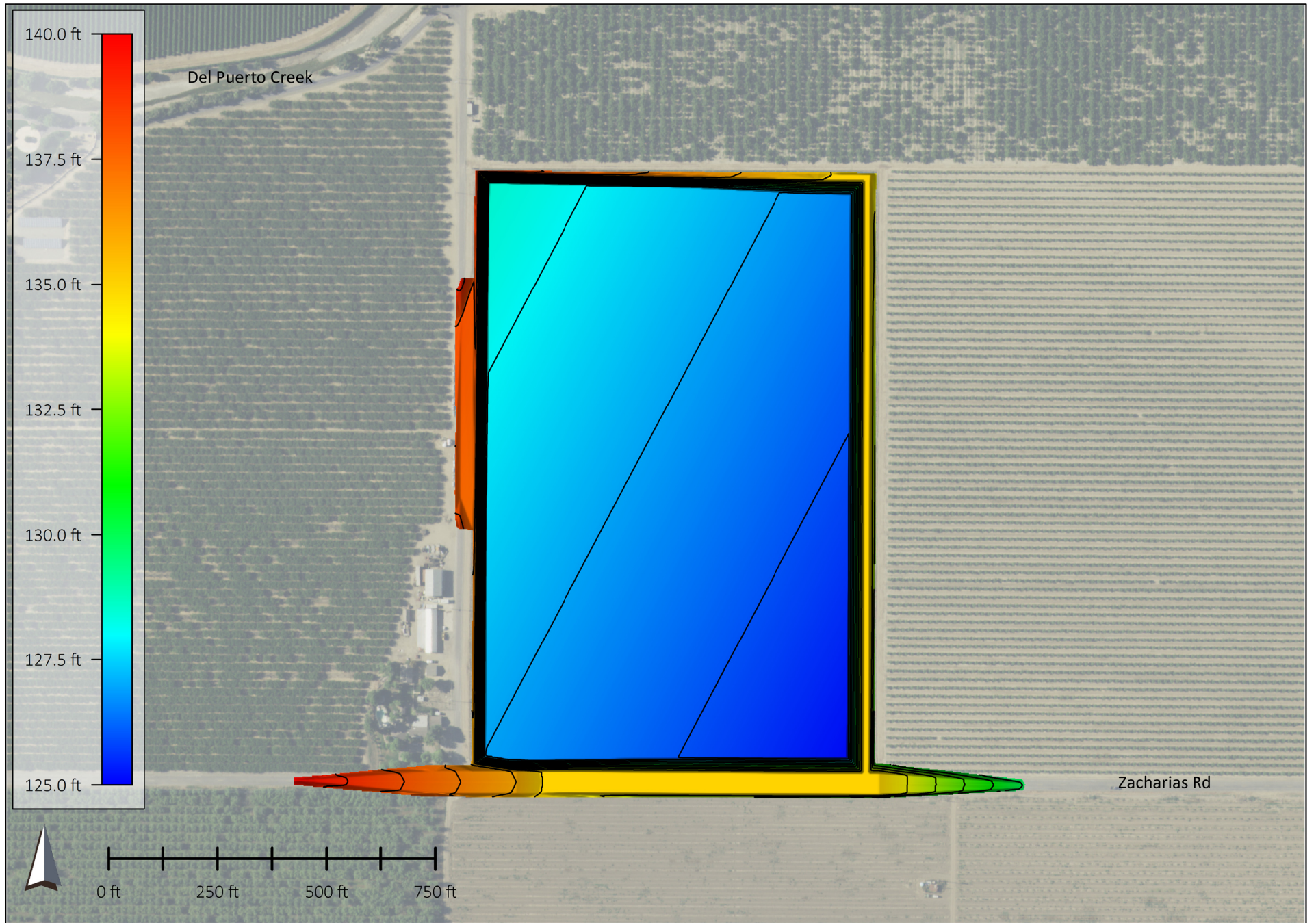


Figure 7. Retention basin grading concept

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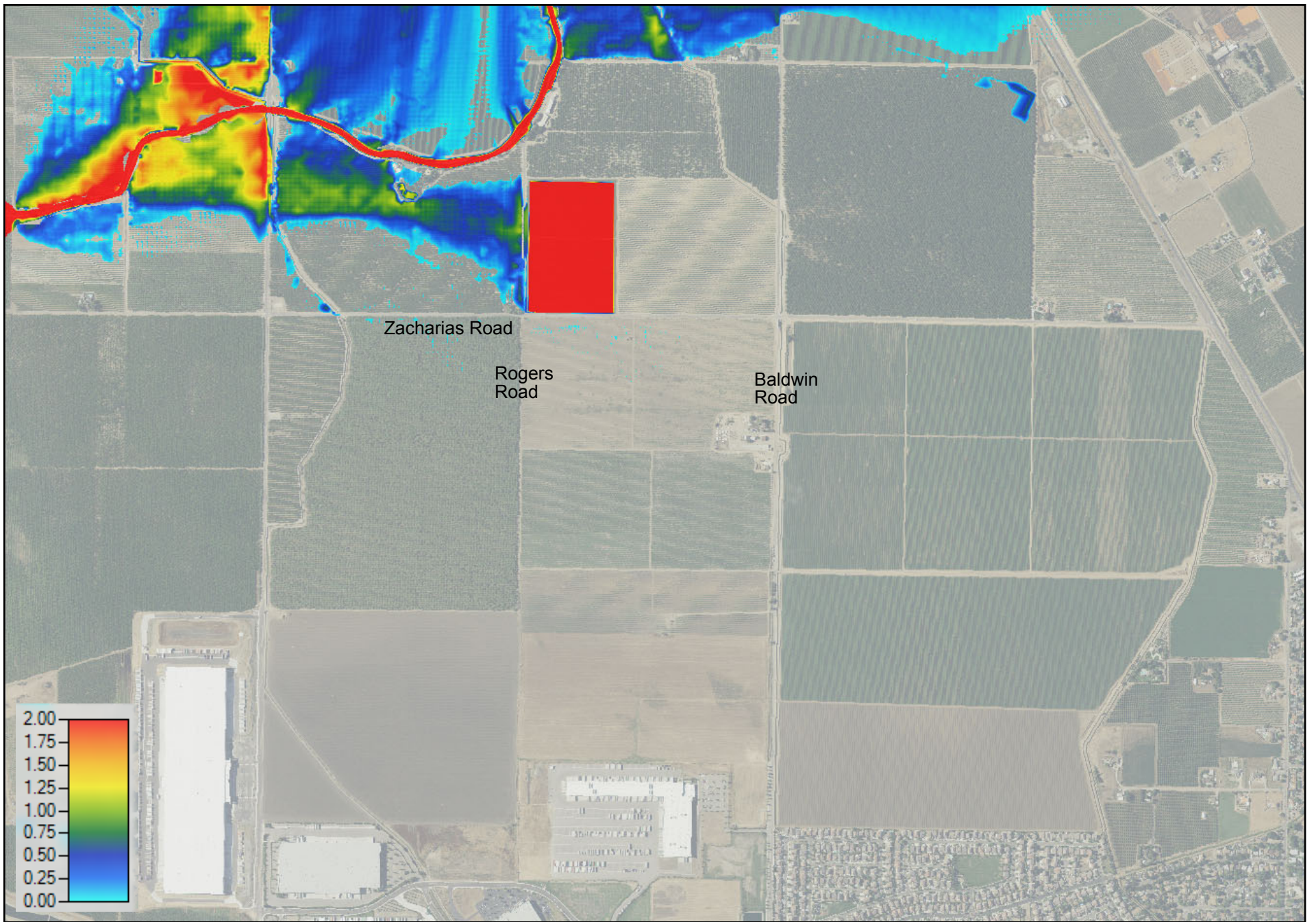


Figure 8. Retention basin condition 100-year flood maximum flood depths

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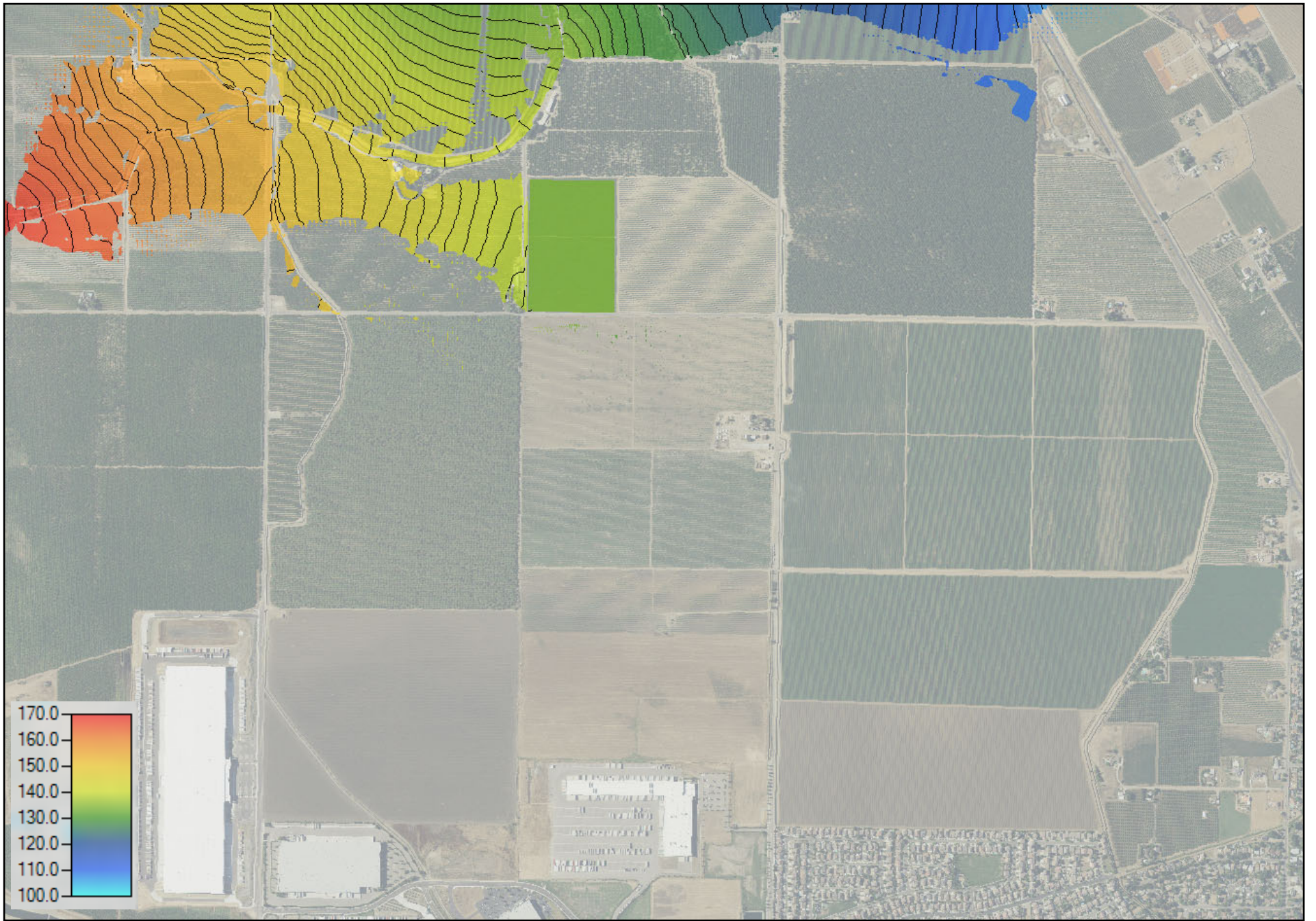


Figure 9. Retention basin condition 100-year flood maximum water surface elevations

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**Appendix G:
Noise Supporting Information**

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TABLE Existing-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Rogers Road - Sperry Avenue to Keystone Pacific Parkway

NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5400 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.05

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	89.1

TABLE Existing-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Rogers Road - Keystone Pacific Parkway to Zacharias Road

NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2100 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 57.42

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	80.9

TABLE Existing-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Rogers Road - Zacharias Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2000 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.89

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	55.1	118.1

TABLE Existing-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Zacharias Road - Rogers Road to Baldwin Road
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 510 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.96

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Zacharias Road - Baldwin Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 820 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 56.02

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	65.4

TABLE Existing-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Zacharias Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1400 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.35

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	93.2

TABLE Existing-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Keystone Pacific Parkway to Zacharias Road
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1800 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 56.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	73.0

TABLE Existing-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Baldwin Road - Sperry Avenue to Keystone Pacific Parkway

NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3400 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	53.0	111.7

TABLE Existing-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - south of Sperry Avenue
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1500 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.49

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Zacharias Road to Eucalyptus Avenue
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8200 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	----	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.02

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	65.4	140.4	302.2

TABLE Existing-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Eucalyptus Avenue to Ward Avenue
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7900 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	90.7	195.1

TABLE Existing-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Ward Avenue to Olive Avenue
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7300 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	----	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.52

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	60.6	129.9	279.7

TABLE Existing-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Ward Avenue - south of Highway 33
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2400 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.53

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	52.1

TABLE Existing-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Rogers Road to Park Center Drive
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10100 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.35

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	75.7	161.5	347.2

TABLE Existing-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Park Center Drive to Baldwin Road
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9700 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	73.8	157.2	337.9

TABLE Existing-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Baldwin Road to American Eagle Avenue
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9600 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	64.1	130.2	276.7

TABLE Existing-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - American Eagle Avenue to Ward Avenue
NOTES: Zacharias Baldwin Master Plan - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11200 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.18

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	58.1	116.5	246.8

TABLE Existing Plus Approved Projects-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Rogers Road - Sperry Avenue to Keystone Pacific Parkway

NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18800 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.47

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	95.0	204.2

TABLE Existing Plus Approved Projects-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Rogers Road - Keystone Pacific Parkway to Zacharias Road

NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14600 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.84

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	63.6	136.5	293.7

TABLE Existing Plus Approved Projects-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Rogers Road - Zacharias Road to Highway 33

NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9000 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.43

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	69.5	149.4	321.5

TABLE Existing Plus Approved Projects-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Zacharias Road - Rogers Road to Baldwin Road

NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9900 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.84

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	74.1	159.2	342.6

TABLE Existing Plus Approved Projects-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Zacharias Road - Baldwin Road to Highway 33

NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11200 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.38

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	80.4	172.8	372.0

TABLE Existing Plus Approved Projects-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Baldwin Road - Zacharias Road to Highway 33

NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3200 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.94

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	75.2	161.5

TABLE Existing Plus Approved Projects-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Baldwin Road - Keystone Pacific Parkway to Zacharias Road

NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3600 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	54.0	115.7

TABLE Existing Plus Approved Projects-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Baldwin Road - Sperry Avenue to Keystone Pacific Parkway

NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4100 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.74

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	59.7	126.4

TABLE Existing Plus Approved Projects-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - south of Sperry Avenue
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2300 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.34

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	50.7

TABLE Existing Plus Approved Projects-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Zacharias Road to Eucalyptus Avenue
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23700 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.63

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
61.6	132.2	284.6	613.0

TABLE Existing Plus Approved Projects-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Eucalyptus Avenue to Ward Avenue
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 22400 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.70

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	84.4	181.4	390.7

TABLE Existing Plus Approved Projects-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Ward Avenue to Olive Avenue
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16000 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	101.9	219.1	471.8

TABLE Existing Plus Approved Projects-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Ward Avenue - south of Highway 33
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6300 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.72

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	98.7

TABLE Existing Plus Approved Projects-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Rogers Road to Park Center Drive
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23700 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 70.05

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
62.5	132.6	284.6	612.6

TABLE Existing Plus Approved Projects-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Sperry Avenue - Park Center Drive to Baldwin Road

NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10200 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.39

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	76.2	162.6	349.4

TABLE Existing Plus Approved Projects-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Sperry Avenue - Baldwin Road to American Eagle Avenue

NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11000 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.52

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	69.3	142.2	302.8

TABLE Existing Plus Approved Projects-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - American Eagle Avenue to Ward Avenue
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12200 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.55

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	61.0	123.1	261.1

TABLE Existing Plus Approved Projects Plus
Proposed Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Rogers Road - Sperry Avenue to Keystone Pacific Parkway
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18500 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.40

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	94.0	202.0

TABLE Existing Plus Approved Projects Plus
Proposed Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Rogers Road - Keystone Pacific Parkway to Zacharias Road
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15800 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.18

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	67.0	143.8	309.6

TABLE Existing Plus Approved Projects Plus
Proposed Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Rogers Road - Zacharias Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16700 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	104.8	225.5	485.5

TABLE Existing Plus Approved Projects Plus
Proposed Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Zacharias Road - Rogers Road to Baldwin Road
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10100 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	75.1	161.3	347.2

TABLE Existing Plus Approved Projects Plus
Proposed Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Zacharias Road - Baldwin Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15400 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	99.3	213.6	460.0

TABLE Existing Plus Approved Projects Plus
Proposed Project-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Zacharias Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16400 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	103.5	222.7	479.7

TABLE Existing Plus Approved Projects Plus
Proposed Project-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Keystone Pacific Parkway to Zacharias Road
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 23600 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.92

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	87.4	187.9	404.5

TABLE Existing Plus Approved Projects Plus
Proposed Project-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Sperry Avenue to Keystone Pacific Parkway
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13000 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	59.8	126.7	271.9

TABLE Existing Plus Approved Projects Plus
Proposed Project-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - south of Sperry Avenue
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6800 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.05

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	103.8

TABLE Existing Plus Approved Projects Plus
Proposed Project-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Zacharias Road to Eucalyptus Avenue
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 28000 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.36

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
68.8	147.8	318.1	685.0

TABLE Existing Plus Approved Projects Plus
Proposed Project-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Eucalyptus Avenue to Ward Avenue
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27000 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.51

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	95.5	205.5	442.5

TABLE Existing Plus Approved Projects Plus
Proposed Project-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Ward Avenue to Olive Avenue
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18500 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
52.3	112.2	241.3	519.7

TABLE Existing Plus Approved Projects Plus
Proposed Project-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Ward Avenue - south of Highway 33
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13600 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.06

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	76.6	164.6

TABLE Existing Plus Approved Projects Plus
Proposed Project-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Rogers Road to Park Center Drive
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15600 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.23

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	100.6	215.6	463.7

TABLE Existing Plus Approved Projects Plus
Proposed Project-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Park Center Drive to Baldwin Road
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13900 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.73

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	93.3	199.6	429.4

TABLE Existing Plus Approved Projects Plus
Proposed Project-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Baldwin Road to American Eagle Avenue
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12800 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.18

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	75.9	156.9	334.7

TABLE Existing Plus Approved Projects Plus
Proposed Project-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - American Eagle Avenue to Ward Avenue
NOTES: Zacharias Baldwin Master Plan - Existing Plus Approved Projects
Plus Proposed Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13800 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.09

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	65.4	133.2	283.3

TABLE 2040 Cumulative No Project -01
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Rogers Road - Sperry Avenue to Keystone Pacific Parkway

NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8700 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.12

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	57.0	122.3

TABLE 2040 Cumulative No Project -02
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Rogers Road - Keystone Pacific Parkway to Zacharias Road

NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2600 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.34

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	93.2

TABLE 2040 Cumulative No Project -03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Rogers Road - Zacharias Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2100 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	56.9	122.0

TABLE 2040 Cumulative No Project -04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Zacharias Road - Rogers Road to Baldwin Road
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1000 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 56.88

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	74.6

TABLE 2040 Cumulative No Project -05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Zacharias Road - Baldwin Road to Highway 33

NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1300 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.02

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	88.7

TABLE 2040 Cumulative No Project -06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Zacharias Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1800 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.44

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	51.4	110.1

TABLE 2040 Cumulative No Project -07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Keystone Pacific Parkway to Zacharias Road
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2100 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 57.42

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	80.9

TABLE 2040 Cumulative No Project -08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Baldwin Road - Sperry Avenue to Keystone Pacific Parkway

NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4800 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.42

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	66.0	140.3

TABLE 2040 Cumulative No Project -09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - south of Sperry Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4500 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 57.26

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	78.9

TABLE 2040 Cumulative No Project -10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Zacharias Road to Eucalyptus Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9200 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.52

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	70.6	151.6	326.3

TABLE 2040 Cumulative No Project -11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Eucalyptus Avenue to Ward Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8100 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	92.3	198.4

TABLE 2040 Cumulative No Project -12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Ward Avenue to Olive Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6700 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.14

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	57.2	122.7	264.1

TABLE 2040 Cumulative No Project -13
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
 ROADWAY SEGMENT: Ward Avenue - south of Highway 33
 NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2400 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.53

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	52.1

TABLE 2040 Cumulative No Project -14
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
 ROADWAY SEGMENT: Sperry Avenue - Rogers Road to Park Center Drive
 NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15600 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.23

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	100.6	215.6	463.7

TABLE 2040 Cumulative No Project -15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Sperry Avenue - Park Center Drive to Baldwin Road

NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13900 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.73

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	93.3	199.6	429.4

TABLE 2040 Cumulative No Project -16
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Sperry Avenue - Baldwin Road to American Eagle Avenue

NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12800 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.18

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	75.9	156.9	334.7

TABLE 2040 Cumulative No Project -17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - American Eagle Avenue to Ward Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative No Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13800 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.09

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	65.4	133.2	283.3

TABLE 2040 Cumulative Plus Project -01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Rogers Road - Sperry Avenue to Keystone Pacific Parkway

NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9900 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.68

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	62.1	133.3

TABLE 2040 Cumulative Plus Project -02
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Rogers Road - Keystone Pacific Parkway to Zacharias Road

NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4000 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.21

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	57.8	124.0

TABLE 2040 Cumulative Plus Project -03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Rogers Road - Zacharias Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5600 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.37

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	50.9	108.9	234.4

TABLE 2040 Cumulative Plus Project -04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Zacharias Road - Rogers Road to Baldwin Road
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2200 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.31

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	58.7	125.9

TABLE 2040 Cumulative Plus Project -05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Zacharias Road - Baldwin Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7900 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	63.8	137.0	294.8

TABLE 2040 Cumulative Plus Project -06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Zacharias Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11800 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	83.2	178.9	385.2

TABLE 2040 Cumulative Plus Project -07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Keystone Pacific Parkway to Zacharias Road
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12400 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.13

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	57.1	122.4	263.4

TABLE 2040 Cumulative Plus Project -08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Baldwin Road - Sperry Avenue to Keystone Pacific Parkway

NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14800 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.32

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	64.9	138.0	296.4

TABLE 2040 Cumulative Plus Project -09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - south of Sperry Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10400 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.90

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	64.1	137.7

TABLE 2040 Cumulative Plus Project -10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Zacharias Road to Eucalyptus Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15800 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	101.0	217.3	467.9

TABLE 2040 Cumulative Plus Project -11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Eucalyptus Avenue to Ward Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10200 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	107.5	231.3

TABLE 2040 Cumulative Plus Project -12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Ward Avenue to Olive Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15300 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.73

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	98.9	212.7	458.0

TABLE 2040 Cumulative Plus Project -13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Ward Avenue - south of Highway 33
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9800 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.64

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	61.7	132.4

TABLE 2040 Cumulative Plus Project -14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Rogers Road to Park Center Drive
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15200 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.12

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	98.9	211.9	455.8

TABLE 2040 Cumulative Plus Project -15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Park Center Drive to Baldwin Road
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13500 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.61

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	91.5	195.8	421.2

TABLE 2040 Cumulative Plus Project -16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020

ROADWAY SEGMENT: Sperry Avenue - Baldwin Road to American Eagle Avenue

NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14300 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.66

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	81.1	168.6	360.3

TABLE 2040 Cumulative Plus Project -17
 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
 ROADWAY SEGMENT: Sperry Avenue - American Eagle Avenue to Ward Avenue
 NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15000 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.45

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	68.7	140.6	299.4

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Rogers Road - Sperry Avenue to Keystone Pacific Parkway
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with
new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8800 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	57.4	123.2

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Rogers Road - Keystone Pacific Parkway to Zacharias Road
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with
new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3100 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	104.7

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Rogers Road - Zacharias Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4500 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.42

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	94.2	202.7

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Zacharias Road - Rogers Road to Baldwin Road
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with
new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7900 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	63.8	137.0	294.8

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Zacharias Road - Baldwin Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8400 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.13

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	66.4	142.7	307.1

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Zacharias Road to Highway 33
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with
new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8000 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.92

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	64.3	138.1	297.3

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Keystone Pacific Parkway to Zacharias Road
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12000 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.98

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	55.9	119.8	257.7

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - Sperry Avenue to Keystone Pacific Parkway
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14000 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.07

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	62.7	133.0	285.6

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Baldwin Road - south of Sperry Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9700 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.59

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	61.3	131.5

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Zacharias Road to Eucalyptus Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with
new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14700 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	96.3	207.1	445.9

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Eucalyptus Avenue to Ward Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with
new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8000 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.22

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	91.5	196.8

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Highway 33 - Ward Avenue to Olive Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with
new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18500 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
52.3	112.2	241.3	519.7

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Ward Avenue - south of Highway 33
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12100 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.55

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	70.9	152.3

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Rogers Road to Park Center Drive
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with
new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16400 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.45

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	104.0	222.8	479.4

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Park Center Drive to Baldwin Road
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13500 SPEED (MPH): 45 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 12 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.61

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	91.5	195.8	421.2

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - Baldwin Road to American Eagle Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14100 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	80.4	167.1	356.9

TABLE 2040 Cumulative Plus Project (with new
Zacharias Avenue/I-5 Interchange)-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 01/17/2020
ROADWAY SEGMENT: Sperry Avenue - American Eagle Avenue to Ward Avenue
NOTES: Zacharias Baldwin Master Plan - 2040 Cumulative Plus Project (with
new Zacharias Avenue/I-5 Interchange)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14800 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.39

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	68.1	139.4	296.7