APPENDIX G

Noise Measurement Data

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: CULTON PHASE 3 | PROJECT #: 10728-03
SITE ID:
SITE ADDRESS: | OBSERVER(S): PEYE VITAR
START DATE: 12/12/18 | END DATE: 12/12/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 56 F | HUMIDITY: 59 % R.H. | WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM-3 | TYPE 1 (2) | SERIAL # 14037004
CALIBRATOR: BSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK: PRE-TEST ____ dBA SPL | POST-TEST ____ dBA SPL | WINDSCRN YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

	REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
ST-1	1-2	10:14	10:29	56.2	70.9	49.4				

COMMENTS
READING TAKEN ON VACANT LOT ON BOSTICK AVE JUST SOUTH OF LITTON AVE; ACCROSS THE STREET FROM A RESIDENCE; PRIMARY NOISE SOURCE IS VERY LIGHT TRAFFIC ON LITTON AVE, EAST OF BOSTICK, AVE AND DISTANT TRAFFIC NOISE

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT | DIST. TO RDWY C/L OR EOP: 35'

TRAFFIC COUNT DURATION: 15 MIN SPEED ____ MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	0								
MED TRKS	0								
HVY TRKS	0								
BUSES	0								
MOTRCLS	0								

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES (DIST. BARKING DOGS) (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: APX. 3 JET AIRPLANE FLYOVERS DURING READING; S. LA CADENA DR. TRAFFIC NOISE & OTHER DISTANT TRAFFIC NOISE

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 3109; 3110; 3111; 3112; 3113; 3114
OTHER COMMENTS / SKETCH

N

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: COLTON PHASE 3 | PROJECT #: 10728-03
SITE ID:
SITE ADDRESS: | OBSERVER(S): PETE VITAR
START DATE: 12/12/18 | END DATE: 12/12/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP 58 F | HUMIDITY 55 % R.H. | WIND (CALM) LIGHT MODERATE
WINDSPD MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG | RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM-3 | TYPE 1 (2) | SERIAL # 14037004
CALIBRATOR: BSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK | PRE-TEST ____ dBA SPL | POST-TEST ____ dBA SPL | WINDSCRN YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
ST-2 6-7	11:06	11:21	57.9	72.9	49.6				

COMMENTS
READING TAKEN IN FRONT OF 279 LITTON AVE (RESIDENTIAL). PRIMARY NOISE SOURCE IS TRAFFIC ON LITTON AVE & DISTANT TRAFFIC

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT | DIST. TO RDWY C/L OR (EOP): 7'

TRAFFIC COUNT DURATION: 15 MIN | SPEED | ___ MIN | SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	5								
MED TRKS	3								
HVY TRKS	0								
BUSES	0								
MOTRCLS	0								

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES (DIST. BARKING DOGS) (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: SOME NOISE FROM TRAFFIC ON S. LA CADENA DR; APX 1 JET AIRPLANE FLY OVERS & 3 PROPELLER PLANE FLYOVERS DURING READING

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 3116; 3117; 3118; 3119
OTHER COMMENTS / SKETCH

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: COLTON PHASE 3 | PROJECT #: 10728-03
SITE ID:
SITE ADDRESS: | OBSERVER(S): PEYE VITAR
START DATE: 12/12/18 | END DATE: 12/12/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP 58 F | HUMIDITY 55 % R.H. | WIND (CALM) LIGHT MODERATE
WINDSPD MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM-3 | TYPE 1 (2) | SERIAL # 14037004
CALIBRATOR: TSSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK | PRE-TEST ____ dBA SPL | POST-TEST ____ dBA SPL | WINDSCRN YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
ST-3 4-5	10:46	11:02	58.4	73.9	47.0				

COMMENTS
READING TAKEN IN FRONT OF 21342 LITTON AVE (RESIDENTIAL); PRIMARY NOISE SOURCE IS DISTANT TRAFFIC AND AIRPLANE FLY-OVERS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT | DIST. TO (RDWY C/L) OR EOP: 11'

TRAFFIC COUNT DURATION: 15 MIN | SPEED | ___ MIN | SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	0								
MED TRKS	0								
HVY TRKS	0								
BUSES	0								
MOTRCLS	0								

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: SOME NOISE FROM TRAFFIC ON S. LA CADENA DR; APX 2 JET AIRPLANE & 2 PROP. PLANE FLY-OVERS DURING READING

DESCRIPTION / SKETCH

TERRAIN HARD SOFT (MIXED) FLAT OTHER:
PHOTOS 3121; 3122; 3123; 3124; 3127
OTHER COMMENTS / SKETCH

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: COLTON PHASE 3 | PROJECT #: 10728-03
SITE ID:
SITE ADDRESS: | OBSERVER(S): PEYE VITAR
START DATE: 12/12/18 | END DATE: 12/12/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP _____ F | HUMIDITY _____ % R.H. | WIND: CALM LIGHT MODERATE
WINDSPD _____ MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCULO SLM-3 | TYPE 1 (2) | SERIAL # 14037004
CALIBRATOR: BSWA C4 114 | SERIAL # 480151
CALIBRATION CHECK: PRE-TEST _____ dBA SPL | POST-TEST _____ dBA SPL | WINDSCRN YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

	REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
ST-4	8-9	11:33	11:48	55.7	73.1	49.9				

COMMENTS
READING TAKEN IN FRONT OF 1904 BOSTICK AVE (RESIDENTIAL); PRIMARY NOISE SOURCE IS DISTANT TRAFFIC, AIRPLANE FLY-OVERS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: | DIST. TO RDWY C/L OR (EOP): 7'

TRAFFIC COUNT DURATION: 15 MIN

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB
AUTOS	2								
MED TRKS	0								
HVY TRKS	0								
BUSES	0								
MOTRCLS	0								

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: 1 JET AIRPLANE FLY-OVER DURING READING

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 3130; 3131; 3133; 3135;
OTHER COMMENTS / SKETCH

N

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: COLTON PHASE 3 | PROJECT #: 10728-03
SITE ID:
SITE ADDRESS: | OBSERVER(S): PEYE VITAR
START DATE: 12/12/18 | END DATE: 12/12/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 61 F | HUMIDITY: 48 % R.H. | WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: (SUNNY) CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM-3 | TYPE 1 (2) | SERIAL # 14037004
CALIBRATOR: BSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK: PRE-TEST ____ dBA SPL | POST-TEST ____ dBA SPL | WINDSCRN YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
ST-S 10-11	11:53	12:08	52.8	64.6	50.0				

COMMENTS
READING TAKEN IN FRONT OF 318 PALM AVE (RESIDENTIAL); PRIMARY NOISE SOURCE IS DISTANT TRAFFIC; AIRPLANE FLYOVERS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: | DIST. TO RDWY C/L OR (EOP): 1'

TRAFFIC COUNT DURATION: 15 MIN | ___ MIN

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB
AUTOS	0								
MED TRKS	0								
HVY TRKS	0								
BUSES	0								
MOTRCLS	0								

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: DISTANT TRAFFIC NOISE FROM S. LA CADENA DR & OTHER DIST. TRAFFIC; 1 JET PLANE & 2 PROP. PLANE FLYOVERS DURING READING

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED FLAT OTHER:
PHOTOS: 3136; 3137; 3138; 3139; 3140
OTHER COMMENTS / SKETCH

N

Dudek 28 January 2019
CB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
West Litton Ave	20.0	point1	1	3,399.6	2,278.8	0.00				Average	
		point2	2	1,546.7	2,293.9	0.00				Average	
		point3	3	1,545.0	2,302.3	0.00					
East Litton Ave	20.0	point4	4	3,392.9	2,267.0	0.00				Average	
		point5	5	2,243.4	2,277.1	0.00				Average	
		point6	6	2,191.2	2,277.1	0.00				Average	
		point7	7	1,550.0	2,282.1	0.00					
Roadway3	18.0	point8	8	2,226.6	2,307.4	0.00				Average	
		point9	9	2,263.6	3,110.1	0.00					
Roadway4	18.0	point10	10	2,211.5	2,310.7	0.00				Average	
		point11	11	2,251.8	3,106.8	0.00					
Roadway5	15.0	point12	12	2,204.7	2,270.3	0.00				Average	
		point13	13	2,184.5	1,836.1	0.00				Average	
		point14	14	2,174.4	1,760.4	0.00				Average	
		point15	15	2,108.8	1,509.6	0.00				Average	
		point16	16	2,056.6	1,299.3	0.00				Average	
		point17	17	2,021.3	1,083.8	0.00				Average	
		point18	18	1,952.3	693.4	0.00					
Roadway6	15.0	point19	19	1,967.4	693.4	0.00				Average	
		point20	20	2,070.1	1,289.2	0.00				Average	
		point21	21	2,129.0	1,538.3	0.00				Average	
		point22	22	2,199.7	1,794.1	0.00				Average	
		point23	23	2,221.5	2,272.0	0.00					
West Palm Ave	18.0	point24	24	1,777.2	673.2	0.00				Average	
		point25	25	3,157.3	683.3	0.00					

East Palm Ave	18.0	point26	26	1,780.6	658.0	0.00				Average	
		point27	27	3,155.6	668.1	0.00					
South La Cadena	15.0	point28	28	3,524.2	3,110.1	0.00				Average	
		point29	29	3,468.6	2,684.4	0.00				Average	
		point30	30	3,446.8	2,453.8	0.00				Average	
		point31	31	3,419.8	2,191.2	0.00				Average	
		point32	32	3,396.3	1,804.2	0.00				Average	
		point33	33	3,374.4	1,649.3	0.00				Average	
		point34	34	3,318.8	1,339.7	0.00				Average	
		point35	35	3,106.8	333.2	0.00				Average	
		point36	36	3,042.8	8.4	0.00					
North La Cadena	15.0	point37	37	3,115.2	13.5	0.00				Average	
		point38	38	3,211.1	382.0	0.00				Average	
		point39	39	3,283.5	853.3	0.00				Average	
		point40	40	3,374.4	1,339.7	0.00				Average	
		point41	41	3,404.7	1,550.0	0.00				Average	
		point42	42	3,450.1	1,861.4	0.00				Average	
		point43	43	3,478.7	2,468.9	0.00				Average	
		point44	44	3,554.5	3,110.1	0.00					

Dudek 28 January 2019
CB TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: Modern Pacific
RUN: Existing

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
West Litton Ave	point1	1	73	30	2	30	1	30	0	0	0	0
	point2	2	73	30	2	30	1	30	0	0	0	0
	point3	3										
East Litton Ave	point4	4	73	30	2	30	1	30	0	0	0	0
	point5	5	73	30	2	30	1	30	0	0	0	0
	point6	6	73	30	2	30	1	30	0	0	0	0
	point7	7										
Roadway3	point8	8	0	0	0	0	0	0	0	0	0	0
	point9	9										
Roadway4	point10	10	0	0	0	0	0	0	0	0	0	0
	point11	11										
Roadway5	point12	12	4	30	0	0	0	0	0	0	0	0
	point13	13	4	30	0	0	0	0	0	0	0	0
	point14	14	4	30	0	0	0	0	0	0	0	0
	point15	15	4	30	0	0	0	0	0	0	0	0
	point16	16	4	30	0	0	0	0	0	0	0	0
	point17	17	4	30	0	0	0	0	0	0	0	0
	point18	18										
Roadway6	point19	19	4	30	0	0	0	0	0	0	0	0
	point20	20	4	30	0	0	0	0	0	0	0	0
	point21	21	4	30	0	0	0	0	0	0	0	0
	point22	22	4	30	0	0	0	0	0	0	0	0
	point23	23										

West Palm Ave	point24	24	24	30	1	30	0	0	0	0	0	0
	point25	25										
East Palm Ave	point26	26	24	30	1	30	0	0	0	0	0	0
	point27	27										
South La Cadena	point28	28	1213	45	25	45	13	45	0	0	0	0
	point29	29	1213	45	25	45	13	45	0	0	0	0
	point30	30	1213	45	25	45	13	45	0	0	0	0
	point31	31	1213	45	25	45	13	45	0	0	0	0
	point32	32	1213	45	25	45	13	45	0	0	0	0
	point33	33	1213	45	25	45	13	45	0	0	0	0
	point34	34	1213	45	25	45	13	45	0	0	0	0
	point35	35	1213	45	25	45	13	45	0	0	0	0
	point36	36										
North La Cadena	point37	37	1213	45	25	45	13	45	0	0	0	0
	point38	38	1213	45	25	45	13	45	0	0	0	0
	point39	39	1213	45	25	45	13	45	0	0	0	0
	point40	40	1213	45	25	45	13	45	0	0	0	0
	point41	41	1213	45	25	45	13	45	0	0	0	0
	point42	42	1213	45	25	45	13	45	0	0	0	0
	point43	43	1213	45	25	45	13	45	0	0	0	0
	point44	44										

Dudek 28 January 2019
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST2	1	1	2,438.6	2,314.1	0.00	4.92	57.90	66	10.0	8.0	Y
ST3	2	1	1,886.6	2,339.3	0.00	4.92	58.40	66	10.0	8.0	Y
ST1	3	1	2,147.5	2,098.7	0.00	4.92	56.20	66	10.0	8.0	Y
ST4	4	1	2,228.3	1,757.0	0.00	4.92	55.70	66	10.0	8.0	Y
ST5	5	1	1,906.8	725.4	0.00	4.92	52.80	66	10.0	8.0	Y
M1	6	1	3,287.1	2,378.9	0.00	4.92	0.00	66	10.0	8.0	Y
M2	7	1	2,933.9	604.6	0.00	4.92	0.00	66	10.0	8.0	Y

Dudek
CB

28 January 2019
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST2	1	1	57.9	57.1	66	-0.8	10	----	57.1	0.0	8	-8.0
ST3	2	1	58.4	54.5	66	-3.9	10	----	54.5	0.0	8	-8.0
ST1	3	1	56.2	47.1	66	-9.1	10	----	47.1	0.0	8	-8.0
ST4	4	1	55.7	45.3	66	-10.4	10	----	45.3	0.0	8	-8.0
ST5	5	1	52.8	49.2	66	-3.6	10	----	49.2	0.0	8	-8.0
M1	6	1	0.0	60.4	66	60.4	10	----	60.4	0.0	8	-8.0
M2	7	1	0.0	56.4	66	56.4	10	----	56.4	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	7	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 28 January 2019
CB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
West Litton Ave	20.0	point1	1	3,399.6	2,278.8	0.00				Average	
		point2	2	1,546.7	2,293.9	0.00				Average	
		point3	3	1,545.0	2,302.3	0.00					
East Litton Ave	20.0	point4	4	3,392.9	2,267.0	0.00				Average	
		point5	5	2,243.4	2,277.1	0.00				Average	
		point6	6	2,191.2	2,277.1	0.00				Average	
		point7	7	1,550.0	2,282.1	0.00					
Roadway3	18.0	point8	8	2,226.6	2,307.4	0.00				Average	
		point9	9	2,263.6	3,110.1	0.00					
Roadway4	18.0	point10	10	2,211.5	2,310.7	0.00				Average	
		point11	11	2,251.8	3,106.8	0.00					
Roadway5	15.0	point12	12	2,204.7	2,270.3	0.00				Average	
		point13	13	2,184.5	1,836.1	0.00				Average	
		point14	14	2,174.4	1,760.4	0.00				Average	
		point15	15	2,108.8	1,509.6	0.00				Average	
		point16	16	2,056.6	1,299.3	0.00				Average	
		point17	17	2,021.3	1,083.8	0.00				Average	
		point18	18	1,952.3	693.4	0.00					
Roadway6	15.0	point19	19	1,967.4	693.4	0.00				Average	
		point20	20	2,070.1	1,289.2	0.00				Average	
		point21	21	2,129.0	1,538.3	0.00				Average	
		point22	22	2,199.7	1,794.1	0.00				Average	
		point23	23	2,221.5	2,272.0	0.00					
West Palm Ave	18.0	point24	24	1,777.2	673.2	0.00				Average	
		point25	25	3,157.3	683.3	0.00					

East Palm Ave	18.0	point26	26	1,780.6	658.0	0.00				Average	
		point27	27	3,155.6	668.1	0.00					
South La Cadena	15.0	point28	28	3,524.2	3,110.1	0.00				Average	
		point29	29	3,468.6	2,684.4	0.00				Average	
		point30	30	3,446.8	2,453.8	0.00				Average	
		point31	31	3,419.8	2,191.2	0.00				Average	
		point32	32	3,396.3	1,804.2	0.00				Average	
		point33	33	3,374.4	1,649.3	0.00				Average	
		point34	34	3,318.8	1,339.7	0.00				Average	
		point35	35	3,106.8	333.2	0.00				Average	
		point36	36	3,042.8	8.4	0.00					
North La Cadena	15.0	point37	37	3,115.2	13.5	0.00				Average	
		point38	38	3,211.1	382.0	0.00				Average	
		point39	39	3,283.5	853.3	0.00				Average	
		point40	40	3,374.4	1,339.7	0.00				Average	
		point41	41	3,404.7	1,550.0	0.00				Average	
		point42	42	3,450.1	1,861.4	0.00				Average	
		point43	43	3,478.7	2,468.9	0.00				Average	
		point44	44	3,554.5	3,110.1	0.00					

Dudek 28 January 2019
CB TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: Modern Pacific
RUN: Existing

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
West Litton Ave	point1	1	112	30	2	30	1	30	0	0	0	0
	point2	2	112	30	2	30	1	30	0	0	0	0
	point3	3										
East Litton Ave	point4	4	112	30	2	30	1	30	0	0	0	0
	point5	5	112	30	2	30	1	30	0	0	0	0
	point6	6	112	30	2	30	1	30	0	0	0	0
	point7	7										
Roadway3	point8	8	0	0	0	0	0	0	0	0	0	0
	point9	9										
Roadway4	point10	10	0	0	0	0	0	0	0	0	0	0
	point11	11										
Roadway5	point12	12	4	30	0	0	0	0	0	0	0	0
	point13	13	4	30	0	0	0	0	0	0	0	0
	point14	14	4	30	0	0	0	0	0	0	0	0
	point15	15	4	30	0	0	0	0	0	0	0	0
	point16	16	4	30	0	0	0	0	0	0	0	0
	point17	17	4	30	0	0	0	0	0	0	0	0
	point18	18										
Roadway6	point19	19	4	30	0	0	0	0	0	0	0	0
	point20	20	4	30	0	0	0	0	0	0	0	0
	point21	21	4	30	0	0	0	0	0	0	0	0
	point22	22	4	30	0	0	0	0	0	0	0	0
	point23	23										

INPUT: TRAFFIC FOR LAeq1h Volumes **Modern Pacific**

West Palm Ave	point24	24	24	30	1	30	0	0	0	0	0	0
	point25	25										
East Palm Ave	point26	26	24	30	1	30	0	0	0	0	0	0
	point27	27										
South La Cadena	point28	28	1237	45	26	45	13	45	0	0	0	0
	point29	29	1237	45	26	45	13	45	0	0	0	0
	point30	30	1237	45	26	45	13	45	0	0	0	0
	point31	31	1237	45	26	45	13	45	0	0	0	0
	point32	32	1237	45	26	45	13	45	0	0	0	0
	point33	33	1237	45	26	45	13	45	0	0	0	0
	point34	34	1237	45	26	45	13	45	0	0	0	0
	point35	35	1237	45	26	45	13	45	0	0	0	0
	point36	36										
North La Cadena	point37	37	1237	45	26	45	13	45	0	0	0	0
	point38	38	1237	45	26	45	13	45	0	0	0	0
	point39	39	1237	45	26	45	13	45	0	0	0	0
	point40	40	1237	45	26	45	13	45	0	0	0	0
	point41	41	1237	45	26	45	13	45	0	0	0	0
	point42	42	1237	45	26	45	13	45	0	0	0	0
	point43	43	1237	45	26	45	13	45	0	0	0	0
	point44	44										

Dudek 28 January 2019
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INPUT: RECEIVERS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST2	1	1	2,438.6	2,314.1	0.00	4.92	57.90	66	10.0	8.0	Y
ST3	2	1	1,886.6	2,339.3	0.00	4.92	58.40	66	10.0	8.0	Y
ST1	3	1	2,147.5	2,098.7	0.00	4.92	56.20	66	10.0	8.0	Y
ST4	4	1	2,228.3	1,757.0	0.00	4.92	55.70	66	10.0	8.0	Y
ST5	5	1	1,906.8	725.4	0.00	4.92	52.80	66	10.0	8.0	Y
M1	6	1	3,287.1	2,378.9	0.00	4.92	0.00	66	10.0	8.0	Y
M2	7	1	2,933.9	604.6	0.00	4.92	0.00	66	10.0	8.0	Y

Dudek
CB

28 January 2019
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST2	1	1	57.9	58.3	66	0.4	10	----	58.3	0.0	8	-8.0
ST3	2	1	58.4	55.8	66	-2.6	10	----	55.8	0.0	8	-8.0
ST1	3	1	56.2	47.7	66	-8.5	10	----	47.7	0.0	8	-8.0
ST4	4	1	55.7	45.5	66	-10.2	10	----	45.5	0.0	8	-8.0
ST5	5	1	52.8	49.4	66	-3.4	10	----	49.4	0.0	8	-8.0
M1	6	1	0.0	60.6	66	60.6	10	----	60.6	0.0	8	-8.0
M2	7	1	0.0	56.5	66	56.5	10	----	56.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	7	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 28 January 2019
CB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
West Litton Ave	20.0	point1	1	3,399.6	2,278.8	0.00				Average	
		point2	2	1,546.7	2,293.9	0.00				Average	
		point3	3	1,545.0	2,302.3	0.00					
East Litton Ave	20.0	point4	4	3,392.9	2,267.0	0.00				Average	
		point5	5	2,243.4	2,277.1	0.00				Average	
		point6	6	2,191.2	2,277.1	0.00				Average	
		point7	7	1,550.0	2,282.1	0.00					
Roadway3	18.0	point8	8	2,226.6	2,307.4	0.00				Average	
		point9	9	2,263.6	3,110.1	0.00					
Roadway4	18.0	point10	10	2,211.5	2,310.7	0.00				Average	
		point11	11	2,251.8	3,106.8	0.00					
Roadway5	15.0	point12	12	2,204.7	2,270.3	0.00				Average	
		point13	13	2,184.5	1,836.1	0.00				Average	
		point14	14	2,174.4	1,760.4	0.00				Average	
		point15	15	2,108.8	1,509.6	0.00				Average	
		point16	16	2,056.6	1,299.3	0.00				Average	
		point17	17	2,021.3	1,083.8	0.00				Average	
		point18	18	1,952.3	693.4	0.00					
Roadway6	15.0	point19	19	1,967.4	693.4	0.00				Average	
		point20	20	2,070.1	1,289.2	0.00				Average	
		point21	21	2,129.0	1,538.3	0.00				Average	
		point22	22	2,199.7	1,794.1	0.00				Average	
		point23	23	2,221.5	2,272.0	0.00					
West Palm Ave	18.0	point24	24	1,777.2	673.2	0.00				Average	
		point25	25	3,157.3	683.3	0.00					

East Palm Ave	18.0	point26	26	1,780.6	658.0	0.00				Average	
		point27	27	3,155.6	668.1	0.00					
South La Cadena	15.0	point28	28	3,524.2	3,110.1	0.00				Average	
		point29	29	3,468.6	2,684.4	0.00				Average	
		point30	30	3,446.8	2,453.8	0.00				Average	
		point31	31	3,419.8	2,191.2	0.00				Average	
		point32	32	3,396.3	1,804.2	0.00				Average	
		point33	33	3,374.4	1,649.3	0.00				Average	
		point34	34	3,318.8	1,339.7	0.00				Average	
		point35	35	3,106.8	333.2	0.00				Average	
		point36	36	3,042.8	8.4	0.00					
North La Cadena	15.0	point37	37	3,115.2	13.5	0.00				Average	
		point38	38	3,211.1	382.0	0.00				Average	
		point39	39	3,283.5	853.3	0.00				Average	
		point40	40	3,374.4	1,339.7	0.00				Average	
		point41	41	3,404.7	1,550.0	0.00				Average	
		point42	42	3,450.1	1,861.4	0.00				Average	
		point43	43	3,478.7	2,468.9	0.00				Average	
		point44	44	3,554.5	3,110.1	0.00					

Dudek **28 January 2019**
CB **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **Modern Pacific**
RUN: **Existing**

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
West Litton Ave	point1	1	87	30	2	30	1	30	0	0	0	0
	point2	2	87	30	2	30	1	30	0	0	0	0
	point3	3										
East Litton Ave	point4	4	87	30	2	30	1	30	0	0	0	0
	point5	5	87	30	2	30	1	30	0	0	0	0
	point6	6	87	30	2	30	1	30	0	0	0	0
	point7	7										
Roadway3	point8	8	0	0	0	0	0	0	0	0	0	0
	point9	9										
Roadway4	point10	10	0	0	0	0	0	0	0	0	0	0
	point11	11										
Roadway5	point12	12	4	30	0	0	0	0	0	0	0	0
	point13	13	4	30	0	0	0	0	0	0	0	0
	point14	14	4	30	0	0	0	0	0	0	0	0
	point15	15	4	30	0	0	0	0	0	0	0	0
	point16	16	4	30	0	0	0	0	0	0	0	0
	point17	17	4	30	0	0	0	0	0	0	0	0
	point18	18										
Roadway6	point19	19	4	30	0	0	0	0	0	0	0	0
	point20	20	4	30	0	0	0	0	0	0	0	0
	point21	21	4	30	0	0	0	0	0	0	0	0
	point22	22	4	30	0	0	0	0	0	0	0	0
	point23	23										

West Palm Ave	point24	24	29	30	1	30	0	0	0	0	0	0
	point25	25										
East Palm Ave	point26	26	29	30	1	30	0	0	0	0	0	0
	point27	27										
South La Cadena	point28	28	1979	45	41	45	20	45	0	0	0	0
	point29	29	1979	45	41	45	20	45	0	0	0	0
	point30	30	1979	45	41	45	20	45	0	0	0	0
	point31	31	1979	45	41	45	20	45	0	0	0	0
	point32	32	1979	45	41	45	20	45	0	0	0	0
	point33	33	1979	45	41	45	20	45	0	0	0	0
	point34	34	1979	45	41	45	20	45	0	0	0	0
	point35	35	1979	45	41	45	20	45	0	0	0	0
	point36	36										
North La Cadena	point37	37	1979	45	41	45	20	45	0	0	0	0
	point38	38	1979	45	41	45	20	45	0	0	0	0
	point39	39	1979	45	41	45	20	45	0	0	0	0
	point40	40	1979	45	41	45	20	45	0	0	0	0
	point41	41	1979	45	41	45	20	45	0	0	0	0
	point42	42	1979	45	41	45	20	45	0	0	0	0
	point43	43	1979	45	41	45	20	45	0	0	0	0
	point44	44										

Dudek 28 January 2019
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST2	1	1	2,438.6	2,314.1	0.00	4.92	57.90	66	10.0	8.0	Y
ST3	2	1	1,886.6	2,339.3	0.00	4.92	58.40	66	10.0	8.0	Y
ST1	3	1	2,147.5	2,098.7	0.00	4.92	56.20	66	10.0	8.0	Y
ST4	4	1	2,228.3	1,757.0	0.00	4.92	55.70	66	10.0	8.0	Y
ST5	5	1	1,906.8	725.4	0.00	4.92	52.80	66	10.0	8.0	Y
M1	6	1	3,287.1	2,378.9	0.00	4.92	0.00	66	10.0	8.0	Y
M2	7	1	2,933.9	604.6	0.00	4.92	0.00	66	10.0	8.0	Y

Dudek
CB

28 January 2019
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST2	1	1	57.9	57.7	66	-0.2	10	----	57.7	0.0	8	-8.0
ST3	2	1	58.4	55.1	66	-3.3	10	----	55.1	0.0	8	-8.0
ST1	3	1	56.2	48.1	66	-8.1	10	----	48.1	0.0	8	-8.0
ST4	4	1	55.7	46.7	66	-9.0	10	----	46.7	0.0	8	-8.0
ST5	5	1	52.8	50.1	66	-2.7	10	----	50.1	0.0	8	-8.0
M1	6	1	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0
M2	7	1	0.0	58.3	66	58.3	10	----	58.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	7	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 28 January 2019
CB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
West Litton Ave	20.0	point1	1	3,399.6	2,278.8	0.00				Average	
		point2	2	1,546.7	2,293.9	0.00				Average	
		point3	3	1,545.0	2,302.3	0.00					
East Litton Ave	20.0	point4	4	3,392.9	2,267.0	0.00				Average	
		point5	5	2,243.4	2,277.1	0.00				Average	
		point6	6	2,191.2	2,277.1	0.00				Average	
		point7	7	1,550.0	2,282.1	0.00					
Roadway3	18.0	point8	8	2,226.6	2,307.4	0.00				Average	
		point9	9	2,263.6	3,110.1	0.00					
Roadway4	18.0	point10	10	2,211.5	2,310.7	0.00				Average	
		point11	11	2,251.8	3,106.8	0.00					
Roadway5	15.0	point12	12	2,204.7	2,270.3	0.00				Average	
		point13	13	2,184.5	1,836.1	0.00				Average	
		point14	14	2,174.4	1,760.4	0.00				Average	
		point15	15	2,108.8	1,509.6	0.00				Average	
		point16	16	2,056.6	1,299.3	0.00				Average	
		point17	17	2,021.3	1,083.8	0.00				Average	
		point18	18	1,952.3	693.4	0.00					
Roadway6	15.0	point19	19	1,967.4	693.4	0.00				Average	
		point20	20	2,070.1	1,289.2	0.00				Average	
		point21	21	2,129.0	1,538.3	0.00				Average	
		point22	22	2,199.7	1,794.1	0.00				Average	
		point23	23	2,221.5	2,272.0	0.00					
West Palm Ave	18.0	point24	24	1,777.2	673.2	0.00				Average	
		point25	25	3,157.3	683.3	0.00					

East Palm Ave	18.0	point26	26	1,780.6	658.0	0.00				Average	
		point27	27	3,155.6	668.1	0.00					
South La Cadena	15.0	point28	28	3,524.2	3,110.1	0.00				Average	
		point29	29	3,468.6	2,684.4	0.00				Average	
		point30	30	3,446.8	2,453.8	0.00				Average	
		point31	31	3,419.8	2,191.2	0.00				Average	
		point32	32	3,396.3	1,804.2	0.00				Average	
		point33	33	3,374.4	1,649.3	0.00				Average	
		point34	34	3,318.8	1,339.7	0.00				Average	
		point35	35	3,106.8	333.2	0.00				Average	
		point36	36	3,042.8	8.4	0.00					
North La Cadena	15.0	point37	37	3,115.2	13.5	0.00				Average	
		point38	38	3,211.1	382.0	0.00				Average	
		point39	39	3,283.5	853.3	0.00				Average	
		point40	40	3,374.4	1,339.7	0.00				Average	
		point41	41	3,404.7	1,550.0	0.00				Average	
		point42	42	3,450.1	1,861.4	0.00				Average	
		point43	43	3,478.7	2,468.9	0.00				Average	
		point44	44	3,554.5	3,110.1	0.00					

Dudek 28 January 2019
CB TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: Modern Pacific
RUN: Existing

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
West Litton Ave	point1	1	126	30	3	30	1	30	0	0	0	0
	point2	2	126	30	3	30	1	30	0	0	0	0
	point3	3										
East Litton Ave	point4	4	126	30	3	30	1	30	0	0	0	0
	point5	5	126	30	3	30	1	30	0	0	0	0
	point6	6	126	30	3	30	1	30	0	0	0	0
	point7	7										
Roadway3	point8	8	0	0	0	0	0	0	0	0	0	0
	point9	9										
Roadway4	point10	10	0	0	0	0	0	0	0	0	0	0
	point11	11										
Roadway5	point12	12	4	30	0	0	0	0	0	0	0	0
	point13	13	4	30	0	0	0	0	0	0	0	0
	point14	14	4	30	0	0	0	0	0	0	0	0
	point15	15	4	30	0	0	0	0	0	0	0	0
	point16	16	4	30	0	0	0	0	0	0	0	0
	point17	17	4	30	0	0	0	0	0	0	0	0
	point18	18										
Roadway6	point19	19	4	30	0	0	0	0	0	0	0	0
	point20	20	4	30	0	0	0	0	0	0	0	0
	point21	21	4	30	0	0	0	0	0	0	0	0
	point22	22	4	30	0	0	0	0	0	0	0	0
	point23	23										

West Palm Ave	point24	24	29	30	1	30	0	0	0	0	0	0
	point25	25										
East Palm Ave	point26	26	29	30	1	30	0	0	0	0	0	0
	point27	27										
South La Cadena	point28	28	2003	45	41	45	21	45	0	0	0	0
	point29	29	2003	45	41	45	21	45	0	0	0	0
	point30	30	2003	45	41	45	21	45	0	0	0	0
	point31	31	2003	45	41	45	21	45	0	0	0	0
	point32	32	2003	45	41	45	21	45	0	0	0	0
	point33	33	2003	45	41	45	21	45	0	0	0	0
	point34	34	2003	45	41	45	21	45	0	0	0	0
	point35	35	2003	45	41	45	21	45	0	0	0	0
	point36	36										
North La Cadena	point37	37	2003	45	41	45	21	45	0	0	0	0
	point38	38	2003	45	41	45	21	45	0	0	0	0
	point39	39	2003	45	41	45	21	45	0	0	0	0
	point40	40	2003	45	41	45	21	45	0	0	0	0
	point41	41	2003	45	41	45	21	45	0	0	0	0
	point42	42	2003	45	41	45	21	45	0	0	0	0
	point43	43	2003	45	41	45	21	45	0	0	0	0
	point44	44										

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INPUT: RECEIVERS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST2	1	1	2,438.6	2,314.1	0.00	4.92	57.90	66	10.0	8.0	Y
ST3	2	1	1,886.6	2,339.3	0.00	4.92	58.40	66	10.0	8.0	Y
ST1	3	1	2,147.5	2,098.7	0.00	4.92	56.20	66	10.0	8.0	Y
ST4	4	1	2,228.3	1,757.0	0.00	4.92	55.70	66	10.0	8.0	Y
ST5	5	1	1,906.8	725.4	0.00	4.92	52.80	66	10.0	8.0	Y
M1	6	1	3,287.1	2,378.9	0.00	4.92	0.00	66	10.0	8.0	Y
M2	7	1	2,933.9	604.6	0.00	4.92	0.00	66	10.0	8.0	Y

Dudek
CB

28 January 2019
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Modern Pacific
RUN: Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST2	1	1	57.9	59.0	66	1.1	10	----	59.0	0.0	8	-8.0
ST3	2	1	58.4	56.4	66	-2.0	10	----	56.4	0.0	8	-8.0
ST1	3	1	56.2	48.7	66	-7.5	10	----	48.7	0.0	8	-8.0
ST4	4	1	55.7	46.8	66	-8.9	10	----	46.8	0.0	8	-8.0
ST5	5	1	52.8	50.2	66	-2.6	10	----	50.2	0.0	8	-8.0
M1	6	1	0.0	62.6	66	62.6	10	----	62.6	0.0	8	-8.0
M2	7	1	0.0	58.4	66	58.4	10	----	58.4	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	7	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/4/2019
Case Description: Litton Bostick Residential_Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Receiver 50'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50	0
Dozer	No	40		81.7	50	0
Dozer	No	40		81.7	75	0
Backhoe	No	40		77.6	75	0
Backhoe	No	40		77.6	100	0
Front End Loader	No	40		79.1	100	0
Tractor	No	40	84		125	0

Results

	Calculated (dBA)		Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A
Dozer	78.1	74.2	N/A	N/A	N/A	N/A	N/A
Backhoe	74	70.1	N/A	N/A	N/A	N/A	N/A
Backhoe	71.5	67.6	N/A	N/A	N/A	N/A	N/A
Front End Loader	73.1	69.1	N/A	N/A	N/A	N/A	N/A
Tractor	76	72.1	N/A	N/A	N/A	N/A	N/A
Total	81.7	82.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Acoustical Center 300'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	300	0
Dozer	No	40		81.7	300	0

Dozer	No	40		81.7	300	0
Backhoe	No	40		77.6	300	0
Backhoe	No	40		77.6	300	0
Front End Loader	No	40		79.1	300	0
Tractor	No	40	84		300	0

Results

	Calculated (dBA)		Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Dozer	66.1	62.1	N/A	N/A	N/A	N/A	N/A
Dozer	66.1	62.1	N/A	N/A	N/A	N/A	N/A
Dozer	66.1	62.1	N/A	N/A	N/A	N/A	N/A
Backhoe	62	58	N/A	N/A	N/A	N/A	N/A
Backhoe	62	58	N/A	N/A	N/A	N/A	N/A
Front End Loader	63.5	59.6	N/A	N/A	N/A	N/A	N/A
Tractor	68.4	64.5	N/A	N/A	N/A	N/A	N/A
Total	68.4	69.9	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/4/2019
Case Description: Litton Bostick Residential_Grading

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Receiver 50'	Residential	65	60	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	50	0
Grader	No	40	85		50	0
Dozer	No	40		81.7	80	0
Scraper	No	40		83.6	80	0
Scraper	No	40		83.6	110	0
Backhoe	No	40		77.6	110	0
Tractor	No	40	84		140	0

Results

	Calculated (dBA)		Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A

Grader		85	81	N/A	N/A	N/A	N/A	N/A
Dozer		77.6	73.6	N/A	N/A	N/A	N/A	N/A
Scraper		79.5	75.5	N/A	N/A	N/A	N/A	N/A
Scraper		76.7	72.8	N/A	N/A	N/A	N/A	N/A
Backhoe		70.7	66.7	N/A	N/A	N/A	N/A	N/A
Tractor		75.1	71.1	N/A	N/A	N/A	N/A	N/A
	Total	85	84.3	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Acoustical Center 300'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	300	0
Grader	No	40	85		300	0
Dozer	No	40		81.7	300	0
Scraper	No	40		83.6	300	0
Scraper	No	40		83.6	300	0
Backhoe	No	40		77.6	300	0
Tractor	No	40	84		300	0

	Calculated (dBA)		Results		Noise Limits (dBA)		
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator	65.1	61.2	N/A	N/A	N/A	N/A	N/A
Grader	69.4	65.5	N/A	N/A	N/A	N/A	N/A
Dozer	66.1	62.1	N/A	N/A	N/A	N/A	N/A
Scraper	68	64	N/A	N/A	N/A	N/A	N/A
Scraper	68	64	N/A	N/A	N/A	N/A	N/A
Backhoe	62	58	N/A	N/A	N/A	N/A	N/A
Tractor	68.4	64.5	N/A	N/A	N/A	N/A	N/A
Total	69.4	71.7	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/4/2019
Case Description: Litton Bostick Residential_Building Construction

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Nearest Receiver 50'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	50	0
Man Lift	No	20		74.7	50	0
Man Lift	No	20		74.7	75	0
Man Lift	No	20		74.7	75	0
Generator	No	50		80.6	100	0
Backhoe	No	40		77.6	100	0
Front End Loader	No	40		79.1	125	0
Tractor	No	40	84		125	0
Welder / Torch	No	40		74	125	0

Results

Equipment	Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A
Man Lift	71.2	64.2	N/A	N/A	N/A	N/A	N/A
Man Lift	71.2	64.2	N/A	N/A	N/A	N/A	N/A
Generator	74.6	71.6	N/A	N/A	N/A	N/A	N/A
Backhoe	71.5	67.6	N/A	N/A	N/A	N/A	N/A
Front End Loader	71.2	67.2	N/A	N/A	N/A	N/A	N/A
Tractor	76	72.1	N/A	N/A	N/A	N/A	N/A
Welder / Torch	66	62.1	N/A	N/A	N/A	N/A	N/A
Total	80.6	78.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Acoustical Center 300'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	300	0
Man Lift	No	20		74.7	300	0
Man Lift	No	20		74.7	300	0
Man Lift	No	20		74.7	300	0
Generator	No	50		80.6	300	0

Backhoe	No	40		77.6	300	0
Front End Loader	No	40		79.1	300	0
Tractor	No	40	84		300	0
Welder / Torch	No	40		74	300	0

Results

	Calculated (dBA)		Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Crane	65	57	N/A	N/A	N/A	N/A	N/A
Man Lift	59.1	52.1	N/A	N/A	N/A	N/A	N/A
Man Lift	59.1	52.1	N/A	N/A	N/A	N/A	N/A
Man Lift	59.1	52.1	N/A	N/A	N/A	N/A	N/A
Generator	65.1	62.1	N/A	N/A	N/A	N/A	N/A
Backhoe	62	58	N/A	N/A	N/A	N/A	N/A
Front End Loader	63.5	59.6	N/A	N/A	N/A	N/A	N/A
Tractor	68.4	64.5	N/A	N/A	N/A	N/A	N/A
Welder / Torch	58.4	54.5	N/A	N/A	N/A	N/A	N/A
Total	68.4	68.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/4/2019
Case Description: Litton Bostick Residential_Paving

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Receiver 50'	Residential	65	60	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	50	0
Paver	No	50		77.2	50	0
All Other Equipment > 5 HP	No	50	85		75	0
All Other Equipment > 5 HP	No	50	85		75	0
Roller	No	20		80	100	0
Roller	No	20		80	100	0

Results

	Calculated (dBA)		Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A

Paver		77.2	74.2	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP		81.5	78.5	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP		81.5	78.5	N/A	N/A	N/A	N/A	N/A
Roller		74	67	N/A	N/A	N/A	N/A	N/A
Roller		74	67	N/A	N/A	N/A	N/A	N/A
	Total	81.5	83.1	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Acoustical Center 300'	Residential	65	60	55

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Paver	No	50		77.2	300	0
Paver	No	50		77.2	300	0
All Other Equipment > 5 HP	No	50	85		300	0
All Other Equipment > 5 HP	No	50	85		300	0
Roller	No	20		80	300	0
Roller	No	20		80	300	0

			Results				
	Calculated (dBA)		Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Paver	61.7	58.6	N/A	N/A	N/A	N/A	N/A
Paver	61.7	58.6	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	69.4	66.4	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	69.4	66.4	N/A	N/A	N/A	N/A	N/A
Roller	64.4	57.4	N/A	N/A	N/A	N/A	N/A
Roller	64.4	57.4	N/A	N/A	N/A	N/A	N/A
Total	69.4	70.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/4/2019
Case Description: Litton Bostick Residential_Architectural Coating

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Receiver 50'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50	0

Results

	Calculated (dBA)		Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A
Total	77.7	73.7	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Acoustical Center 300'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	300	0

Results

	Calculated (dBA)		Noise Limits (dBA)				
			Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Compressor (air)	62.1	58.1	N/A	N/A	N/A	N/A	N/A
Total	62.1	58.1	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.