NOISE DATA WORKSHEET

Job No: 100512

Job Name: I-57 Walnut Ridge to Missouri State Line

Roadway Reference: I-57 Hwy 67 Through Corning (Without Bypass)

County: Lawrence, Randolph, Clay

Design Year: 2040

Year(s) To Be Modeled: 2022

Roadway Cross-Sections: Two lanes with center turn lane - 42' wide paved section

Note:
DHV = (ADT)(K)
DDHV = (ADT)(K)(D)
K - Percent of ADT occuring in design hour
D - Directional Distribution

Operating Speed: 40

Kfactor 9%   **D** 55%

Traffic Data:

	YEAR	ADT	%TRUCK	DHV	CARS	MT	HT	CARS/2	MT/2	HT/2
						4.1%	28.1%			
Existing	2022	8,100	32%	729	494	30	205			
	2022		32%	0	0	0	0	0	0	0

Garver
Ryan Mountain and

RESULTS: SOUND
PROJECT/CONTR   I-57 ARDOT No. 100512
RUN: Hwy 67 2022 W/out Bypass
BARRIER DESIGN   INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

27-Feb-24
TNM 2.5
Calculated with TNM 2.5

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 LAeq1h	Calculated Noise Reduction Calculated Goal		Calculated minus Goal
			dBA	dBA	dBA	dB	dB			dBA	dB	dB	dB
	25	1	1	0	73.8	66	73.8		10 Snd Lvl	73.8	0	8	-8
	42	2	1	0	71.1	66	71.1		10 Snd Lvl	71.1	0	8	-8
	75	3	1	0	68.2	66	68.2		10 Snd Lvl	68.2	0	8	-8
	105	4	1	0	66.6	66	66.6		10 Snd Lvl	66.6	0	8	-8
	125	5	1	0	65.7	66	65.7		10 ----	65.7	0	8	-8
	150	6	1	0	64.8	66	64.8		10 ----	64.8	0	8	-8
	180	7	1	0	63.5	66	63.5		10 ----	63.5	0	8	-8
	200	8	1	0	62.5	66	62.5		10 ----	62.5	0	8	-8
	250	11	1	0	60.2	66	60.2		10 ----	60.2	0	8	-8
	300	12	1	0	58.5	66	58.5		10 ----	58.5	0	8	-8
	350	31	1	0	57.0	66	57		10 ----	57	0	8	-8

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	11	0	0	0
All Impacted	4	0	0	0
All that meet NR Goal	0	0	0	0

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D - Directional Distribution

Operating Speed: 40

Kfactor	8%	D	55%

Traffic Data:

	YEAR	ADT	%TRUCK	DHV	CARS	MT	HT	CARS/2	MT/2	HT/2
						0.30%	6.40%			
W/Bypass	2022	4,680	6.7%	358	334	1	23			
		0	7%	0	0	0	0	0	0	0

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			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
	22	1	1	0	67.2	66	67.2	10	Snd Lvl	67.2	0	8	-8
	28	2	1	0	66.0	66	66	10	Snd Lvl	66	0	8	-8
	75	3	1	0	61.1	66	61.1	10	----	61.1	0	8	-8
	105	4	1	0	59.4	66	59.4	10	----	59.4	0	8	-8
	125	5	1	0	58.5	66	58.5	10	----	58.5	0	8	-8
	150	6	1	0	57.6	66	57.6	10	----	57.6	0	8	-8
	180	7	1	0	56.3	66	56.3	10	----	56.3	0	8	-8
	200	8	1	0	55.1	66	55.1	10	----	55.1	0	8	-8
	250	11	1	0	52.7	66	52.7	10	----	52.7	0	8	-8
	300	12	1	0	50.7	66	50.7	10	----	50.7	0	8	-8
	350	31	1	0	49.1	66	49.1	10	----	49.1	0	8	-8

Dwelling Units	# DUs	Noise Reduction Min dB	Avg dB	Max dB
All Selected	11	0	0	0
All Impacted	2	0	0	0
All that meet NR Goal	0	0	0	0