US-89
FARMINGTON TO I-84

US-89: FARMINGTON TO SR-193 NOISE ANALYSIS UPDATE

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PREPARED FOR:
The Utah Department of Transportation

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ACRONYMS, ABBREVIATIONS, AND DEFINITIONS

UDOT	Utah Department of Transportation
CFR	Code of Federal Regulations
dBA	A-weighted decibel
FHWA	Federal Highway Administration
L_{eq}	equivalent steady-state noise level, which in a stated period of time would contain the same acoustical energy as the time-varying noise level during the same period
$L_{eq}(h)$	energy-average of the A-weighted noise levels occurring during a 1-hour period
noise	unwanted sound
receptor	point in the model representative of several noise sensitive locations
TNM	Traffic Noise Model

NOISE STUDY

1.0 INTRODUCTION

This Noise Analysis was prepared in accordance with the UDOT Noise Abatement Policy, last revised June 15, 2017, consistent with federal regulation 23 CFR 772 and Utah Administrative Code R930-3.

This noise analysis updates the noise analysis prepared for the US-89 State Environmental Study in November 2017. This updated noise analysis was prepared to take into account design changes to the proposed action. The original proposed action included grade-separating or constructing interchanges at several cross-street locations. At these locations, US-89 would go over the cross-streets, with the cross-streets remaining at-grade. During the design phase of the project, the decision was made to construct US-89 under the cross-streets, with the cross-streets remaining at-grade. This change required an update to the noise analysis. Since no design changes were made south of Hidden Valley Drive, north of Antelope Drive, or west of the Gordon Avenue interchange, the updated noise analysis study area focuses on the area directly adjacent to the US-89 corridor and terminates at Hidden Valley Drive in Fruit Heights and just north of Antelope Drive in Layton. For noise impact and mitigation analysis for the areas outside the updated noise analysis study area see the *US-89 State Environmental Study: Farmington to I-84*.

2.0 DESCRIPTION OF PROJECT

The proposed action for this study includes improvements to US-89 in Davis County, Utah between Shepard Lane in Farmington and SR-193 in Layton (refer to Figure 1 for study area). These improvements include:

- Widening US-89 from four lanes to a six-lane freeway from I-15 in Farmington to SR-193 in Layton
- The addition of frontage roads from Nicholls Road in Fruit Heights to Oak Hills Drive (SR-109) in Layton
- Constructing grade-separated interchanges at 400 North in Fruit Heights, Oak Hills Drive (SR-109) in Layton, Gordon Avenue in Layton, and Antelope Drive in Layton, with US-89 under the cross-streets
- Constructing a grade-separated crossing at Nicholls Road in Fruit Heights and Crestwood Road in Kaysville, with US-89 under the cross-streets.

2.1 Applicability

The UDOT Noise Abatement Policy states that "noise abatement will be considered for all Type I projects where noise impacts are identified." Type I projects are projects that include any of the following: the construction of a highway at a new location; the physical alteration of an existing highway that substantially alters its alignment; the addition of a through traffic lane; the addition of an auxiliary lane; the addition

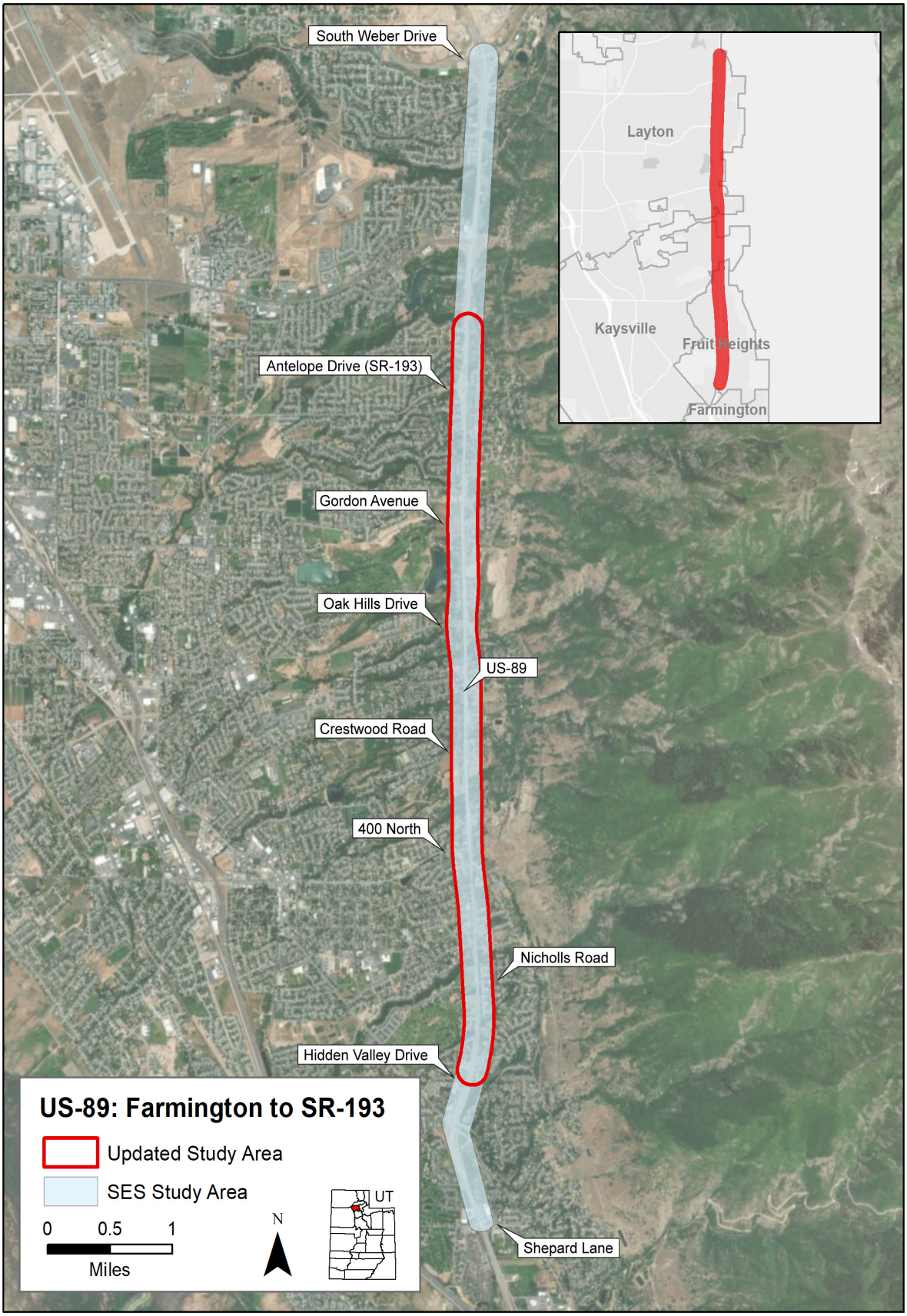


Figure 1: Study Area

or relocation of interchange lanes or ramps; or the addition or substantial alteration of a weigh station, rest stop, ride share lot, or toll plaza. This project is considered a Type I project because of the alteration of the vertical alignment of US-89, the addition of through traffic lanes, and the addition of interchanges.

3.0 ANALYSIS OF TRAFFIC NOISE IMPACTS

Traffic noise is measured in A-weighted sound levels in decibels (dBA) which most closely approximates the way the human ear hears sounds at different frequencies (see Figure 2). Since traffic noise varies over time, the sound levels for this noise analysis are expressed as "equivalent levels" or Leq, representing the average sound level over a one hour period of time. Unless noted otherwise, all sound levels in this noise analysis are expressed in the hourly equivalent noise level.

3.1 Noise Abatement Criteria

The Federal Highway Administration (FHWA) has established Noise Abatement Criteria for several categories of land use activities (see Table 1). FHWA's noise criteria is based on sound levels that are considered to be an impact to nearby property owners, also known as receptors. Primary consideration is to be given for exterior areas where frequent human use occurs.

UDOT has developed a Noise Abatement Policy for transportation projects, which conforms to FHWA noise abatement requirements outlined in 23 CFR §772.

UDOT's Noise Abatement Criteria is the noise decibel (dBA) value reflecting the approach criteria of 1 dBA below the Noise Abatement Criteria values listed in 23 CFR §772 for each land use category (see Table 1).

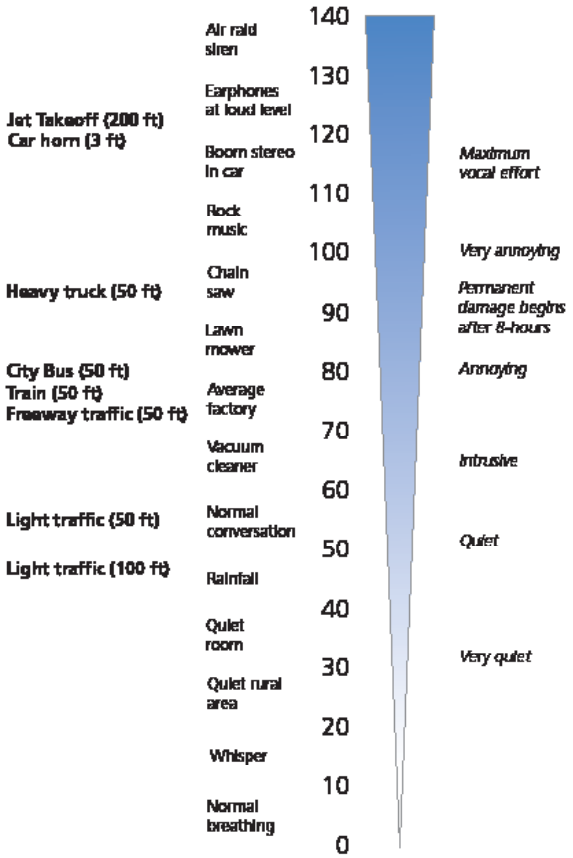


Figure 2: Sound Levels (in dBA) of Common Sounds (Compiled from Federal Transit Administration and Environmental Protection Agency Data)

UDOT's Noise Abatement Policy states that a traffic noise impact occurs when either 1) the future worst case noise level is equal to or greater than the UDOT Noise Abatement Criteria for specified land use categories or, 2) the future worst case

noise level is greater than or equal to an increase of 10 dBA over the existing noise level.

Noise impact and abatement analyses are required within Land Use Activity Categories A, B, C, D, and E (see Table 1) only when development exists or has been permitted (formal building permit issued prior to the date the final environmental decision document is approved). Activity Categories F and G include lands that are not sensitive to traffic noise. There is no impact criteria for these land use types and an analysis of noise impacts is not required.

For the purposes of this noise analysis, aerial photography and on-site visits were used to identify existing land uses and structure locations.

Table 1: Noise Abatement Criteria

Activity Category	FHWA Criteria Leq(h)	UDOT Criteria Leq(h)	Evaluation Location	Activity Description
A	57	56	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67	66	Exterior	Residential.
C	67	66	Exterior	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails and trail crossings.
D	52	51	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72	71	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.

Activity Category	FHWA Criteria Leq(h)	UDOT Criteria Leq(h)	Evaluation Location	Activity Description
F	---	---		Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	---		Undeveloped lands that are not permitted.

Source: UDOT Noise Abatement Policy

3.2 Noise Sensitive Land Uses

Noise sensitive land uses within each of the Activity Categories within the study area can be seen in Table 2.

Table 2: Noise Sensitive Land Uses

Activity Category	Description of Location within Study Area
A	• None
B	• Residential neighborhoods within the study area
C	• Meetinghouses for the Church of Jesus Christ of Latter-Day Saints • Mountain Road Evangelical Presbyterian Church • Valley View Golf Course • Davis Park Golf Course • Nicholls Park • Harvey Park • Cherry Hill Water Park
D	• Interior of churches
E	• Businesses and offices
F	• None
G	• Undeveloped land within the study area

The UDOT Noise Policy states that a noise impact analysis will not be required for Activity Categories F and G. However, for Activity Category G, an estimate of the distance to the approach criteria must be provided to local governments. See Section 6 of this noise analysis for additional information.

3.3 Existing Noise

The primary source of noise in the study area is automobile and truck traffic from US-89 and other roadways in the area. Existing traffic volumes were provided by Horrocks Traffic Group (see Appendix F).

Of the 750 receptors within the study area, 219 currently experience a noise level above the Noise Abatement Criteria (NAC) threshold (see Existing Noise Levels maps in Appendix A).

3.4 Proposed Action Noise

Projected traffic noise levels for the Proposed Action were calculated with TNM 2.5 software using build conditions, including travel lane configurations and traffic volumes provided by Horrocks Traffic Group (see Appendix F). Noise levels were determined using the greatest hourly traffic noise conditions likely to occur on a regular basis, or LOS C traffic volumes.

The Preferred Alternative would generally result in a 1.0 dBA noise level increase throughout the study area. The greatest increase in noise would be 5.7 dBA at receptor 553B (see map 15 in Appendix B). Of the 750 receptors, 286 would be impacted by Proposed Action noise levels. This increase in impacted receptors is due to the addition of a travel lane along US-89, the increased speed with the conversion of the roadway to a freeway, as well as an increase in total traffic volumes. Some of the Proposed Action noise levels have a noticeable decrease from the existing level due to the grade-separation introduced by the new freeway. The US-89 mainline is lower in some areas and therefore some receptors experience a decrease in noise levels. A total of 286 impacted receptors exhibit noise levels that exceed the Noise Abatement Criteria (NAC), while no impacted receptors exhibit noise levels that are greater than 10 dBA above existing levels. Projected future worst case noise levels and impacted receptors can be seen in the Build Noise Levels maps in Appendix B.

3.5 Summary

Table 3 shows a summary of existing and Proposed Action noise levels (the letter on the map label represents the activity category). Refer to the maps in Appendix A and B for receptor locations. See Appendix G for a comparison of receptor numbers between the *US-89 State Environmental Study: Farmington to I-84* and this analysis.

Table 3: Summary of Existing and Proposed Action Noise Levels

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
1B	66.0	68.6	Yes	70.9	No	**Yes**	2.3
2B	66.0	66.2	Yes	59.5	No	No	-6.7
3B	66.0	63.9	No	58.2	No	No	-5.7
4C	66.0	65.3	No	63.4	No	No	-1.9
5C	66.0	62.5	No	55.2	No	No	-7.3
6C	66.0	60.1	No	56.2	No	No	-3.9

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
7C	66.0	58.4	No	55.4	No	No	-3.0
8C	66.0	60.1	No	60.8	No	No	0.7
9C	66.0	63.0	No	58.3	No	No	-4.7
10C	66.0	60.7	No	57.0	No	No	-3.7
11C	66.0	62.0	No	57.4	No	No	-4.6
12C	66.0	59.7	No	56.3	No	No	-3.4
13B	66.0	72.1	Yes	73.9	No	**Yes**	1.8
14B	66.0	72.3	Yes	75.1	No	**Yes**	2.8
15B	66.0	72.6	Yes	75.1	No	**Yes**	2.5
16B	66.0	63.5	No	65.5	No	No	2.0
17B	66.0	62.7	No	64.2	No	No	1.5
18B	66.0	64.0	No	65.5	No	No	1.5
19B	66.0	61.6	No	63.6	No	No	2.0
20B	66.0	69.2	Yes	70.9	No	**Yes**	1.7
21B	66.0	63.5	No	65.9	No	No	2.4
22B	66.0	61.1	No	63.2	No	No	2.1
23B	66.0	58.6	No	60.7	No	No	2.1
24B	66.0	68.8	Yes	69.6	No	**Yes**	0.8
25B	66.0	64.3	No	65.9	No	No	1.6
26B	66.0	61.6	No	63.2	No	No	1.6
27B	66.0	68.4	Yes	69.9	No	**Yes**	1.5
28B	66.0	63.8	No	65.5	No	No	1.7
29B	66.0	60.3	No	62.0	No	No	1.7
30B	66.0	60.2	No	62.0	No	No	1.8
31B	66.0	60.3	No	61.8	No	No	1.5
32B	66.0	69.0	Yes	70.5	No	**Yes**	1.5
33B	66.0	70.1	Yes	71.4	No	**Yes**	1.3
34B	66.0	60.4	No	61.8	No	No	1.4
35B	66.0	59.3	No	60.7	No	No	1.4
36B	66.0	57.8	No	60.4	No	No	2.6
37B	66.0	59.1	No	62.0	No	No	2.9
38B	66.0	63.3	No	65.7	No	No	2.4
39B	66.0	62.5	No	64.7	No	No	2.2
40B	66.0	61.6	No	64.4	No	No	2.8
41B	66.0	63.3	No	65.7	No	No	2.4

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
42B	66.0	62.3	No	65.1	No	No	2.8
43B	66.0	63.8	No	66.0	No	**Yes**	2.2
44B	66.0	62.9	No	65.3	No	No	2.4
45B	66.0	61.8	No	64.2	No	No	2.4
46B	66.0	62.0	No	64.6	No	No	2.6
47B	66.0	61.9	No	64.6	No	No	2.7
48B	66.0	61.5	No	63.9	No	No	2.4
49B	66.0	60.6	No	62.8	No	No	2.2
50B	66.0	60.9	No	63.3	No	No	2.4
51B	66.0	66.6	Yes	68.4	No	**Yes**	1.8
52B	66.0	64.3	No	66.4	No	**Yes**	2.1
53B	66.0	66.3	Yes	68.4	No	**Yes**	2.1
54B	66.0	62.0	No	64.6	No	No	2.6
55B	66.0	67.3	Yes	69.4	No	**Yes**	2.1
56B	66.0	61.6	No	64.3	No	No	2.7
57B	66.0	67.7	Yes	69.7	No	**Yes**	2.0
58B	66.0	69.8	Yes	71.9	No	**Yes**	2.1
59B	66.0	70.2	Yes	72.1	No	**Yes**	1.9
60B	66.0	71.1	Yes	72.9	No	**Yes**	1.8
61B	66.0	72.4	Yes	75.0	No	**Yes**	2.6
62B	66.0	62.1	No	64.8	No	No	2.7
63B	66.0	63.1	No	65.7	No	No	2.6
64B	66.0	62.3	No	65.0	No	No	2.7
65B	66.0	64.9	No	67.2	No	**Yes**	2.3
66B	66.0	64.4	No	66.7	No	**Yes**	2.3
67B	66.0	65.1	No	67.4	No	**Yes**	2.3
68B	66.0	62.7	No	65.1	No	No	2.4
69B	66.0	63.8	No	66.2	No	**Yes**	2.4
70B	66.0	62.7	No	64.8	No	No	2.1
71B	66.0	65.1	No	62.2	No	No	-2.9
72B	66.0	64.5	No	61.0	No	No	-3.5
73B	66.0	67.1	Yes	64.1	No	No	-3.0
74B	66.0	65.6	No	61.9	No	No	-3.7
75B	66.0	63.5	No	57.8	No	No	-5.7

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
76B	66.0	65.5	No	59.5	No	No	-6.0
77B	66.0	65.4	No	62.9	No	No	-2.5
78B	66.0	65.4	No	62.8	No	No	-2.6
79B	66.0	66.0	Yes	65.1	No	No	-0.9
80B	66.0	64.5	No	64.1	No	No	-0.4
81B	66.0	63.0	No	63.4	No	No	0.4
82B	66.0	62.3	No	62.9	No	No	0.6
83B	66.0	62.3	No	61.3	No	No	-1.0
84B	66.0	62.7	No	61.6	No	No	-1.1
85B	66.0	63.2	No	61.8	No	No	-1.4
86B	66.0	63.7	No	62.2	No	No	-1.5
87B	66.0	63.0	No	60.4	No	No	-2.6
88B	66.0	63.6	No	61.3	No	No	-2.3
89B	66.0	63.6	No	60.7	No	No	-2.9
90B	66.0	63.0	No	59.2	No	No	-3.8
91B	66.0	62.7	No	56.4	No	No	-6.3
92B	66.0	63.7	No	57.5	No	No	-6.2
93B	66.0	62.5	No	56.7	No	No	-5.8
94B	66.0	65.0	No	61.8	No	No	-3.2
95B	66.0	64.9	No	61.4	No	No	-3.5
96B	66.0	62.7	No	59.8	No	No	-2.9
97B	66.0	63.1	No	60.6	No	No	-2.5
98B	66.0	62.5	No	62.9	No	No	0.4
99B	66.0	74.0	Yes	75.9	No	**Yes**	1.9
100B	66.0	66.4	Yes	69.6	No	**Yes**	3.2
101B	66.0	66.6	Yes	69.9	No	**Yes**	3.3
102B	66.0	61.7	No	63.7	No	No	2.0
103B	66.0	59.1	No	60.2	No	No	1.1
104B	66.0	60.3	No	61.8	No	No	1.5
105B	66.0	63.7	No	66.1	No	**Yes**	2.4
106B	66.0	61.7	No	63.7	No	No	2.0
107B	66.0	62.7	No	64.8	No	No	2.1
108B	66.0	60.5	No	62.3	No	No	1.8
109B	66.0	60.4	No	62.2	No	No	1.8

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
110B	66.0	63.1	No	65.2	No	No	2.1
111B	66.0	65.4	No	67.6	No	**Yes**	2.2
112B	66.0	59.4	No	61.2	No	No	1.8
113B	66.0	70.8	Yes	72.4	No	**Yes**	1.6
114B	66.0	65.7	No	68.1	No	**Yes**	2.4
115B	66.0	62.6	No	64.9	No	No	2.3
116B	66.0	60.7	No	62.7	No	No	2.0
117B	66.0	57.3	No	57.6	No	No	0.3
118B	66.0	57.6	No	59.9	No	No	2.3
119B	66.0	59.9	No	61.9	No	No	2.0
120B	66.0	64.6	No	66.3	No	**Yes**	1.7
121B	66.0	75.5	Yes	77.0	No	**Yes**	1.5
122B	66.0	75.3	Yes	76.7	No	**Yes**	1.4
123B	66.0	75.4	Yes	77.0	No	**Yes**	1.6
124B	66.0	75.4	Yes	77.2	No	**Yes**	1.8
125B	66.0	75.5	Yes	77.1	No	**Yes**	1.6
126B	66.0	75.8	Yes	77.7	No	**Yes**	1.9
127B	66.0	75.0	Yes	75.9	No	**Yes**	0.9
128B	66.0	76.0	Yes	77.7	No	**Yes**	1.7
129B	66.0	73.6	Yes	77.0	No	**Yes**	3.4
130B	66.0	73.3	Yes	77.0	No	**Yes**	3.7
131B	66.0	73.7	Yes	77.8	No	**Yes**	4.1
132B	66.0	75.3	Yes	75.1	No	**Yes**	-0.2
133B	66.0	76.1	Yes	75.8	No	**Yes**	-0.3
134B	66.0	75.8	Yes	75.7	No	**Yes**	-0.1
135B	66.0	75.8	Yes	75.9	No	**Yes**	0.1
136B	66.0	75.1	Yes	75.0	No	**Yes**	-0.1
137B	66.0	75.5	Yes	75.7	No	**Yes**	0.2
138B	66.0	75.9	Yes	76.1	No	**Yes**	0.2
139B	66.0	76.1	Yes	76.2	No	**Yes**	0.1
140B	66.0	75.0	Yes	75.5	No	**Yes**	0.5
141B	66.0	63.8	No	66.1	No	**Yes**	2.3
142B	66.0	62.0	No	63.0	No	No	1.0
143C	66.0	71.6	Yes	74.2	No	**Yes**	2.6

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
144C	66.0	69.8	Yes	73.0	No	**Yes**	3.2
145C	66.0	64.5	No	65.7	No	No	1.2
146C	66.0	66.1	Yes	68.1	No	**Yes**	2.0
147C	66.0	57.7	No	57.7	No	No	0.0
148D	51.0	46.0	No	47.4	No	No	1.4
149B	66.0	62.4	No	64.6	No	No	2.2
150B	66.0	64.5	No	66.7	No	**Yes**	2.2
151B	66.0	67.6	Yes	69.9	No	**Yes**	2.3
152B	66.0	70.9	Yes	72.2	No	**Yes**	1.3
153B	66.0	63.2	No	65.6	No	No	2.4
154B	66.0	65.8	No	68.2	No	**Yes**	2.4
155B	66.0	61.5	No	63.7	No	No	2.2
156B	66.0	69.2	Yes	71.2	No	**Yes**	2.0
157B	66.0	64.3	No	66.7	No	**Yes**	2.4
158B	66.0	72.1	Yes	73.6	No	**Yes**	1.5
159B	66.0	67.7	Yes	69.9	No	**Yes**	2.2
160B	66.0	67.1	Yes	65.5	No	No	-1.6
161B	66.0	74.2	Yes	69.4	No	**Yes**	-4.8
162B	66.0	73.6	Yes	69.8	No	**Yes**	-3.8
163B	66.0	74.5	Yes	71.3	No	**Yes**	-3.2
164B	66.0	74.9	Yes	72.4	No	**Yes**	-2.5
165B	66.0	74.0	Yes	72.6	No	**Yes**	-1.4
166B	66.0	68.3	Yes	69.1	No	**Yes**	0.8
167B	66.0	63.9	No	65.6	No	No	1.7
168B	66.0	66.9	Yes	66.2	No	**Yes**	-0.7
169B	66.0	66.6	Yes	66.8	No	**Yes**	0.2
170B	66.0	65.0	No	65.5	No	No	0.5
171B	66.0	64.1	No	65.0	No	No	0.9
172B	66.0	61.7	No	63.3	No	No	1.6
173B	66.0	66.5	Yes	59.7	No	No	-6.8
174B	66.0	64.4	No	57.9	No	No	-6.5
175B	66.0	65.8	No	68.4	No	**Yes**	2.6
176B	66.0	65.0	No	68.1	No	**Yes**	3.1
177B	66.0	63.2	No	66.0	No	**Yes**	2.8

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
178B	66.0	61.0	No	63.3	No	No	2.3
179B	66.0	61.1	No	63.5	No	No	2.4
180B	66.0	60.9	No	60.0	No	No	-0.9
181B	66.0	59.7	No	59.8	No	No	0.1
182B	66.0	60.4	No	60.6	No	No	0.2
183B	66.0	67.7	Yes	66.7	No	**Yes**	-1.0
184B	66.0	65.4	No	65.3	No	No	-0.1
185B	66.0	63.4	No	62.6	No	No	-0.8
186B	66.0	63.4	No	65.1	No	No	1.7
187B	66.0	65.4	No	67.4	No	**Yes**	2.0
188B	66.0	69.5	Yes	63.2	No	No	-6.3
189B	66.0	63.7	No	58.6	No	No	-5.1
190B	66.0	69.4	Yes	67.5	No	**Yes**	-1.9
191B	66.0	65.8	No	68.2	No	**Yes**	2.4
192B	66.0	60.6	No	61.9	No	No	1.3
193B	66.0	61.0	No	63.7	No	No	2.7
194B	66.0	61.4	No	59.5	No	No	-1.9
195B	66.0	69.6	Yes	74.7	No	**Yes**	5.1
196B	66.0	65.2	No	66.9	No	**Yes**	1.7
197B	66.0	61.2	No	63.9	No	No	2.7
198B	66.0	67.1	Yes	69.9	No	**Yes**	2.8
199B	66.0	65.8	No	67.8	No	**Yes**	2.0
200B	66.0	65.5	No	68.1	No	**Yes**	2.6
201B	66.0	63.2	No	65.2	No	No	2.0
202B	66.0	63.4	No	65.4	No	No	2.0
203B	66.0	63.8	No	65.6	No	No	1.8
204B	66.0	64.6	No	66.2	No	**Yes**	1.6
205B	66.0	64.8	No	66.3	No	**Yes**	1.5
206B	66.0	69.3	Yes	70.9	No	**Yes**	1.6
207B	66.0	66.8	Yes	67.4	No	**Yes**	0.6
208B	66.0	63.6	No	64.7	No	No	1.1
209B	66.0	61.0	No	61.8	No	No	0.8
210B	66.0	64.9	No	62.8	No	No	-2.1
211B	66.0	67.2	Yes	67.1	No	**Yes**	-0.1

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
212B	66.0	65.5	No	64.1	No	No	-1.4
213B	66.0	63.1	No	62.8	No	No	-0.3
214B	66.0	61.3	No	60.5	No	No	-0.8
215B	66.0	60.0	No	60.1	No	No	0.1
216B	66.0	60.5	No	60.4	No	No	-0.1
217B	66.0	61.8	No	61.8	No	No	0.0
218B	66.0	70.0	Yes	69.0	No	**Yes**	-1.0
219B	66.0	71.9	Yes	70.7	No	**Yes**	-1.2
220B	66.0	68.9	Yes	67.2	No	**Yes**	-1.7
221B	66.0	71.1	Yes	69.2	No	**Yes**	-1.9
222B	66.0	65.9	No	63.9	No	No	-2.0
223B	66.0	67.8	Yes	65.4	No	No	-2.4
224B	66.0	67.6	Yes	64.0	No	No	-3.6
225B	66.0	68.3	Yes	67.1	No	**Yes**	-1.2
226B	66.0	68.4	Yes	64.8	No	No	-3.6
227B	66.0	68.5	Yes	65.2	No	No	-3.3
228B	66.0	73.1	Yes	68.6	No	**Yes**	-4.5
229B	66.0	73.5	Yes	69.0	No	**Yes**	-4.5
230B	66.0	58.7	No	58.4	No	No	-0.3
231B	66.0	59.8	No	59.5	No	No	-0.3
232B	66.0	60.1	No	58.5	No	No	-1.6
233B	66.0	61.6	No	60.6	No	No	-1.0
234B	66.0	63.8	No	62.6	No	No	-1.2
235B	66.0	62.3	No	59.8	No	No	-2.5
236B	66.0	61.6	No	57.9	No	No	-3.7
237B	66.0	60.5	No	54.9	No	No	-5.6
238B	66.0	60.3	No	54.2	No	No	-6.1
239B	66.0	59.7	No	56.6	No	No	-3.1
240B	66.0	59.7	No	55.9	No	No	-3.8
241B	66.0	59.4	No	54.5	No	No	-4.9
242B	66.0	59.2	No	53.8	No	No	-5.4
243B	66.0	56.4	No	54.7	No	No	-1.7
244B	66.0	69.9	Yes	61.0	No	No	-8.9
245B	66.0	67.1	Yes	59.5	No	No	-7.6

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
246B	66.0	67.6	Yes	62.7	No	No	-4.9
247B	66.0	60.1	No	54.5	No	No	-5.6
248B	66.0	58.8	No	54.0	No	No	-4.8
249B	66.0	58.3	No	54.3	No	No	-4.0
250B	66.0	61.8	No	58.5	No	No	-3.3
251B	66.0	61.5	No	57.8	No	No	-3.7
252B	66.0	59.2	No	54.5	No	No	-4.7
253B	66.0	61.4	No	59.2	No	No	-2.2
254B	66.0	60.3	No	59.0	No	No	-1.3
255B	66.0	60.8	No	60.9	No	No	0.1
256B	66.0	61.1	No	63.7	No	No	2.6
257B	66.0	60.9	No	63.5	No	No	2.6
258B	66.0	61.5	No	64.0	No	No	2.5
259B	66.0	65.4	No	61.1	No	No	-4.3
260B	66.0	65.4	No	61.5	No	No	-3.9
261C	66.0	70.2	Yes	67.7	No	**Yes**	-2.5
262B	66.0	65.1	No	64.3	No	No	-0.8
263B	66.0	64.1	No	64.7	No	No	0.6
264B	66.0	66.0	Yes	66.9	No	**Yes**	0.9
265B	66.0	67.7	Yes	68.2	No	**Yes**	0.5
266B	66.0	68.7	Yes	68.2	No	**Yes**	-0.5
267B	66.0	68.8	Yes	67.8	No	**Yes**	-1.0
268B	66.0	68.7	Yes	68.1	No	**Yes**	-0.6
269B	66.0	65.8	No	65.1	No	No	-0.7
270B	66.0	71.4	Yes	69.9	No	**Yes**	-1.5
271B	66.0	67.2	Yes	68.9	No	**Yes**	1.7
272B	66.0	65.4	No	67.2	No	**Yes**	1.8
273B	66.0	69.6	Yes	68.7	No	**Yes**	-0.9
274B	66.0	67.3	Yes	68.5	No	**Yes**	1.2
275B	66.0	64.7	No	66.4	No	**Yes**	1.7
276B	66.0	63.8	No	65.5	No	No	1.7
277B	66.0	64.5	No	65.7	No	No	1.2
278B	66.0	63.5	No	65.2	No	No	1.7
279B	66.0	66.9	Yes	68.5	No	**Yes**	1.6

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
280B	66.0	64.1	No	65.2	No	No	1.1
281B	66.0	66.7	Yes	67.1	No	**Yes**	0.4
282B	66.0	62.6	No	63.4	No	No	0.8
283B	66.0	61.0	No	62.0	No	No	1.0
284B	66.0	70.7	Yes	72.6	No	**Yes**	1.9
285B	66.0	65.5	No	66.6	No	**Yes**	1.1
286B	66.0	63.4	No	60.0	No	No	-3.4
287B	66.0	71.4	Yes	66.6	No	**Yes**	-4.8
288B	66.0	65.1	No	58.2	No	No	-6.9
289B	66.0	63.7	No	56.9	No	No	-6.8
290B	66.0	66.1	Yes	66.6	No	**Yes**	0.5
291B	66.0	63.9	No	64.3	No	No	0.4
292B	66.0	62.4	No	63.4	No	No	1.0
293B	66.0	60.0	No	60.7	No	No	0.7
294B	66.0	74.9	Yes	77.1	No	**Yes**	2.2
295B	66.0	66.8	Yes	69.3	No	**Yes**	2.5
296B	66.0	64.2	No	65.9	No	No	1.7
297B	66.0	66.0	Yes	68.3	No	**Yes**	2.3
298B	66.0	73.8	Yes	76.2	No	**Yes**	2.4
299B	66.0	75.4	Yes	78.1	No	**Yes**	2.7
300B	51.0	59.8	Yes	62.9	No	**Yes**	3.1
301B	66.0	65.4	No	67.0	No	**Yes**	1.6
302B	66.0	60.7	No	63.3	No	No	2.6
303B	66.0	61.5	No	63.5	No	No	2.0
304B	66.0	60.8	No	62.5	No	No	1.7
305B	66.0	56.9	No	61.9	No	No	5.0
306B	66.0	65.1	No	68.0	No	**Yes**	2.9
307B	66.0	65.2	No	68.6	No	**Yes**	3.4
308B	66.0	66.4	Yes	69.1	No	**Yes**	2.7
309B	66.0	67.2	Yes	69.9	No	**Yes**	2.7
310B	66.0	65.2	No	68.8	No	**Yes**	3.6
311B	66.0	61.4	No	64.6	No	No	3.2
312B	66.0	59.3	No	62.4	No	No	3.1
313B	66.0	64.6	No	68.8	No	**Yes**	4.2

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
314B	66.0	63.8	No	68.4	No	**Yes**	4.6
315B	66.0	63.6	No	67.7	No	**Yes**	4.1
316B	66.0	70.9	Yes	73.1	No	**Yes**	2.2
317B	66.0	62.5	No	65.5	No	No	3.0
318B	66.0	69.9	Yes	72.9	No	**Yes**	3.0
319B	66.0	62.8	No	65.9	No	No	3.1
320B	66.0	70.3	Yes	73.2	No	**Yes**	2.9
321B	66.0	62.2	No	65.5	No	No	3.3
322B	66.0	62.3	No	65.8	No	No	3.5
323B	66.0	62.5	No	66.3	No	**Yes**	3.8
324B	66.0	59.3	No	63.8	No	No	4.5
325B	66.0	62.0	No	66.0	No	**Yes**	4.0
326B	66.0	67.6	Yes	72.1	No	**Yes**	4.5
327B	66.0	62.3	No	64.7	No	No	2.4
328B	66.0	64.0	No	64.6	No	No	0.6
329B	66.0	64.1	No	64.6	No	No	0.5
330B	66.0	64.2	No	64.8	No	No	0.6
331B	66.0	65.0	No	65.1	No	No	0.1
332B	66.0	64.4	No	64.2	No	No	-0.2
333B	66.0	67.6	Yes	68.5	No	**Yes**	0.9
334B	66.0	65.0	No	65.8	No	No	0.8
335B	66.0	62.4	No	62.7	No	No	0.3
336B	66.0	61.7	No	62.4	No	No	0.7
337B	66.0	61.4	No	61.6	No	No	0.2
338B	66.0	61.0	No	61.8	No	No	0.8
339B	66.0	60.8	No	60.7	No	No	-0.1
340B	66.0	61.5	No	61.8	No	No	0.3
341B	66.0	61.1	No	61.1	No	No	0.0
342B	66.0	61.6	No	62.1	No	No	0.5
343B	66.0	67.5	Yes	70.2	No	**Yes**	2.7
344B	66.0	65.2	No	67.4	No	**Yes**	2.2
345B	66.0	63.5	No	65.3	No	No	1.8
346B	66.0	70.5	Yes	73.2	No	**Yes**	2.7
347B	66.0	66.9	Yes	69.6	No	**Yes**	2.7

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
348B	66.0	67.4	Yes	69.5	No	**Yes**	2.1
349B	66.0	68.6	Yes	70.7	No	**Yes**	2.1
350B	66.0	69.4	Yes	71.5	No	**Yes**	2.1
351B	66.0	70.2	Yes	72.6	No	**Yes**	2.4
352B	66.0	68.9	Yes	72.0	No	**Yes**	3.1
353B	66.0	65.7	No	69.0	No	**Yes**	3.3
354B	66.0	71.1	Yes	73.8	No	**Yes**	2.7
355B	66.0	67.8	Yes	70.3	No	**Yes**	2.5
356B	66.0	65.1	No	68.4	No	**Yes**	3.3
357B	66.0	65.1	No	68.4	No	**Yes**	3.3
358B	66.0	67.4	Yes	70.3	No	**Yes**	2.9
359E	71.0	63.0	No	66.7	No	No	3.7
360B	66.0	69.7	Yes	72.2	No	**Yes**	2.5
361B	66.0	68.0	Yes	69.2	No	**Yes**	1.2
362B	66.0	63.1	No	65.8	No	No	2.7
363B	66.0	69.5	Yes	70.2	No	**Yes**	0.7
364B	66.0	64.7	No	64.3	No	No	-0.4
365B	66.0	62.0	No	61.0	No	No	-1.0
366B	66.0	62.3	No	60.8	No	No	-1.5
367B	51.0	61.9	Yes	59.2	No	**Yes**	-2.7
368B	66.0	60.8	No	60.1	No	No	-0.7
369B	66.0	58.9	No	58.8	No	No	-0.1
370B	66.0	60.2	No	60.3	No	No	0.1
371B	66.0	62.4	No	63.3	No	No	0.9
372B	66.0	64.5	No	66.1	No	**Yes**	1.6
373B	66.0	65.9	No	66.6	No	**Yes**	0.7
374B	66.0	63.4	No	63.9	No	No	0.5
375B	66.0	60.7	No	61.2	No	No	0.5
376B	66.0	58.5	No	58.4	No	No	-0.1
377B	66.0	65.9	No	66.6	No	**Yes**	0.7
378B	66.0	64.3	No	64.5	No	No	0.2
379B	66.0	61.5	No	62.4	No	No	0.9
380B	66.0	58.8	No	59.4	No	No	0.6
381B	66.0	58.8	No	59.5	No	No	0.7

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
382B	66.0	60.0	No	60.9	No	No	0.9
383B	66.0	61.4	No	62.4	No	No	1.0
384B	66.0	63.7	No	65.1	No	No	1.4
385B	66.0	66.7	Yes	67.5	No	**Yes**	0.8
386B	66.0	68.3	Yes	70.6	No	**Yes**	2.3
387B	66.0	66.1	Yes	68.3	No	**Yes**	2.2
388B	66.0	63.6	No	65.5	No	No	1.9
389B	66.0	61.9	No	63.5	No	No	1.6
390B	66.0	60.3	No	61.7	No	No	1.4
391B	66.0	61.0	No	62.7	No	No	1.7
392B	66.0	64.4	No	66.5	No	**Yes**	2.1
393B	66.0	69.8	Yes	73.6	No	**Yes**	3.8
394B	66.0	64.3	No	66.7	No	**Yes**	2.4
395B	66.0	60.8	No	62.2	No	No	1.4
396B	66.0	66.9	Yes	69.3	No	**Yes**	2.4
397B	66.0	59.3	No	60.6	No	No	1.3
398B	66.0	67.2	Yes	70.3	No	**Yes**	3.1
399B	66.0	67.7	Yes	70.5	No	**Yes**	2.8
400B	66.0	59.3	No	61.2	No	No	1.9
401B	66.0	63.3	No	64.9	No	No	1.6
402B	66.0	63.2	No	64.9	No	No	1.7
403B	66.0	62.1	No	64.2	No	No	2.1
404B	66.0	70.6	Yes	73.3	No	**Yes**	2.7
405B	66.0	59.5	No	61.5	No	No	2.0
406B	66.0	58.2	No	60.0	No	No	1.8
407B	66.0	55.6	No	58.0	No	No	2.4
408B	66.0	60.0	No	61.5	No	No	1.5
409B	66.0	59.2	No	60.8	No	No	1.6
410B	66.0	58.2	No	59.9	No	No	1.7
411B	66.0	65.0	No	67.4	No	**Yes**	2.4
412B	66.0	70.7	Yes	72.3	No	**Yes**	1.6
413B	66.0	71.3	Yes	73.5	No	**Yes**	2.2
414B	66.0	72.1	Yes	74.3	No	**Yes**	2.2
415B	66.0	71.3	Yes	73.2	No	**Yes**	1.9

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
416B	66.0	71.5	Yes	73.7	No	**Yes**	2.2
417B	66.0	69.5	Yes	71.2	No	**Yes**	1.7
418B	66.0	70.1	Yes	71.6	No	**Yes**	1.5
419B	66.0	70.8	Yes	72.5	No	**Yes**	1.7
420B	66.0	63.4	No	65.1	No	No	1.7
421B	66.0	63.2	No	64.9	No	No	1.7
422B	66.0	63.3	No	65.1	No	No	1.8
423B	66.0	63.2	No	65.4	No	No	2.2
424B	66.0	62.4	No	64.0	No	No	1.6
425B	66.0	62.3	No	63.9	No	No	1.6
426B	66.0	62.5	No	64.3	No	No	1.8
427B	66.0	62.9	No	64.9	No	No	2.0
428B	66.0	63.1	No	64.6	No	No	1.5
429B	66.0	62.8	No	64.5	No	No	1.7
430B	66.0	62.8	No	64.6	No	No	1.8
431B	66.0	62.4	No	64.4	No	No	2.0
432B	66.0	62.1	No	63.8	No	No	1.7
433B	66.0	62.6	No	64.6	No	No	2.0
434B	66.0	63.2	No	65.3	No	No	2.1
435B	66.0	59.3	No	60.1	No	No	0.8
436B	66.0	56.1	No	56.6	No	No	0.5
437B	66.0	53.8	No	53.8	No	No	0.0
438B	66.0	52.6	No	52.9	No	No	0.3
439B	66.0	54.5	No	54.8	No	No	0.3
440B	66.0	61.3	No	63.4	No	No	2.1
441B	66.0	61.1	No	63.3	No	No	2.2
442B	66.0	57.9	No	59.7	No	No	1.8
443B	66.0	58.4	No	59.5	No	No	1.1
444B	66.0	58.8	No	59.8	No	No	1.0
445B	66.0	64.4	No	63.3	No	No	-1.1
446B	66.0	66.2	Yes	66.1	No	**Yes**	-0.1
447B	66.0	66.3	Yes	67.8	No	**Yes**	1.5
448B	66.0	66.1	Yes	69.0	No	**Yes**	2.9
449B	66.0	65.2	No	69.2	No	**Yes**	4.0

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
450B	66.0	66.0	Yes	70.0	No	**Yes**	4.0
451B	66.0	64.9	No	68.7	No	**Yes**	3.8
452B	66.0	65.3	No	69.6	No	**Yes**	4.3
453B	66.0	64.8	No	68.8	No	**Yes**	4.0
454B	66.0	65.1	No	69.0	No	**Yes**	3.9
455B	66.0	66.2	Yes	70.9	No	**Yes**	4.7
456B	66.0	66.1	Yes	70.6	No	**Yes**	4.5
457B	66.0	66.4	Yes	70.8	No	**Yes**	4.4
458B	66.0	66.2	Yes	70.8	No	**Yes**	4.6
459B	66.0	74.2	Yes	77.0	No	**Yes**	2.8
460B	66.0	66.2	Yes	70.7	No	**Yes**	4.5
461B	66.0	66.6	Yes	70.9	No	**Yes**	4.3
462B	66.0	67.9	Yes	72.1	No	**Yes**	4.2
463B	66.0	67.6	Yes	71.7	No	**Yes**	4.1
464B	66.0	71.8	Yes	75.1	No	**Yes**	3.3
465B	66.0	70.7	Yes	74.2	No	**Yes**	3.5
466B	66.0	75.9	Yes	79.1	No	**Yes**	3.2
467B	66.0	73.5	Yes	76.2	No	**Yes**	2.7
468B	66.0	66.5	Yes	70.6	No	**Yes**	4.1
469B	66.0	66.3	Yes	70.4	No	**Yes**	4.1
470B	66.0	67.1	Yes	71.1	No	**Yes**	4.0
471B	66.0	72.3	Yes	75.8	No	**Yes**	3.5
472B	66.0	73.2	Yes	75.8	No	**Yes**	2.6
473B	66.0	71.9	Yes	74.8	No	**Yes**	2.9
474B	66.0	66.6	Yes	69.0	No	**Yes**	2.4
475B	66.0	63.1	No	64.7	No	No	1.6
476B	66.0	62.0	No	63.8	No	No	1.8
477B	66.0	62.5	No	65.0	No	No	2.5
478B	66.0	61.8	No	64.3	No	No	2.5
479B	66.0	62.2	No	65.2	No	No	3.0
480B	66.0	61.2	No	63.9	No	No	2.7
481B	66.0	61.1	No	64.1	No	No	3.0
482B	66.0	62.3	No	65.9	No	No	3.6
483B	66.0	60.4	No	62.9	No	No	2.5

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
484B	66.0	61.2	No	64.3	No	No	3.1
485B	66.0	59.6	No	61.5	No	No	1.9
486B	66.0	60.2	No	62.4	No	No	2.2
487B	66.0	60.6	No	63.1	No	No	2.5
488B	66.0	59.4	No	61.2	No	No	1.8
489B	66.0	59.3	No	61.4	No	No	2.1
490B	66.0	60.5	No	62.8	No	No	2.3
491B	66.0	60.1	No	61.6	No	No	1.5
492B	66.0	60.3	No	61.5	No	No	1.2
493B	66.0	60.5	No	60.7	No	No	0.2
494B	66.0	61.5	No	61.4	No	No	-0.1
495B	66.0	68.2	Yes	70.8	No	**Yes**	2.6
496B	66.0	66.5	Yes	68.9	No	**Yes**	2.4
497B	66.0	69.5	Yes	71.2	No	**Yes**	1.7
498B	66.0	66.9	Yes	68.7	No	**Yes**	1.8
499B	66.0	63.7	No	65.8	No	**No**	2.1
500B	66.0	62.6	No	64.9	No	No	2.3
501B	66.0	61.3	No	63.4	No	No	2.1
502B	66.0	59.9	No	61.8	No	No	1.9
503B	66.0	69.0	Yes	70.7	No	**Yes**	1.7
504B	66.0	66.9	Yes	68.3	No	**Yes**	1.4
505B	66.0	64.6	No	66.3	No	**Yes**	1.7
506B	66.0	62.2	No	64.0	No	No	1.8
507B	66.0	60.5	No	62.4	No	No	1.9
508B	66.0	66.9	Yes	67.7	No	**Yes**	0.8
509B	66.0	66.1	Yes	66.9	No	**Yes**	0.8
510B	66.0	66.1	Yes	66.9	No	**Yes**	0.8
511B	66.0	65.1	No	66.2	No	**Yes**	1.1
512B	66.0	62.4	No	63.3	No	No	0.9
513B	66.0	60.9	No	62.0	No	No	1.1
514B	66.0	60.2	No	61.4	No	No	1.2
515B	66.0	61.2	No	62.3	No	No	1.1
516B	66.0	63.4	No	64.5	No	No	1.1
517B	66.0	65.4	No	66.3	No	**Yes**	0.9

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
518B	66.0	66.0	Yes	67.2	No	**Yes**	1.2
519B	66.0	64.0	No	65.5	No	No	1.5
520B	66.0	61.4	No	63.1	No	No	1.7
521B	66.0	60.2	No	61.7	No	No	1.5
522B	66.0	60.2	No	61.9	No	No	1.7
523B	66.0	60.4	No	62.2	No	No	1.8
524B	66.0	63.6	No	64.9	No	No	1.3
525B	66.0	61.8	No	62.9	No	No	1.1
526B	66.0	61.9	No	62.9	No	No	1.0
527B	66.0	63.4	No	64.5	No	No	1.1
528B	66.0	65.8	No	67.0	No	**Yes**	1.2
529B	66.0	68.9	Yes	71.3	No	**Yes**	2.4
530B	66.0	68.6	Yes	70.8	No	**Yes**	2.2
531B	66.0	64.5	No	65.9	No	No	1.4
532B	66.0	61.7	No	62.8	No	No	1.1
533B	66.0	59.9	No	60.7	No	No	0.8
534B	66.0	52.4	No	51.1	No	No	-1.3
535B	66.0	52.2	No	51.1	No	No	-1.1
536B	66.0	57.6	No	57.8	No	No	0.2
537B	66.0	62.0	No	60.0	No	No	-2.0
538B	66.0	60.1	No	58.0	No	No	-2.1
539B	66.0	63.7	No	62.1	No	No	-1.6
540B	66.0	64.8	No	63.0	No	No	-1.8
541B	66.0	64.1	No	62.2	No	No	-1.9
542B	66.0	63.7	No	61.9	No	No	-1.8
543B	66.0	64.6	No	60.9	No	No	-3.7
544B	66.0	74.1	Yes	77.7	No	**Yes**	3.6
545B	66.0	61.8	No	65.4	No	No	3.6
546B	66.0	62.2	No	65.4	No	No	3.2
547B	66.0	59.6	No	62.4	No	No	2.8
548B	66.0	59.2	No	62.4	No	No	3.2
549B	66.0	60.1	No	62.5	No	No	2.4
550B	66.0	60.0	No	63.0	No	No	3.0
551D	51.0	45.6	No	48.8	No	No	3.2

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
552B	66.0	68.3	Yes	73.5	No	**Yes**	5.2
553B	66.0	69.0	Yes	74.7	No	**Yes**	5.7
554B	66.0	62.2	No	65.6	No	No	3.4
555B	66.0	61.2	No	65.0	No	No	3.8
556B	66.0	67.1	Yes	71.9	No	**Yes**	4.8
557B	66.0	61.3	No	64.6	No	No	3.3
558B	66.0	62.5	No	66.2	No	**Yes**	3.7
559B	66.0	64.4	No	68.6	No	**Yes**	4.2
560B	66.0	67.9	Yes	72.4	No	**Yes**	4.5
561B	66.0	63.1	No	64.0	No	No	0.9
562B	66.0	62.9	No	64.7	No	No	1.8
563B	66.0	62.1	No	64.3	No	No	2.2
564B	66.0	62.0	No	64.3	No	No	2.3
565B	66.0	59.8	No	61.9	No	No	2.1
566B	66.0	61.5	No	62.9	No	No	1.4
567B	66.0	62.4	No	63.1	No	No	0.7
568B	66.0	62.8	No	61.5	No	No	-1.3
569B	66.0	62.9	No	62.0	No	No	-0.9
570B	66.0	58.3	No	57.1	No	No	-1.2
571B	66.0	58.7	No	57.9	No	No	-0.8
572B	66.0	58.5	No	59.0	No	No	0.5
573B	66.0	58.8	No	61.2	No	No	2.4
574B	66.0	59.0	No	61.7	No	No	2.7
575B	66.0	67.2	Yes	71.8	No	**Yes**	4.6
576B	66.0	67.3	Yes	71.1	No	**Yes**	3.8
577B	66.0	65.0	No	68.9	No	**Yes**	3.9
578B	66.0	65.6	No	67.0	No	**Yes**	1.4
579B	66.0	65.9	No	69.6	No	**Yes**	3.7
580B	66.0	72.0	Yes	69.9	No	**Yes**	-2.1
581B	66.0	72.0	Yes	69.2	No	**Yes**	-2.8
582B	66.0	71.7	Yes	69.7	No	**Yes**	-2.0
583B	66.0	71.3	Yes	69.6	No	**Yes**	-1.7
584B	66.0	65.6	No	68.8	No	**Yes**	3.2
585B	66.0	65.9	No	68.9	No	**Yes**	3.0
586B	66.0	66.5	Yes	69.1	No	**Yes**	2.6

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
587B	66.0	67.3	Yes	68.8	No	**Yes**	1.5
588B	66.0	63.1	No	65.7	No	No	2.6
589B	66.0	64.1	No	67.4	No	**Yes**	3.3
590B	66.0	65.4	No	66.8	No	**Yes**	1.4
591B	66.0	70.6	Yes	67.5	No	**Yes**	-3.1
592B	66.0	63.5	No	61.8	No	No	-1.7
593B	66.0	66.4	Yes	62.4	No	No	-4.0
594B	66.0	62.6	No	58.5	No	No	-4.1
595B	66.0	72.1	Yes	70.2	No	**Yes**	-1.9
596B	66.0	60.5	No	59.6	No	No	-0.9
597B	66.0	58.3	No	58.1	No	No	-0.2
598B	66.0	66.4	Yes	69.7	No	**Yes**	3.3
599B	66.0	63.8	No	66.8	No	**Yes**	3.0
600B	66.0	65.2	No	68.0	No	**Yes**	2.8
601B	66.0	63.9	No	66.6	No	**Yes**	2.7
602B	66.0	63.0	No	65.6	No	No	2.6
603B	66.0	66.7	Yes	68.5	No	**Yes**	1.8
604B	66.0	63.4	No	66.0	No	**Yes**	2.6
605B	66.0	65.4	No	68.2	No	**Yes**	2.8
606B	66.0	63.8	No	66.3	No	**Yes**	2.5
607B	66.0	62.8	No	65.3	No	No	2.5
608B	66.0	67.3	Yes	70.5	No	**Yes**	3.2
609B	66.0	65.7	No	68.7	No	**Yes**	3.0
610B	66.0	64.0	No	66.5	No	**Yes**	2.5
611B	66.0	62.8	No	65.1	No	No	2.3
612B	66.0	62.5	No	63.8	No	No	1.3
613B	66.0	66.3	Yes	68.6	No	**Yes**	2.3
614B	66.0	67.7	Yes	70.1	No	**Yes**	2.4
615B	66.0	68.5	Yes	70.9	No	**Yes**	2.4
616B	66.0	69.4	Yes	71.9	No	**Yes**	2.5
617B	66.0	69.9	Yes	72.3	No	**Yes**	2.4
618B	66.0	70.2	Yes	72.5	No	**Yes**	2.3
619B	66.0	70.5	Yes	72.6	No	**Yes**	2.1
620B	66.0	69.9	Yes	72.0	No	**Yes**	2.1

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
621B	66.0	69.8	Yes	72.0	No	**Yes**	2.2
622B	66.0	60.2	No	61.8	No	No	1.6
623B	66.0	57.6	No	58.6	No	No	1.0
624D	51.0	34.4	No	35.3	No	No	0.9
625C	66.0	55.6	No	56.9	No	No	1.3
626B	66.0	55.7	No	56.9	No	No	1.2
627B	66.0	54.8	No	55.7	No	No	0.9
628B	66.0	61.3	No	62.6	No	No	1.3
629B	66.0	59.7	No	61.0	No	No	1.3
630B	66.0	58.3	No	59.6	No	No	1.3
631B	66.0	56.9	No	58.2	No	No	1.3
632B	66.0	56.1	No	57.3	No	No	1.2
633B	66.0	60.5	No	62.0	No	No	1.5
634B	66.0	59.8	No	61.4	No	No	1.6
635B	66.0	61.1	No	62.8	No	No	1.7
636B	66.0	60.4	No	62.0	No	No	1.6
637B	66.0	61.1	No	63.3	No	No	2.2
638B	66.0	60.4	No	62.5	No	No	2.1
639B	66.0	60.5	No	62.4	No	No	1.9
640B	66.0	61.2	No	63.1	No	No	1.9
641B	66.0	61.0	No	63.2	No	No	2.2
642B	66.0	61.3	No	63.4	No	No	2.1
643B	66.0	60.5	No	62.6	No	No	2.1
644B	66.0	56.4	No	57.8	No	No	1.4
645B	66.0	57.1	No	58.7	No	No	1.6
646B	66.0	61.3	No	63.2	No	No	1.9
647B	66.0	60.8	No	62.8	No	No	2.0
648B	66.0	54.8	No	55.6	No	No	0.8
649B	66.0	53.0	No	54.1	No	No	1.1
650B	66.0	50.9	No	52.1	No	No	1.2
651C	66.0	62.6	No	63.8	No	No	1.2
652C	66.0	60.3	No	61.3	No	No	1.0
653C	66.0	59.0	No	60.2	No	No	1.2
654B	66.0	56.1	No	57.5	No	No	1.4

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
655B	66.0	54.8	No	56.4	No	No	1.6
656B	66.0	55.4	No	56.7	No	No	1.3
657B	66.0	56.9	No	58.6	No	No	1.7
658B	66.0	56.9	No	58.5	No	No	1.6
659B	66.0	56.7	No	58.4	No	No	1.7
660B	66.0	56.4	No	57.9	No	No	1.5
661B	66.0	75.7	Yes	77.7	No	**Yes**	2.0
662B	66.0	61.9	No	61.8	No	No	-0.1
663B	66.0	60.6	No	62.7	No	No	2.1
664B	66.0	62.0	No	62.2	No	No	0.2
665B	66.0	62.7	No	62.7	No	No	0.0
666B	66.0	67.1	Yes	66.7	No	**Yes**	-0.4
667B	66.0	67.4	Yes	66.9	No	**Yes**	-0.5
668B	66.0	67.6	Yes	70.5	No	**Yes**	2.9
669B	66.0	66.0	Yes	68.6	No	**Yes**	2.6
670B	66.0	76.7	Yes	79.0	No	**Yes**	2.3
671B	66.0	67.8	Yes	68.4	No	**Yes**	0.6
672B	66.0	67.0	Yes	68.9	No	**Yes**	1.9
673B	66.0	59.5	No	56.8	No	No	-2.7
674B	66.0	61.1	No	62.1	No	No	1.0
675B	66.0	60.2	No	60.3	No	No	0.1
676B	66.0	69.5	Yes	71.3	No	**Yes**	1.8
677B	66.0	59.6	No	58.0	No	No	-1.6
678B	66.0	67.1	Yes	69.3	No	**Yes**	2.2
679B	66.0	64.8	No	66.0	No	**Yes**	1.2
680B	66.0	62.1	No	63.5	No	No	1.4
681B	66.0	60.5	No	61.3	No	No	0.8
682B	66.0	59.0	No	59.5	No	No	0.5
683B	66.0	59.3	No	60.7	No	No	1.4
684B	66.0	60.3	No	62.0	No	No	1.7
685B	66.0	62.0	No	64.0	No	No	2.0
686B	66.0	66.3	Yes	68.6	No	**Yes**	2.3
687B	66.0	66.6	Yes	69.2	No	**Yes**	2.6
688B	66.0	63.2	No	66.3	No	**Yes**	3.1

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
689B	66.0	62.1	No	64.8	No	No	2.7
690B	66.0	58.5	No	61.1	No	No	2.6
691B	66.0	60.6	No	62.6	No	No	2.0
692B	66.0	59.8	No	61.5	No	No	1.7
693B	66.0	60.2	No	61.9	No	No	1.7
694B	66.0	59.9	No	61.6	No	No	1.7
695B	66.0	60.7	No	62.7	No	No	2.0
696B	66.0	61.9	No	64.8	No	No	2.9
697B	66.0	63.9	No	65.9	No	No	2.0
698B	66.0	59.7	No	61.9	No	No	2.2
699B	66.0	59.7	No	61.4	No	No	1.7
700B	66.0	57.8	No	59.4	No	No	1.6
702B	66.0	62.8	No	64.9	No	No	2.1
703B	66.0	64.2	No	66.4	No	**Yes**	2.2
704B	66.0	63.7	No	66.4	No	**Yes**	2.7
705B	66.0	63.6	No	65.8	No	No	2.2
706B	66.0	64.9	No	67.0	No	**Yes**	2.1
707B	66.0	65.9	No	67.9	No	**Yes**	2.0
708B	66.0	65.2	No	67.1	No	**Yes**	1.9
709B	66.0	64.1	No	66.0	No	**Yes**	1.9
710B	66.0	58.8	No	60.5	No	No	1.7
711B	66.0	59.2	No	61.1	No	No	1.9
712B	66.0	60.4	No	62.3	No	No	1.9
713B	66.0	61.4	No	63.5	No	No	2.1
714B	66.0	62.6	No	64.9	No	No	2.3
715B	66.0	63.7	No	66.2	No	**Yes**	2.5
716C	66.0	61.6	No	63.7	No	No	2.1
717C	66.0	61.4	No	63.6	No	No	2.2
718C	66.0	61.1	No	63.5	No	No	2.4
719B	66.0	59.6	No	61.5	No	No	1.9
720B	66.0	59.4	No	61.3	No	No	1.9
721B	66.0	59.4	No	61.2	No	No	1.8
722B	66.0	59.2	No	61.0	No	No	1.8
723B	66.0	60.2	No	62.2	No	No	2.0
724B	66.0	60.3	No	62.3	No	No	2.0

Map Label[1]	UDOT Noise Abatement Criteria Leq(h)	Existing Noise Levels (dBA)	Existing Exceeds NAC	Proposed Action Noise Levels (dBA)	Projected Impact		Existing and Proposed Action Noise Level Difference
					≥ 10 dBA Increase From Existing Level	≥ UDOT Noise Abatement Criteria	
725B	66.0	60.4	No	62.5	No	No	2.1
726B	66.0	60.6	No	62.6	No	No	2.0
727B	66.0	61.0	No	63.3	No	No	2.3
728B	66.0	60.8	No	63.2	No	No	2.4
729B	66.0	60.9	No	63.2	No	No	2.3
730B	66.0	60.8	No	63.1	No	No	2.3
731B	66.0	60.3	No	62.7	No	No	2.4
732B	66.0	60.4	No	62.7	No	No	2.3
733B	66.0	60.6	No	62.8	No	No	2.2
734B	66.0	60.8	No	63.0	No	No	2.2
735B	66.0	60.3	No	62.7	No	No	2.4
736B	66.0	59.9	No	62.4	No	No	2.5
737B	66.0	59.8	No	62.2	No	No	2.4
738B	66.0	59.6	No	61.8	No	No	2.2
739B	66.0	59.6	No	61.9	No	No	2.3
740B	66.0	59.8	No	62.2	No	No	2.4
741B	66.0	59.9	No	62.3	No	No	2.4
742B	66.0	60.1	No	62.5	No	No	2.4
743B	66.0	58.3	No	59.4	No	No	1.1
744B	66.0	65.2	No	61.8	No	No	-3.4
745B	66.0	63.2	No	59.3	No	No	-3.9
746B	66.0	61.7	No	57.9	No	No	-3.8
747B	66.0	59.9	No	60.2	No	No	0.3
748B	66.0	58.6	No	57.9	No	No	-0.7
749B	66.0	60.8	No	59.8	No	No	-1.0
750B	66.0	61.2	No	60.1	No	No	-1.1
751B	66.0	60.8	No	63.1	No	No	2.3

[1] Receptors with a D suffix represent the interiors of structures. Masonry buildings with double-glazed glass windows generally provide a noise reduction of approximately 25 dBA. Therefore, the interior noise levels for these buildings were estimated to be 25 dBA less than the exterior noise levels calculated by TNM.

4.0 NOISE ABATEMENT

According to the UDOT Noise Abatement Policy, specific conditions must be met before traffic noise abatement is implemented. Noise mitigation must be considered feasible and reasonable. The factors considered when determining if mitigation is feasible include:

- **Engineering Considerations:** Engineering considerations such as safety, presence of cross streets, sight distance, access to adjacent properties, wall height, topography, drainage, utilities, maintenance access and maintenance of the abatement measure must be taken into account as part of establishing feasibility. Noise abatement measures are not intended to serve as privacy fences or safety barriers. Abatement measures installed on structures will not exceed 10-feet in height measured from the top of deck or roadway to the top of the noise wall. Noise walls will not be installed on structures that require retrofitting to accommodate the noise abatement measure. Noise abatement measures will be considered if the project meets the criteria established in this policy if structure replacement is included as part of the project. Abatement measures shall be consistent with general American Association of State Highway and Transportation Officials (AASHTO) design principles.
- **Safety on Urban Non-Access Controlled Roadways:** To avoid a damaged wall from becoming a safety hazard, in the event of a failure, wall height shall be no greater than the distance from the back-of-curb to the face of proposed wall. Because the distance from the back-of-curb to the face of a proposed wall varies, wall heights which meet this safety requirement may also vary.
- **Acoustic Feasibility:** Noise abatement must be considered "acoustically feasible." This is defined as achieving at least a 5 dBA highway traffic noise reduction for at least 50% of front-row receptors.

The factors considered when determining if mitigation is reasonable include:

- **Noise Abatement Design Goal:** Every reasonable effort should be made to obtain substantial noise reductions. UDOT defines the minimum noise reduction (design goal) from proposed abatement measures to be 7 dBA or greater for at least 35% of front-row receptors.
- **Cost Effectiveness:** The cost of noise abatement measures must be deemed reasonable in order to be included in the project. Noise abatement costs are based on a fixed unit cost of $20 per square foot, multiplied by the height and length of the wall, in addition to the cost of any other item associated with the abatement measure that is critical to safety. The fixed unit cost is based on the historical average cost of noise walls installed on UDOT projects and is reviewed at regular intervals, not to exceed five years. The cost effectiveness of abatement is determined by analyzing the cost of a wall that would provide a noise reduction of 5 dBA or more for a benefited receptor. A reasonable cost

is considered to be a maximum of $30,000 per benefited receptor (Activity Category B) and $360 per lineal foot for Activity Categories A,C,D or E. If the anticipated cost of the noise abatement measure is less than the allowable cost, then the abatement is deemed reasonable.

The cost effectiveness calculation needs to take into account the cost of any items associated with the abatement measure that is critical to safety, such as snow storage. Where noise walls are located, additional width between the safety barrier and the noise wall needs to be added to accommodate snow storage. Therefore, the cost to construct items necessary for snow storage was taken into consideration as part of the cost effectiveness calculation.

- **Viewpoints of Property Owners and Residents:** As part of the final design phase, public balloting would take place if noise abatement measures appear to meet the criteria outlined in UDOT's Noise Abatement Policy.

4.1 Noise Barriers

For a sound wall to be effective, it must be high enough and long enough to block the view of the noise source from the receptor's perspective. The *Highway Traffic Noise Analysis and Abatement Policy and Guidance* states that a good rule of thumb is that the noise barrier should extend four times as far in each direction as the distance from the receptor to the barrier. For instance, if the receptor is 50 feet from the proposed noise barrier, the barrier needs to extend at least 200 feet on either side of the receptor in order to shield the receptor from noise traveling past the ends of the barrier.

Openings in noise walls for driveway and cross street accesses greatly reduce the effectiveness of noise walls. Therefore, impacted receptors with direct access onto local streets do not qualify for noise walls.

The anticipated cost of each wall was calculated by multiplying the wall area and the wall cost per square foot ($20). The allowable cost was calculated using two variables: 1) Activity Category B allowable cost and, 2) Activity Category C allowable cost. The Activity Category B allowable cost was calculated by multiplying the allowable cost per benefited receptor ($30,000) by the number of receptors benefited by the wall. The Activity Category C allowable cost was calculated by multiplying the length of the wall associated with Activity Category C land use by the allowable cost for Activity Cateogory C land ($360 per linear foot). These two variables, Activity Category B allowable cost and Activity Category C allowable cost, were combined to produce the allowable cost for each wall (see Appendix D for detailed wall analyses).

In an effort to provide an objective analysis of traffic noise reduction to impacted receptors, a variety of noise wall heights were considered. When multiple wall heights met noise abatement requirements, the shortest wall height found to be

both feasible and reasonable was recommended for balloting. A total of 18 noise walls were considered for this project and each are discussed below. See Noise Wall maps 1–16 for benefited receptors associated with recommended noise walls. Benefited receptors associated with non-recommended noise walls represent those receptors associated with the shortest wall height found to be acoustically feasible and meet the noise abatement design goal, but is not cost reasonable.

Wall 1

This wall is located on the east side of US-89 and extends from Hidden Springs Parkway north to Nicholls Road (see Noise Wall maps 1 and 2 in Appendix C). This wall was evaluated to mitigate impacts to 26 receptors: 120B–132B, 143–144C, 146C, 613B–621B, and 661B. The wall is approximately 3,981 feet in length. As summarized in Table 4, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses). c

Table 4: Summary of Wall 1

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	62.1	Yes	44.8	Yes	$895,725	$692,400	No	No
12	86.2	Yes	69.0	Yes	$1,054,965	$932,400	No	No
14	96.6	Yes	82.8	Yes	$1,214,205	$1,712,400	Yes	Yes
16	96.6	Yes	89.7	Yes	$1,373,445	$2,252,400	Yes	Yes
18	96.6	Yes	96.6	Yes	$1,532,685	$2,282,400	Yes	Yes
20	96.6	Yes	96.6	Yes	$1,691,925	$2,312,400	Yes	Yes

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost

Walls ranging in height from 10 to 12 feet in height are acoustically feasible and meet the noise abatement design goal, however, they are not cost reasonable. Walls ranging in height from 14 to 20 feet are acoustically feasible, meet the noise abatement design goal, and are cost reasonable. **Therefore, a 14 foot tall wall for Wall 1 is recommended for balloting because it is the shortest wall height found to be both feasible and reasonable.**

Wall 2

This wall is an existing 12 foot tall noise wall located on the west side of US-89 and extends from south of Hidden Valley drive north to the Davis Park Golf Course (see Noise Wall maps 1 and 2 in Appendix C). The wall was evaluated to determine if constructing a noise wall taller than the existing 12-ft wall would provide mitigation for impacts to 12 receptors: 678B–679B, 687B–688B, 703B–704B, 706B–709B, and 715B. The wall is approximately 2,365 feet in length. As summarized in Table 5, walls ranging in height from 14 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 5: Summary of Wall 2

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
14	0.0	No	N/A	N/A	N/A	N/A	N/A	No
16	0.0	No	N/A	N/A	N/A	N/A	N/A	No
18	38.9	No	N/A	N/A	N/A	N/A	N/A	No
20	55.6	Yes	0.0	N/A	N/A	N/A	N/A	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost

Walls ranging in height from 14 to 18 feet are not acoustically feasible. A wall 20 feet in height is acoustically feasible, however it does not meet the noise abatement design goal. Therefore, a wall 2,365 feet in length at this location is not recommended for balloting.

Wall 3

This wall is located on the east side of US-89 and extends from Nicholls Road north along the 400 North exit ramp (see Noise Wall maps 3–5 in Appendix C). This wall was evaluated to mitigate impacts to 32 receptors: 99B–101B, 111B, 113B–114B,133b–141B, 150B–152B,154B, 157B–159B, 161B–166B, and 168B–169B. The wall is approximately 4,187 feet in length. As summarized in Table 6, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 6: Summary of Wall 3

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	60.9	Yes	34.8	No	N/A	N/A	N/A	No
12	78.3	Yes	60.9	Yes	$1,109,555	$657,000	No	No
14	87.0	Yes	78.3	Yes	$1,277,035	$1,047,000	No	No
16	95.7	Yes	87.0	Yes	$1,444,515	$1,467,000	Yes	Yes
18	100.0	Yes	91.3	Yes	$1,611,995	$1,527,000	No	No
20	100.0	Yes	91.3	Yes	$1,779,475	$1,587,000	No	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

A wall 10 feet in height is acoustically feasible, however it does not meet the noise abatement design goal. Walls ranging in height from 12 to 14 feet and 18 to 20 feet are acoustically feasible and meet the noise abatement design goal, however they are not cost reasonable. A wall 16 feet in height is cost reasonable, meets the noise abatement design goal, and is cost reasonable. **Therefore, a 16 foot tall wall for Wall 3 is recommended for balloting because it is the only wall height found to be both feasible and reasonable.**

Wall 4

This wall is located on the west side of US-89 and extends from approximately 400 feet south of Laurelwood Drive to approximately 170 feet south of Charlais Drive (see Noise Wall maps 3–5 in Appendix C). This wall was evaluated to mitigate impacts to 23 receptors: 1B, 13B–15B,20B, 24B, 27B, 32B–33B, 43B, 51B–53B, 55B, 57B–61B, 65B–67B, and 69B. The wall is approximately 3,435 feet in length. As summarized in Table 7, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 7: Summary of Wall 4

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	38.1	No	N/A	N/A	N/A	N/A	N/A	No
12	66.7	Yes	28.6	No	N/A	N/A	N/A	No
14	71.4	Yes	42.9	Yes	$1,047,675	$840,000	No	No
16	85.7	Yes	71.4	Yes	$1,185,075	$1,230,000	Yes	Yes
18	90.5	Yes	76.2	Yes	$1,322,475	$1,440,000	Yes	Yes
20	90.5	Yes	81.0	Yes	$1,459,875	$1,440,000	No	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost

A wall 10 feet in height is not acoustically feasible. A wall 12 feet in height is acoustically feasible, however it does not meet the noise abatement design goal. A wall 14 feet in height is acoustically feasible and meets the noise abatement design goal, however it is not cost reasonable. Walls ranging in height from 16 to 18 feet are acoustially feasible, meet the noise abatement design goal, and are cost reasonable. A wall 20 feet in height is acoustically feasible and meets the noise abatement design goal, however it is not cost reasonable. **Therefore, a 16 foot tall wall for Wall 4 is recommended for balloting because it is the shortest wall height found to be both feasible and reasonable.**

Wall 5

This wall is located on the west side of US-89 and extends from approximately 300 feet south to approximately 610 feet north of the proposed circle at 450 North (see Noise Wall maps 5 and 6 in Appendix C). This wall was evaluated to mitigate impacts to 3 receptors: 175B–177B. The wall is approximately 900 feet in length. As summarized in Table 8, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 8: Summary of Wall 5

Barrier Height	Feasibility		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	0.0	No	N/A	N/A	N/A	N/A	N/A	No
12	0.0	No	N/A	N/A	N/A	N/A	N/A	No
14	50.0	Yes	0.0	No	N/A	N/A	N/A	No
16	50.0	Yes	0.0	No	N/A	N/A	N/A	No
18	100.0	Yes	0.0	No	N/A	N/A	N/A	No
20	100.0	Yes	0.0	No	N/A	N/A	N/A	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost

Walls ranging in height from 10 to 12 feet are not acoustically feasible. Wall heights ranging from 14 to 20 feet are acoustically feasible, however they do not meet the noise abatement design goal. Therefore, a wall 900 feet in length at this location is not recommended for balloting.

Wall 6

This wall is located on the east side of US-89 and extends north from 400 North to the US-89 northbound entrance ramp at 400 North (see Noise Wall maps 5 and 6 in Appendix C). This wall was evaluated to mitigate impacts to 2 receptors: 591B and 595B. The wall is approximately 1,082 feet in length. As summarized in Table 9, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 9: Summary of Wall 6

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	0.0	No	N/A	N/A	N/A	N/A	N/A	No
12	0.0	No	N/A	N/A	N/A	N/A	N/A	No
14	0.0	No	N/A	N/A	N/A	N/A	N/A	No
16	0.0	No	N/A	N/A	N/A	N/A	N/A	No
18	0.0	No	N/A	N/A	N/A	N/A	N/A	No
20	0.0	No	N/A	N/A	N/A	N/A	N/A	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost

Due to local road accessibility, the only location appropriate to evaluate mitigation was along the west side of Mountain Road. As the highway drops below the surrounding elevation at 400 North, walls ranging in height from 10 to 20 feet are not acoustically feasible. Therefore, a wall 1,082 feet in length at this location is not recommended for balloting.

Wall 7

This wall is located on the east side of US-89 and extends from approximately 180 feet south of 650 North to Crestwood Road (see Noise Wall maps 6 and 7 in Appendix C). This wall was evaluated to mitigate impacts to 17 receptors: 190B–191B, 575B–587B, and 589B–590B. The wall is approximately 2,963 feet in length. As summarized in Table 10, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 10: Summary of Wall 7

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	0.0	No	N/A	N/A	N/A	N/A	N/A	No
12	9.1	No	N/A	N/A	N/A	N/A	N/A	No
14	18.2	No	N/A	N/A	N/A	N/A	N/A	No
16	54.5	Yes	9.1	No	N/A	N/A	N/A	No
18	81.8	Yes	36.4	Yes	$1,140,755	$420,000	No	No
20	81.8	Yes	72.7	Yes	$1,259,275	$480,000	No	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

Walls ranging in height from 10 to 14 feet are not acoustically feasible. A wall 16 feet in height is acoustically feasible, however it does not meet the noise abatement design goal. Walls ranging in height from 18 to 20 feet are acoustically feasible and meet the noise abatement design goal, however they are not cost reasonable. Therefore, a wall 2,963 feet in length at this location is not recommended for balloting.

Wall 7a

Wall 7a was modeled to evaluate the shortening of Wall 7 to mitigate impacts for only those receptors in close proximity to the 400 North interchange. This wall is located on the east side of US-89 and extends from the US-89 northbound entrance ramp at 400 North approximately 963 feet to the north (see inset to Noise Wall map 6 in Appendix C). This wall was evaluated to mitigate impacts to 14 receptors: 576B–587B, and 589B–590B. The wall is approximately 963 feet in length. As summarized in Table 11, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 11: Summary of Wall 7a

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	0.0	No	N/A	N/A	N/A	N/A	N/A	No
12	0.0	No	N/A	N/A	N/A	N/A	N/A	No
14	0.0	No	N/A	N/A	N/A	N/A	N/A	No
16	66.7	Yes	0.0	No	N/A	N/A	N/A	No
18	83.3	Yes	16.7	No	N/A	N/A	N/A	No
20	100.0	Yes	66.7	Yes	$409,275	$330,000	No	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

Walls ranging in height from 10 to 14 feet are not acoustically feasible. Walls ranging in height from 16 to 18 feet are acoustically feasible, however they do not meet the noise abatement design goal. A wall 20 feet in height is acoustically feasible and meets the noise abatement design goal, however it is not cost reasonable. Therefore, a wall 963 feet in length at this location is not recommended for balloting.

Wall 8

This wall is located on the west side of US-89 and extends from Elias Road to Crestwood Road (see Noise Wall maps 6 and 7 in Appendix C). This wall was evaluated to mitigate impacts to 4 receptors: 183B, 187B, and 603B–604B. The wall is approximately 2,221 feet in length. As summarized in Table 12, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 12: Summary of Wall 8

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	14.3	No	N/A	N/A	N/A	N/A	N/A	No
12	42.9	No	N/A	N/A	N/A	N/A	N/A	No
14	71.4	Yes	14.3	No	N/A	N/A	N/A	No
16	85.7	Yes	14.3	No	N/A	N/A	N/A	No
18	85.7	Yes	42.9	Yes	$855,085	$180,000	No	No
20	100.0	Yes	57.1	Yes	$943,925	$210,000	No	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

Walls ranging in height from 10 to 12 feet are not acoustically feasible. Walls ranging in height from 14 to 16 feet are acoustically feasible, however they do not meet the noise abatement design goal. Walls ranging in height from 18 to 20 feet are acoustically feasible and meet the noise abatement design goal, however they are not cost reasonable. Wall 8 could not be shortened and still provide benefit to enough receptors to be considered feasible and reasonable. Therefore, a wall 2,221 feet in length at this location is not recommended for balloting.

Wall 9

This wall is located on the west side of US-89 and extends from Crestwood Road to approximately 1,100 feet south of Oak Hills Drive (see Noise Wall maps 7–9 in Appendix C). This wall was evaluated to mitigate impacts to 18 receptors: 195B–196B, 198B–200B, 204B–207B, 211B, 218B–221B, 22B, 228B–229B, and 676B. The wall is approximately 3,598 feet in length. As summarized in Table 13, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 13: Summary of Wall 9

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	22.7	No	N/A	N/A	N/A	N/A	N/A	No
12	54.5	Yes	13.6	No	N/A	N/A	N/A	No
14	63.6	Yes	36.4	Yes	$1,097,390	$750,000	No	No
16	86.4	Yes	50.0	Yes	$1,241,310	$1,110,000	No	No
18	86.4	Yes	54.5	Yes	$1,385,230	$1,170,000	No	No
20	86.4	Yes	63.6	Yes	$1,529,150	$1,170,000	No	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

A wall 10 feet in height is not acoustically feasible. A wall 12 feet in height is acoustically feasible, however it does not meet the noise abatement design goal. Wall heights ranging from 14 to 20 feet are acoustically feasible and meet the noise abatement design goal, however, they are not cost reasonable. Wall 9 could not be shortened and still provide benefit to enough receptors to be considered feasible and reasonable. Therefore, a wall 3,598 feet in length at this location is not recommended for balloting.

Wall 10

This wall is located on the east side of US-89 and extends from Crestwood Road to Oak Hills Drive (see Noise Wall maps 7–10 in Appendix C). This wall was evaluated to mitigate impacts to 17 receptors: 261C, 264B–268B, 270B–275B, 279B, 281B, 284B–285B, and 287B. The wall is approximately 4,615 feet in length. As summarized in Table 14, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses). While a planned residential development comprised of 35 parcels is approved for Orchard Ridge Estates in this area, no building permits have been issued as of September 6, 2019. As such, no receptors for this development were included in this analysis.

Table 14: Summary of Wall 10

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	27.8	No	N/A	N/A	N/A	N/A	N/A	No
12	38.9	No	N/A	N/A	N/A	N/A	N/A	No
14	66.7	Yes	16.7	No	N/A	N/A	N/A	No
16	77.8	Yes	44.4	Yes	$1,592,175	$720,000	No	No
18	77.8	Yes	61.1	Yes	$1,776,775	$744,120	No	No
20	83.3	Yes	72.2	Yes	$1,961,375	$774,120	No	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

Walls ranging in height from 10 to 12 feet are not acoustically feasible. A wall 14 feet in height is acoustically feasible, however it does not meet the noise abatement design goal. Wall ranging in height from 16 to 20 feet are acoustically feasible and meet the noise abatement design goal, however, they are not cost reasonable. Wall 10 could not be shortened and still provide benefit to enough receptors to be considered feasible and reasonable. Therefore, a wall 4,615 feet in length at this location is not recommended for balloting.

Wall 11

This wall is located on the west side of US-89 and extends from the proposed circle at the southern end of Woodridge Drive to approximately 400 feet north of the proposed circle at the eastern end of Gentile Street (see Noise Wall maps 10–12 in Appendix C). This wall was evaluated to mitigate impacts to 22 receptors: 290B, 294B–295B, 297B–301B, 306B–310B, 313B–316B, 318B, 320B, 323B, and 325B–326B. The wall is approximately 3,000 feet in length. As summarized in Table 15, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 15: Summary of Wall 11

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	76.2	Yes	28.6	No	N/A	N/A	N/A	No
12	85.7	Yes	52.4	Yes	$795,000	$960,000	Yes	Yes
14	90.5	Yes	61.9	Yes	$915,000	$1,080,000	Yes	Yes
16	90.5	Yes	76.2	Yes	$1,035,000	$1,080,000	Yes	Yes
18	95.2	Yes	81.0	Yes	$1,155,000	$1,140,000	No	No
20	95.2	Yes	85.7	Yes	$1,275,000	$1,140,000	No	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

A wall 10 feet in height is acoustically feasible, however it does not meet the noise abatement design goal. Wall heights ranging from 12 to 16 feet are acoustically feasible, meet the noise abatement design goal, and are cost reasonable. Wall heights ranging from 18 to 20 feet in height are acoustically feasible and meet the noise abatement design goal, however, they are not cost reasonable. **Therefore, a 12 foot tall wall for Wall 11 is recommended for balloting because it is the shortest wall height found to be both feasible and reasonable.**

Wall 12

This wall is located on the east side of US-89 and extends from approximately 866 feet north of Oak Hills Drive to 335 feet south of Gordon Avenue (see Noise Wall maps 10–12 in Appendix C). This wall was evaluated to mitigate impacts to 29 receptors: 333B, 343B–344B, 346B–358B, 360–c361B, 363B, 598B–601B, 605B–606B, 608B–610B, and 668B. The wall is approximately 2,750 feet in length. As summarized in Table 16, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses). A planned residential development comprised of 13 parcels is approved for Eastside Village in this area, and all 13 building permits have been issued as of August 28, 2019. The 13 permitted parcels were included in this analysis.

Table 16: Summary of Wall 12

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	29.4	No	N/A	N/A	N/A	N/A	N/A	No
12	52.9	Yes	5.9	No	N/A	N/A	N/A	No
14	76.5	Yes	41.2	Yes	$838,750	$780,000	No	No
16	88.2	Yes	76.5	Yes	$948,750	$1,320,000	Yes	Yes
18	94.1	Yes	82.4	Yes	$1,058,750	$1,320,000	Yes	Yes
20	94.1	Yes	88.2	Yes	$1,168,750	$1,350,000	Yes	Yes

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

A wall 10 feet in height is not acoustically feasible. A wall 14 feet in height is acoustically feasible, however it does not meet the noise abatement design goal. A wall 14 feet in height is acoustically feasible and meets the noise abatement design goal, however it is not cost reasonable. Walls ranging in height from 16 to 20 feet are acoustically feasible, meet the noise abatement design goal, and are cost reasonable. **Therefore, a 16 foot tall wall for Wall 12 is recommended for balloting because it is the shortest wall height found to be both feasible and reasonable.**

Wall 13

This wall is located on the east side of US-89 and extends from approximately 803 feet north of Gordon Avenue to Antelope Drive (see Noise Wall maps 13–15 in Appendix C). This wall was evaluated to mitigate impacts to 34 receptors: 446B–474B, 495B–497B, and 669B–670B. The wall is approximately 4,481 feet in length. As summarized in Table 17, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 17: Summary of Wall 13

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	6.9	No	N/A	N/A	N/A	N/A	N/A	No
12	17.2	No	N/A	N/A	N/A	N/A	N/A	No
14	31.0	No	N/A	N/A	N/A	N/A	N/A	No
16	65.5	Yes	37.9	Yes	$1,545,945	$690,000	No	No
18	86.2	Yes	62.1	Yes	$1,725,185	$1,050,000	No	No
20	96.6	Yes	82.8	Yes	$1,904,425	$1,200,000	No	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

Walls ranging in height from 10 to 14 feet are not acoustically feasible. Walls ranging in height from 16 to 20 feet are acoustically feasible and meet the noise abatement design goal, however, they are not cost reasonable. Wall 13 could not be shortened and still provide benefit to enough receptors to be considered feasible and reasonable. Therefore, a wall 4,481 feet in length at this location is not recommended for balloting.

Wall 14

This wall is located on the west side of US-89 and extends from approximately 100 feet south of Cherry Lane to Antelope Drive (see Noise Wall maps 13–15 in Appendix C). This wall was evaluated to mitigate impacts to 23 receptors: 367B, 372B–373B, 377B, 385B–387B, 392B–394B, 396B, 398B–399B, 404B, and 411B–419B. The wall is approximately 3,985 feet in length. As summarized in Table 18, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 18: Summary of Wall 14

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	72.0	Yes	4.0	No	N/A	N/A	No	No
12	84.0	Yes	56.0	Yes	$1,056,025	$1,470,000	Yes	Yes
14	84.0	Yes	72.0	Yes	$1,215,425	$1,710,000	Yes	Yes
16	88.0	Yes	80.0	Yes	$1,374,825	$2,010,000	Yes	Yes
18	92.0	Yes	84.0	Yes	$1,534,225	$2,070,000	Yes	Yes
20	92.0	Yes	84.0	Yes	$1,693,625	$2,070,000	Yes	Yes

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

A wall 10 feet in height is acoustically feasible, however it does not meet the noise abatement design goal. Walls ranging in height from 12 to 20 feet are acoustically feasible, meet the noise abatement design goal, and are cost reasonable. **Therefore, a 12 foot tall wall for Wall 14 is recommended for balloting because it is the shortest wall height found to be both feasible and reasonable.**

Wall 15

This wall is located on the east side of US-89 and extends from Antelope Drive to approximately 300 feet north of Sunset Drive (see Noise Wall maps 15 and 16 in Appendix C). This wall was evaluated to mitigate impacts to 7 receptors: 544B, 552B–553B, 556B, and 558B–560B. The wall is approximately 1,800 feet in length. As summarized in Table 19, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 19: Summary of Wall 15

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	11.1	No	N/A	N/A	N/A	N/A	N/A	No
12	11.1	No	N/A	N/A	N/A	N/A	N/A	No
14	11.1	No	N/A	N/A	N/A	N/A	N/A	No
16	22.2	No	N/A	N/A	N/A	N/A	N/A	No
18	44.4	No	N/A	N/A	N/A	N/A	N/A	No
20	55.6	Yes	44.4	Yes	$765,000	$449,040	No	No

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

Walls ranging in height from 10 to 18 feet are not acoustically feasible. A wall 20 feet in height is acoustically feasible and meets the noise abatement design goal, however, it is not cost reasonable. Wall 15 could not be shortened and still provide benefit to enough receptors to be considered feasible and reasonable. Therefore, a wall 1,800 feet in length at this location is not recommended for balloting.

Wall 16

This wall is located on the west side of US-89 and extends from approximately 700 feet north of Antelope Drive to Shay Lane (see Noise Wall maps 15 and 16 in Appendix C). This wall was evaluated to mitigate impacts to 15 receptors: 498B, 503B–505B, 508B–511B, 517B–518B, 528B–530B, and 671B–672B. The wall is approximately 1,967 feet in length. As summarized in Table 20, walls ranging in height from 10 to 20 feet were evaluated (see Appendix D for detailed wall analyses).

Table 20: Summary of Wall 16

Barrier Height	Feasible		Reasonable					Is Barrier Feasible & Reasonable?
	% front-row with 5 dBA reduction	Acoustically feasible? [1]	% front-row with 7 dBA reduction	Noise Abatement Design Goal? [2]	Anticipated Cost	Allowable Cost	Cost Effective? [3]	
10	36.4	No	N/A	N/A	N/A	N/A	N/A	No
12	54.5	Yes	18.2	No	N/A	N/A	N/A	No
14	81.8	Yes	45.5	Yes	$599,935	$600,000	Yes	Yes
16	100.0	Yes	63.6	Yes	$678,615	$1,110,000	Yes	Yes
18	100.0	Yes	63.6	Yes	$757,295	$1,170,000	Yes	Yes
20	100.0	Yes	81.8	Yes	$835,975	$1,170,000	Yes	Yes

[1] 5 dBA reduction for at least 50% of front-row receptors
[2] 7 dBA for at least 35% of front-row receptors
[3] Anticipated cost is less than allowable cost.

A wall 10 feet in height is not acoustically feasible. A wall 12 feet in height is acoustically feasible, however it does not meet the noise abatement design goal. Walls ranging in height from 14 to 20 feet are acoustically feasible, meet the noise abatement design goal, and are cost reasonable. **Therefore, a 14 foot tall wall for Wall 16 is recommended for balloting because it is the shortest wall height found to be both feasible and reasonable.**

5.0 CONSTRUCTION IMPACTS

Construction noise impacts are considered temporary and will be minimized through adherence to UDOT Special Provision 0055M. Extended disruption of normal activities is not anticipated, since no receptors are expected to be exposed to construction noise for a long duration of time.

6.0 INFORMATION FOR LOCAL OFFICIALS

According to the UDOT Noise Abatement Policy, an estimated distance from the edge of pavement to where the worst hour Leq(h) levels of 66 dBA and 71 dBA occurs must be provided to local governments for land uses with Activity Category G. Within the study area there are several parcels of undeveloped land.

The first parcel is located on the west side of US-89 and extends south approximately 530 feet from Gordon Avenue. Projected traffic noise levels from the edge of pavement to a level of 66 dBA and 71 dBA would less than 50 feet from the edge of pavement (see Appendix E).

The second parcel is located on the east side of US-89 and extends north approximatley 817 feet north of Gordon Avenue. Projected traffic noise levels from the edge of pavement to a level of 66 dBA would occur between 350 feet at the northern boundary and 200 feet at the southern boundary (see Appendix E). Projected traffic noise levels from the edge of pavement to a level of 71 dBA would occur between 180 feet at the northern boundary and less than 50 feet from the edge of pavement at the southern boundary (see Appendix E).

The final parcel is located on the east side of US-89 and extends from approximately 800 feet to 1,500 feet south of the Valley View Drive and US-89 intersection. Projected traffic noise levels from the edge of pavement to a level of 71 dBA would occur between 360 feet at the northern boundary and 150 feet at the southern boundary (see Appendix E). Noise levels would be 66 dBA between 270 feet at the southern boundary and beyond 500 feet at the northern boundary (see Appendix E).

7.0 CONCLUSION

The Proposed Action would generally result in an 1.0 dBA noise level increase throughout the study area. Of the 750 receptors in this study, 286 would be impacted by Proposed Action noise levels. Recommended noise walls within the study area that met the requirements of the UDOT Noise Abatement Policy are discussed below. The final decision to build a noise barrier will be made upon completion of the project design, the public involvement process and concurrence with the UDOT Noise Policy. A barrier identified as recommended for balloting is

a barrier that has been shown to be both feasible and reasonable. However, that finding is not a commitment to build a barrier.

Summary of Recommended Walls

Wall 1
This wall is located on the east side of US-89 and extends from Hidden Springs Parkway north to Nicholls Road (see Noise Wall maps 1 and 2 in Appendix C). The wall is approximately 3,981 feet in length with a proposed height of 14 feet.

Wall 3
This wall is located on the east side of US-89 and extends from Nicholls Road north along the 400 North exit ramp (see Noise Wall maps 3–5 in Appendix C). The wall is approximately 4,187 feet in length with a proposed height of 16 feet.

Wall 4
This wall is located on the west side of US-89 and extends from approximately 400 feet south of Laurelwood Drive to approximately 170 feet south of Charlais Drive (see Noise Wall maps 3–5 in Appendix C). The wall is approximately 3,435 feet in length with a proposed height of 16 feet.

Wall 11
This wall is located on the west side of US-89 and extends from the proposed circle at the southern end of Woodridge Drive to approximately 400 feet north of the proposed circle at the eastern end of Gentile Street (see Noise Wall maps 10–12 in Appendix C). The wall is approximately 3,000 feet in length with a proposed height of 12 feet.

Wall 12
This wall is located on the east side of US-89 and extends from approximately 866 feet north of Oak Hills Drive to 335 feet south of Gordon Avenue (see Noise Wall maps 10–12 in Appendix C). The wall is approximately 2,750 feet in length with a proposed height of 16 feet.

Wall 14
This wall is located on the west side of US-89 and extends from approximately 100 feet south of Cherry Lane to Antelope Drive (see Noise Wall maps 13–15 in Appendix C). The wall is approximately 3,985 feet in length with a proposed height of 12 feet.

Wall 16
This wall is located on the west side of US-89 and extends from approximately 700 feet north of Antelope Drive to Shay Lane (see Noise Wall maps 15 and 16 in Appendix C). The wall is approximately 1,967 feet in length with a proposed height of 14 feet.

APPENDIX A: EXISTING NOISE LEVEL MAPS

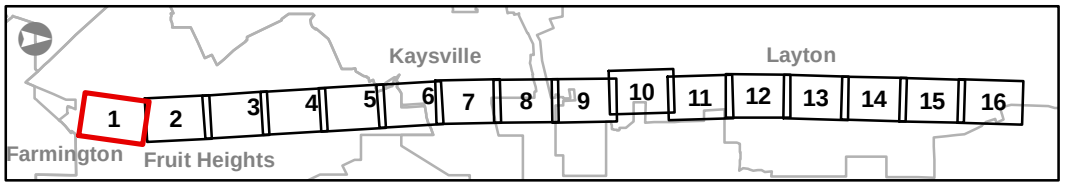
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 1 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



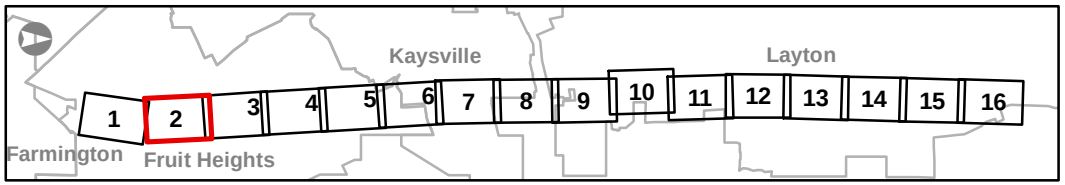
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 2 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



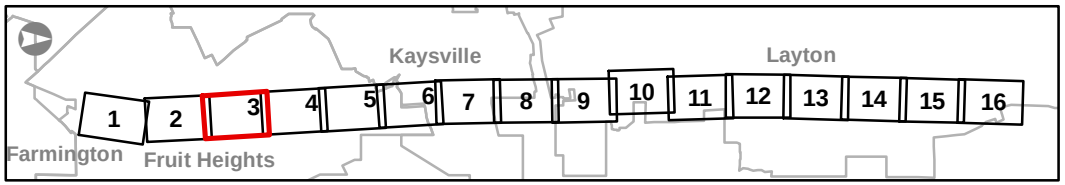
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 3 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



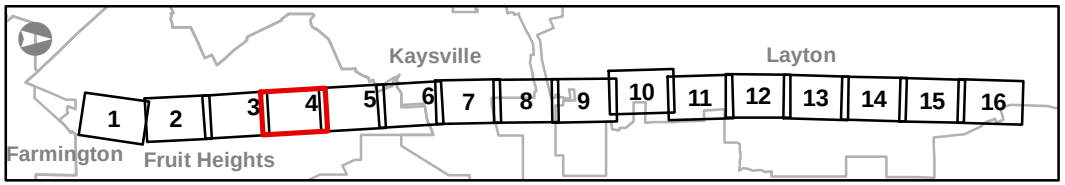
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 4 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



HAMPTON CT
450 N
575 N
HOMESTEAD LN
CHARLAIS DR
COUNTRY WAY
COUNTRY RD
400 N
1300 E
WARD
US 89
MOUNTAIN RD
TERRACE DR
1400 E

35B 36B 37B 38B 39B 40B 41B 42B 43B 44B 45B 46B 47B 48B 49B 50B 51B 52B 53B 54B 55B
178B 176B 180B 181B 182B
591B 592B 593B 594B 595B
160B 161B 162B 163B 164B 165B 166B 167B 168B 169B 170B 171B 172B
664B 665B 666B 667B

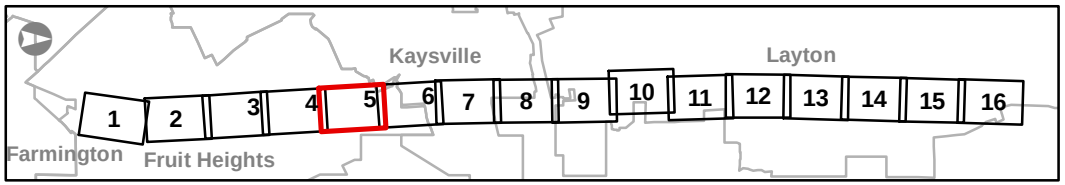
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 5 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



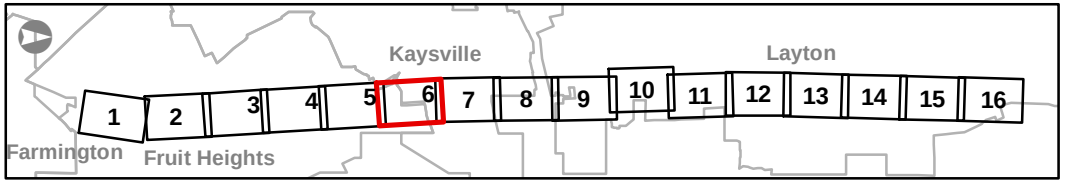
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 6 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



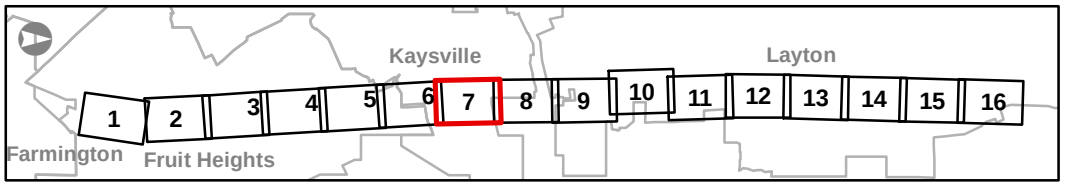
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 7 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



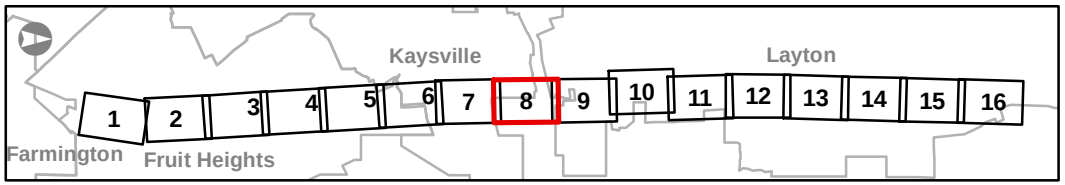
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 8 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



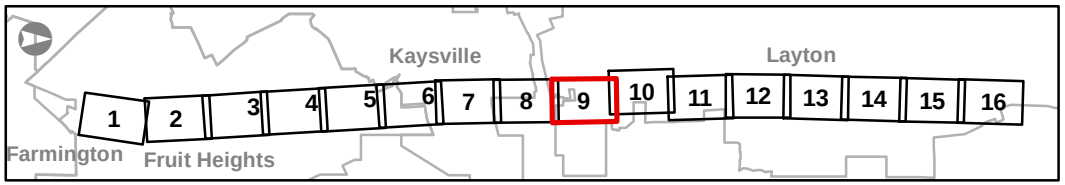
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 9 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



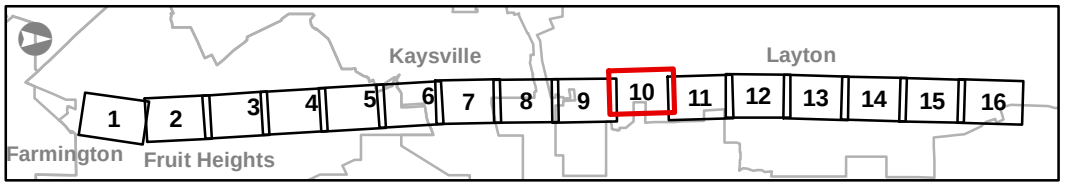
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 10 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



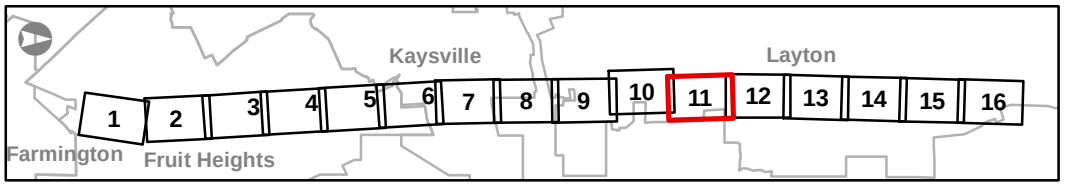
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 11 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



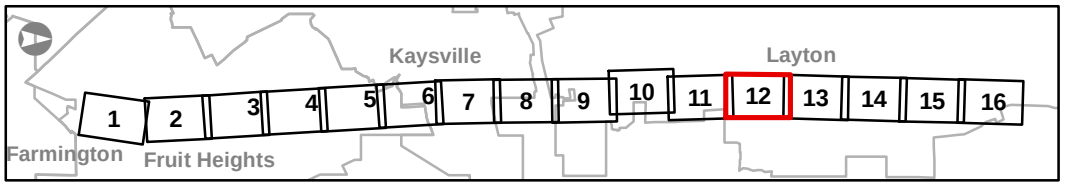
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 12 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



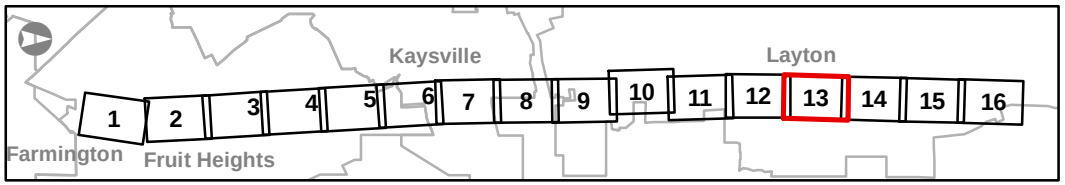
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 13 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



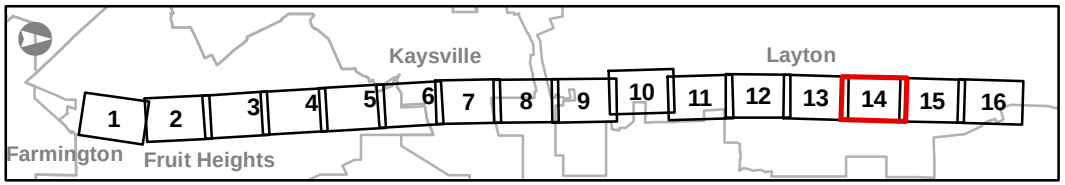
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 14 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



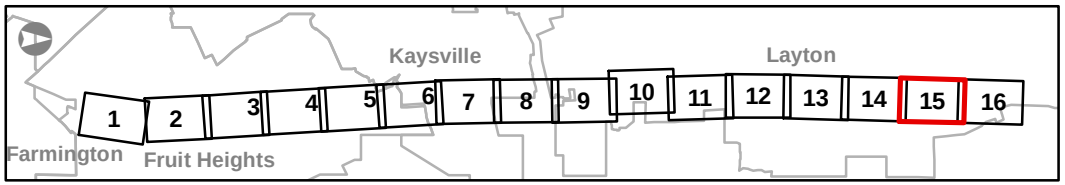
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 15 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



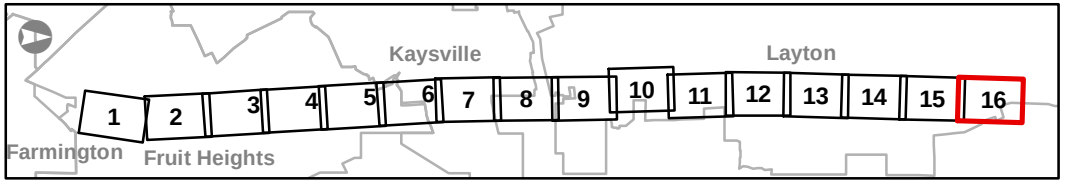
US-89: Shepard Lane to SR-193

Existing Noise Levels

Map 16 of 16

0 175 350 Feet

- Exceeds NAC
- Does Not Exceed NAC



APPENDIX B: BUILD NOISE LEVELS MAPS

US-89: Shepard Lane to SR-193

Build Noise Impacts

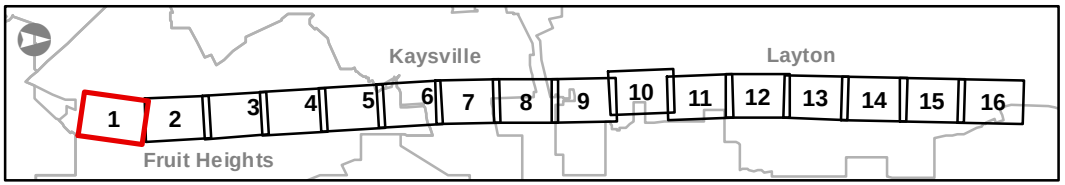
Map 1 of 16

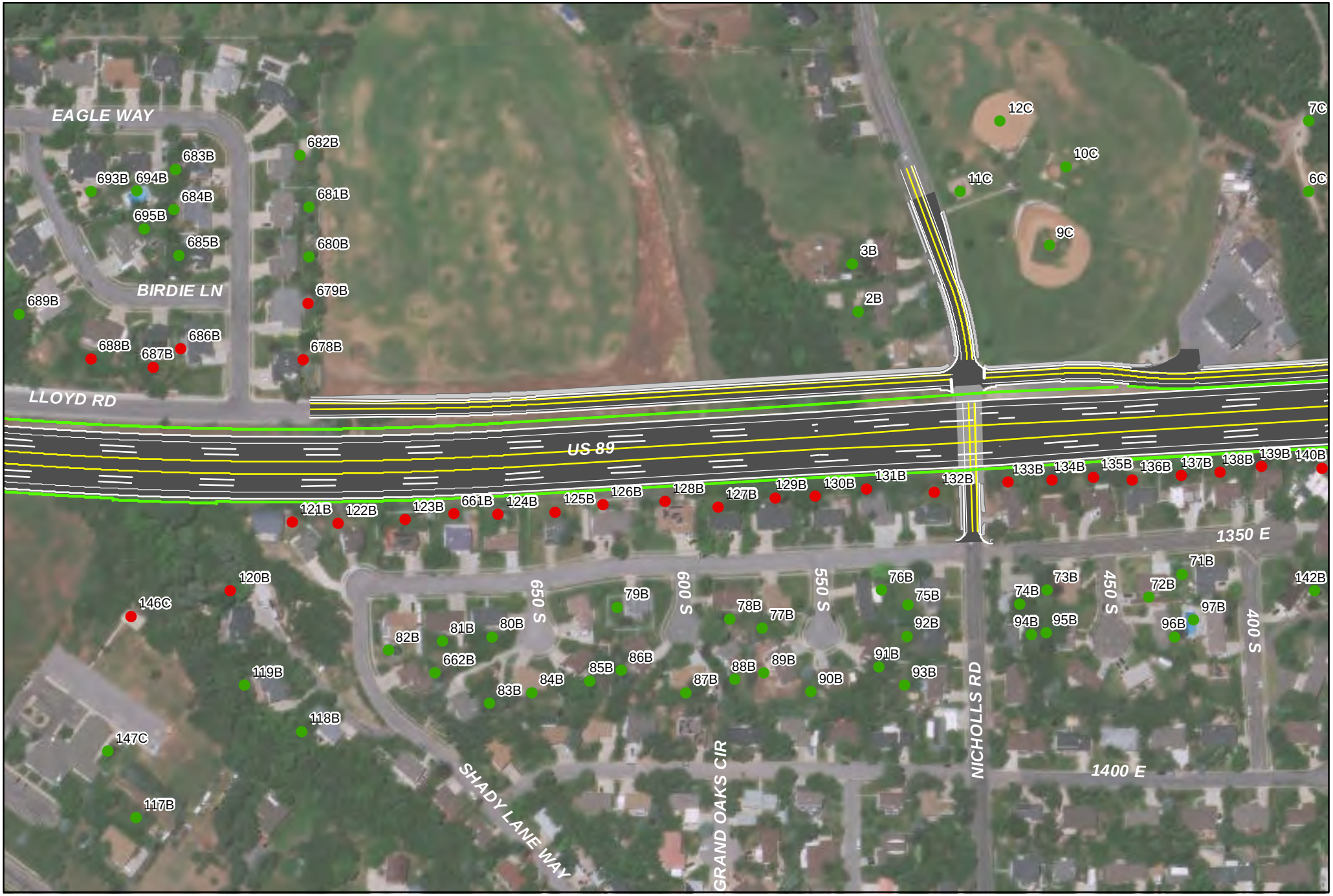
0 175 350 Feet

Impacted Receptor

Non-impacted Receptor

Right-of-way





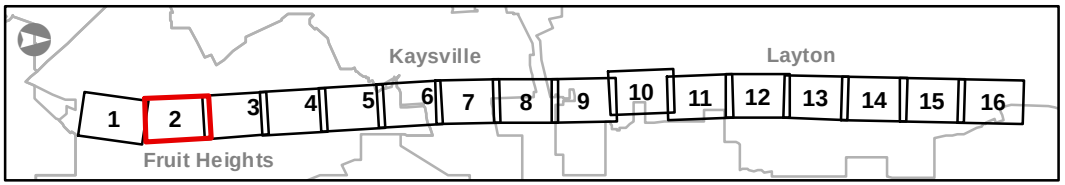
US-89: Shepard Lane to SR-193

Build Noise Impacts

Map 2 of 16

0 175 350 Feet

- Impacted Receptor
- Non-impacted Receptor
- Right-of-way



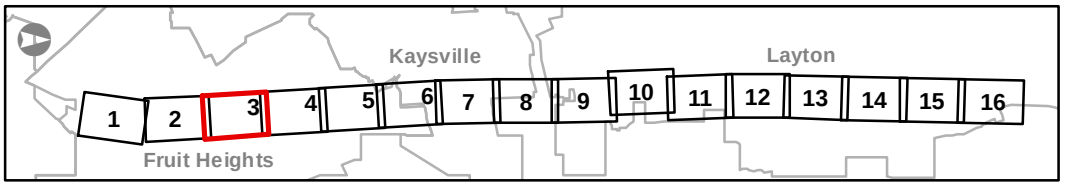
US-89: Shepard Lane to SR-193

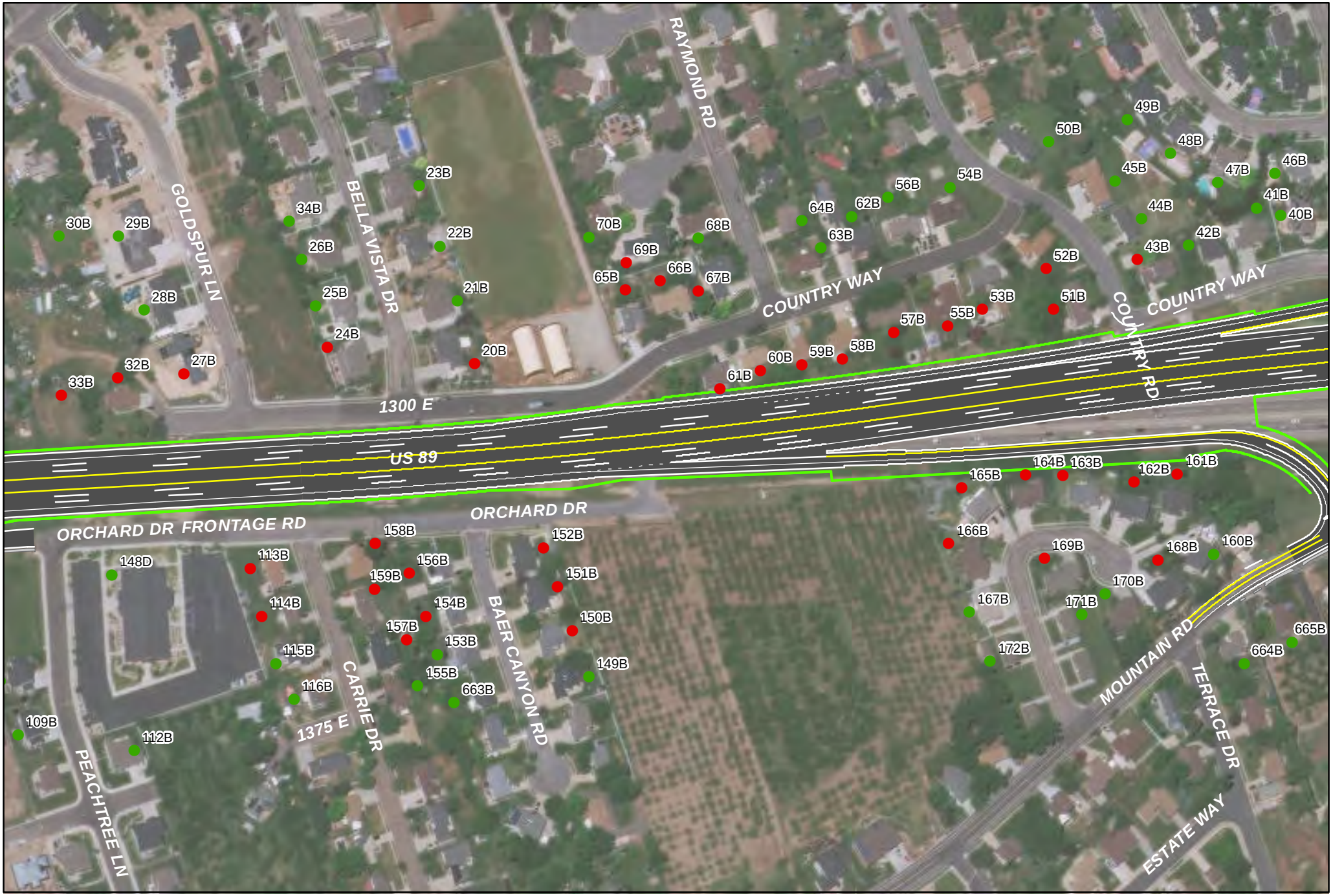
Build Noise Impacts

Map 3 of 16

0 175 350 Feet

- Impacted Receptor
- Non-impacted Receptor
- Right-of-way





US-89: Shepard Lane to SR-193

Build Noise Impacts

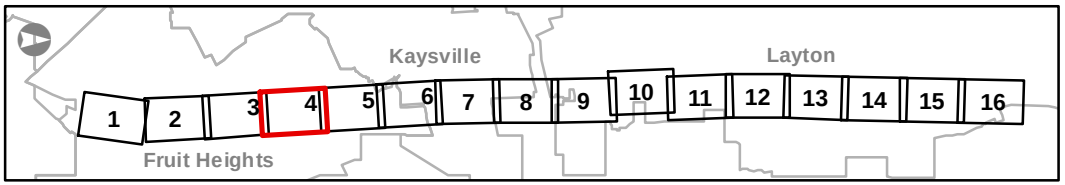
Map 4 of 16

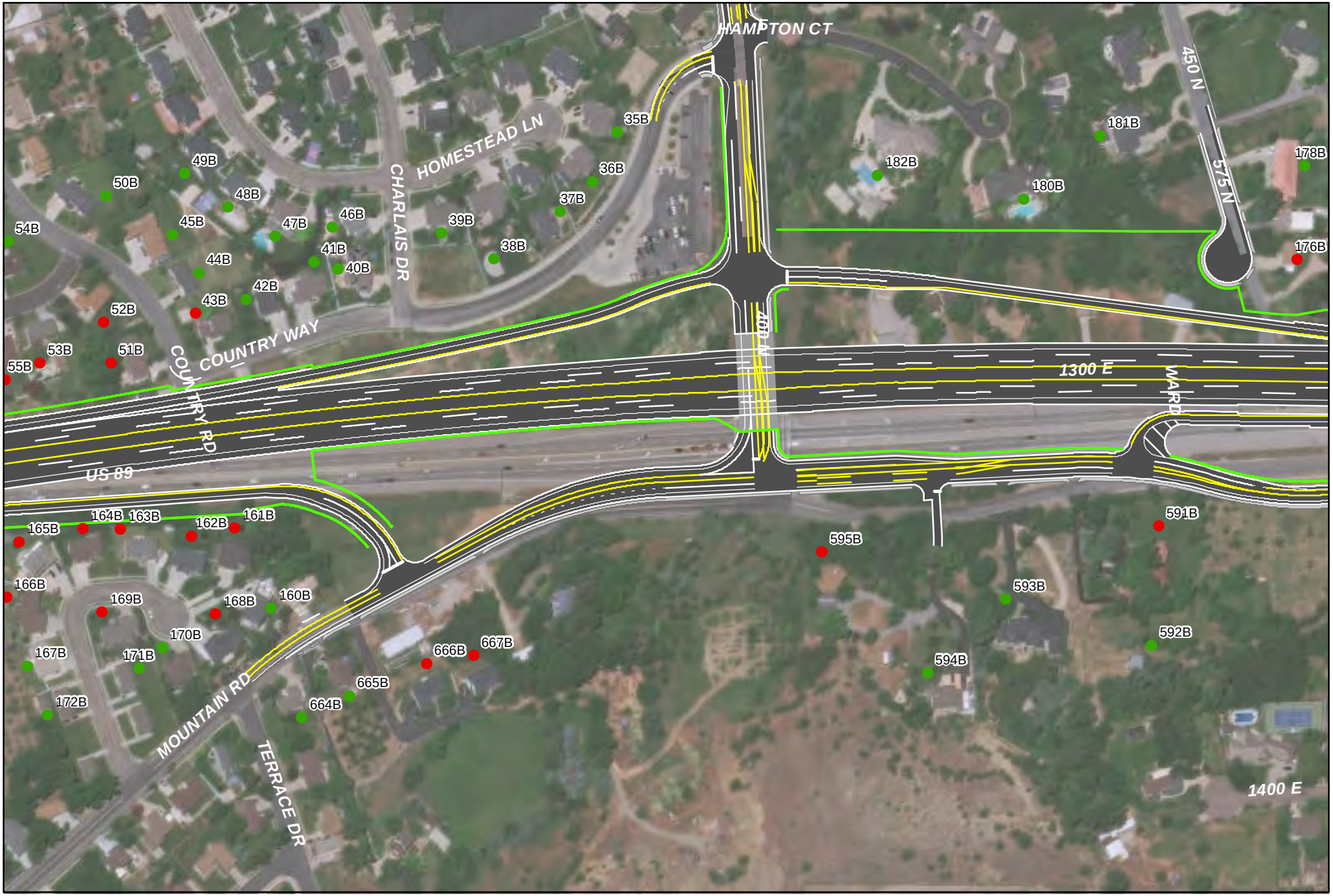
0 175 350 Feet

Impacted Receptor

Non-impacted Receptor

Right-of-way





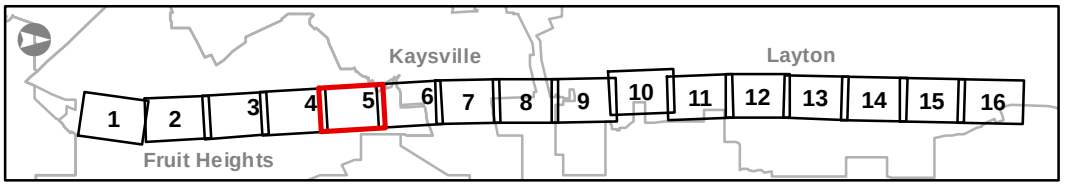
US-89: Shepard Lane to SR-193

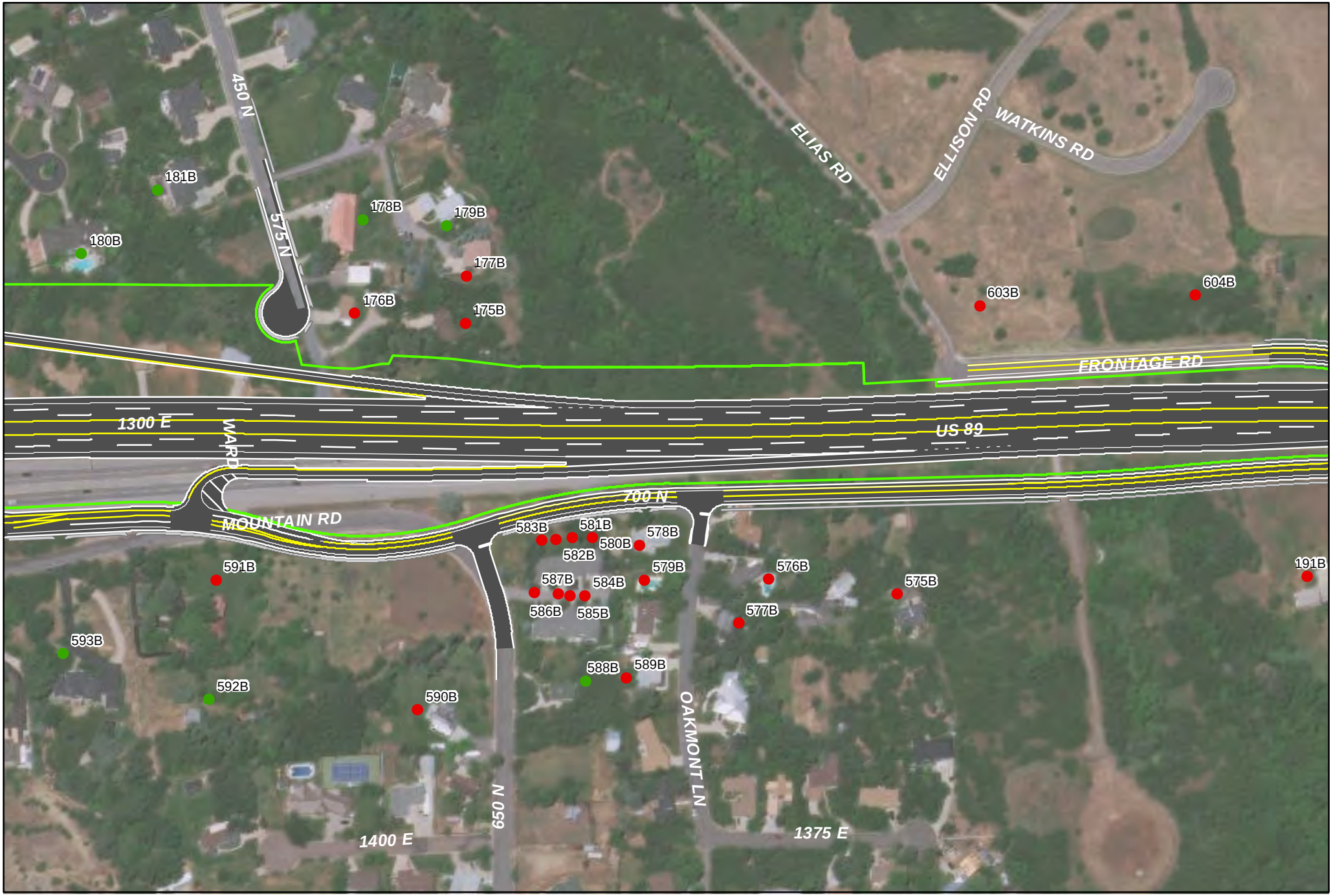
Build Noise Impacts

Map 5 of 16

0 175 350 Feet

- Impacted Receptor
- Non-impacted Receptor
- Right-of-way





US-89: Shepard Lane to SR-193

Build Noise Impacts

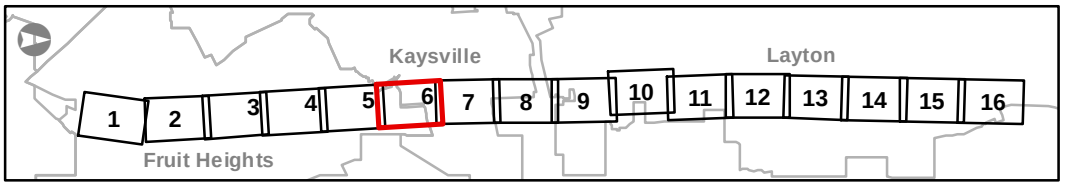
Map 6 of 16

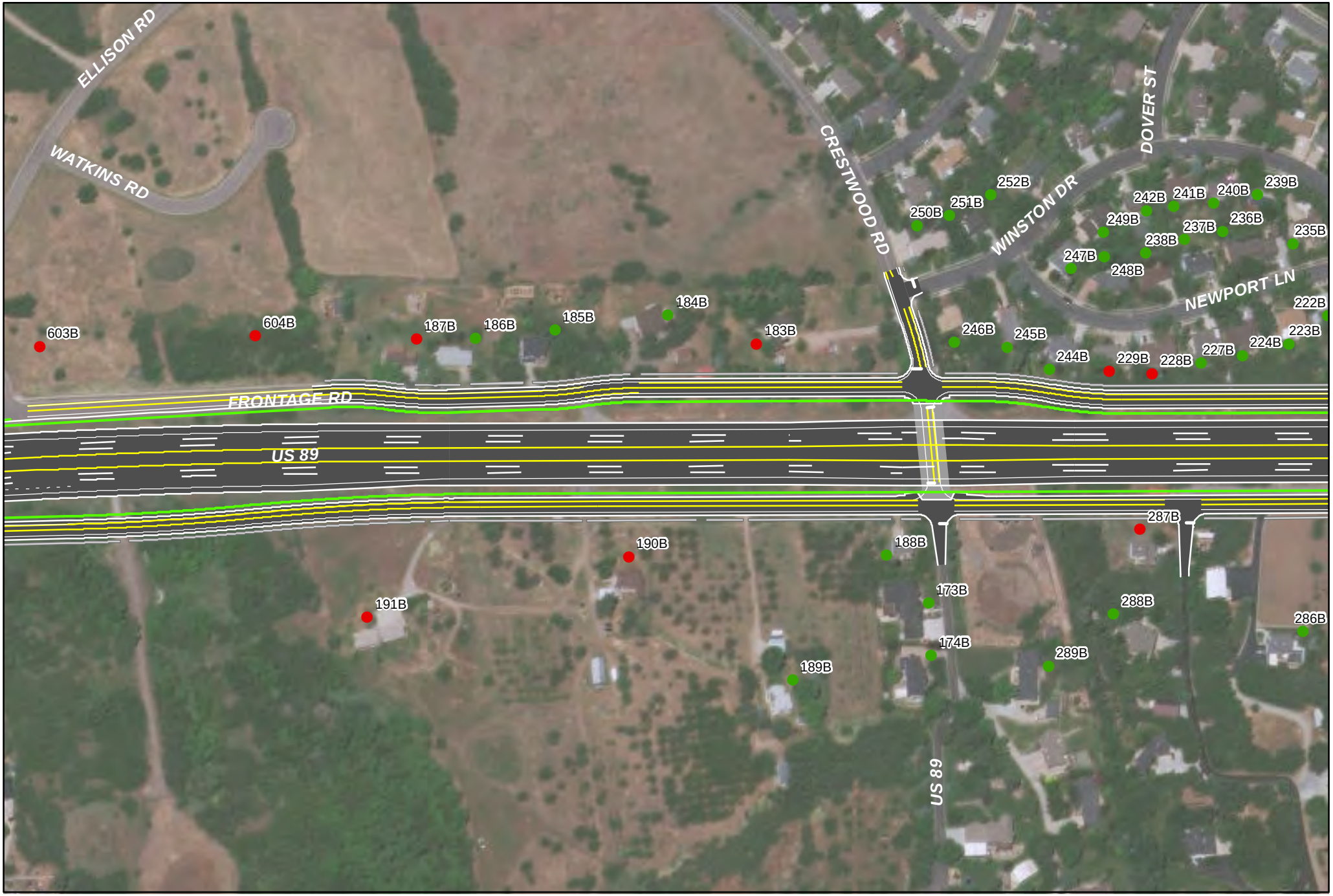
0 175 350 Feet

Impacted Receptor

Non-impacted Receptor

Right-of-way





US-89: Shepard Lane to SR-193

Build Noise Impacts

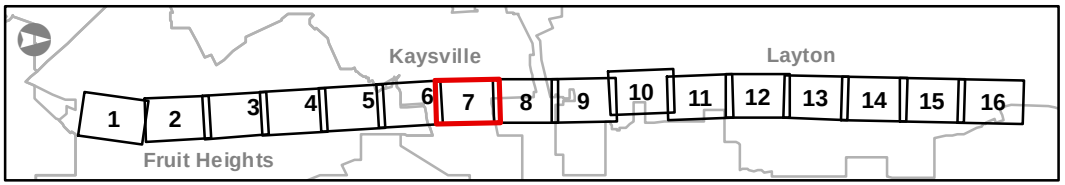
Map 7 of 16

0 175 350 Feet

Impacted Receptor

Non-impacted Receptor

Right-of-way



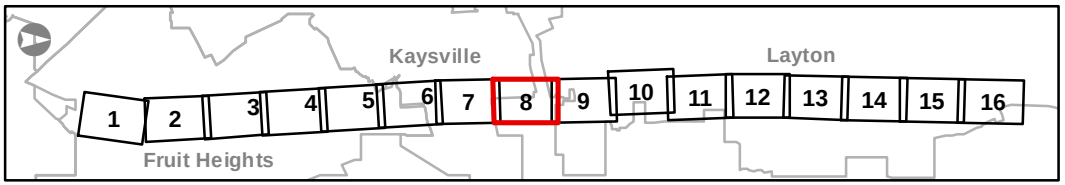
US-89: Shepard Lane to SR-193

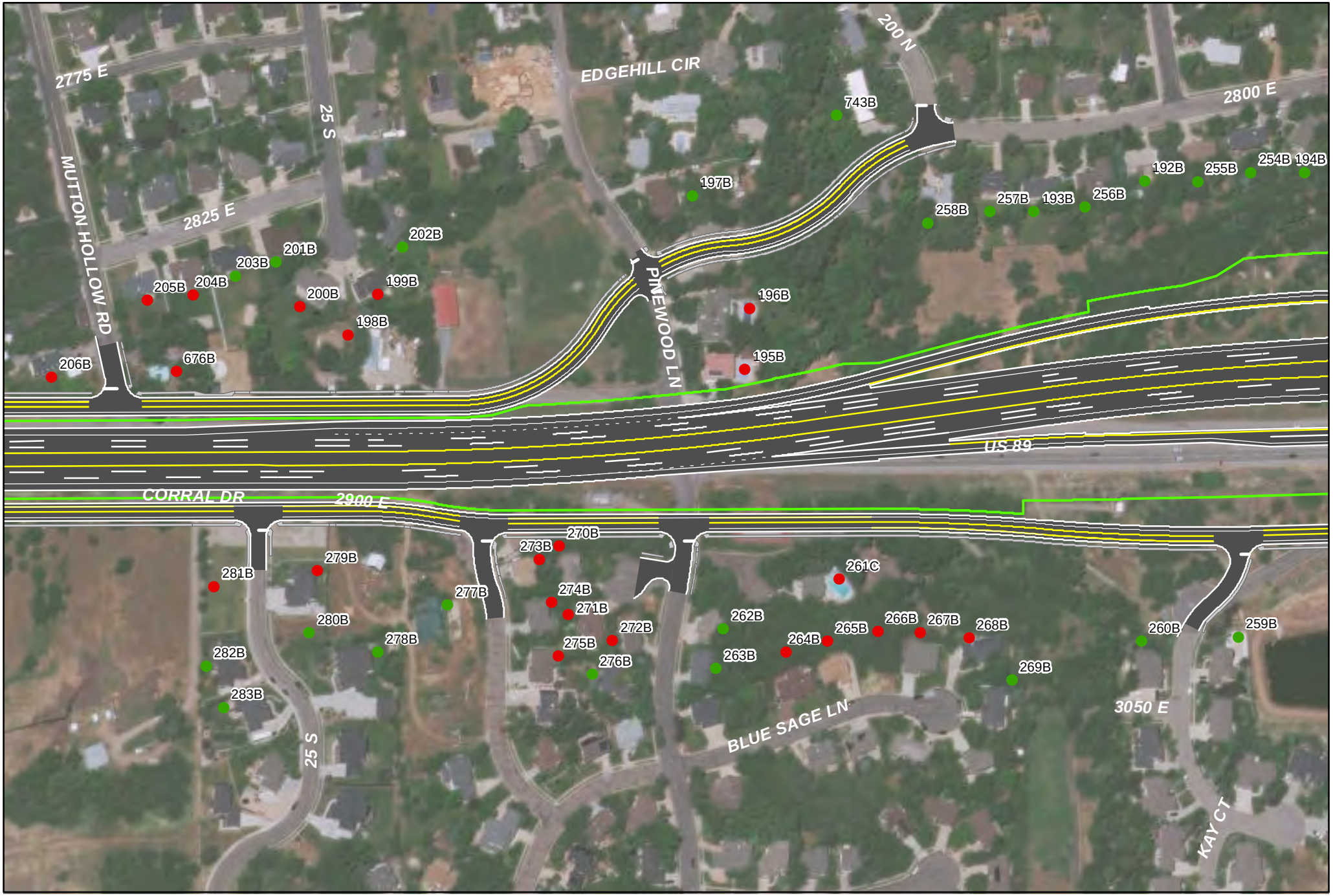
Build Noise Impacts

Map 8 of 16

0 175 350 Feet

- Impacted Receptor
- Non-impacted Receptor
- Right-of-way





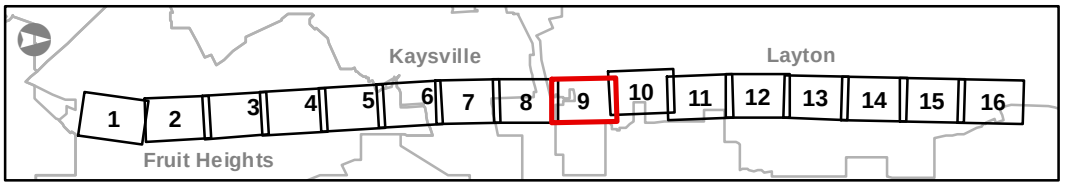
US-89: Shepard Lane to SR-193

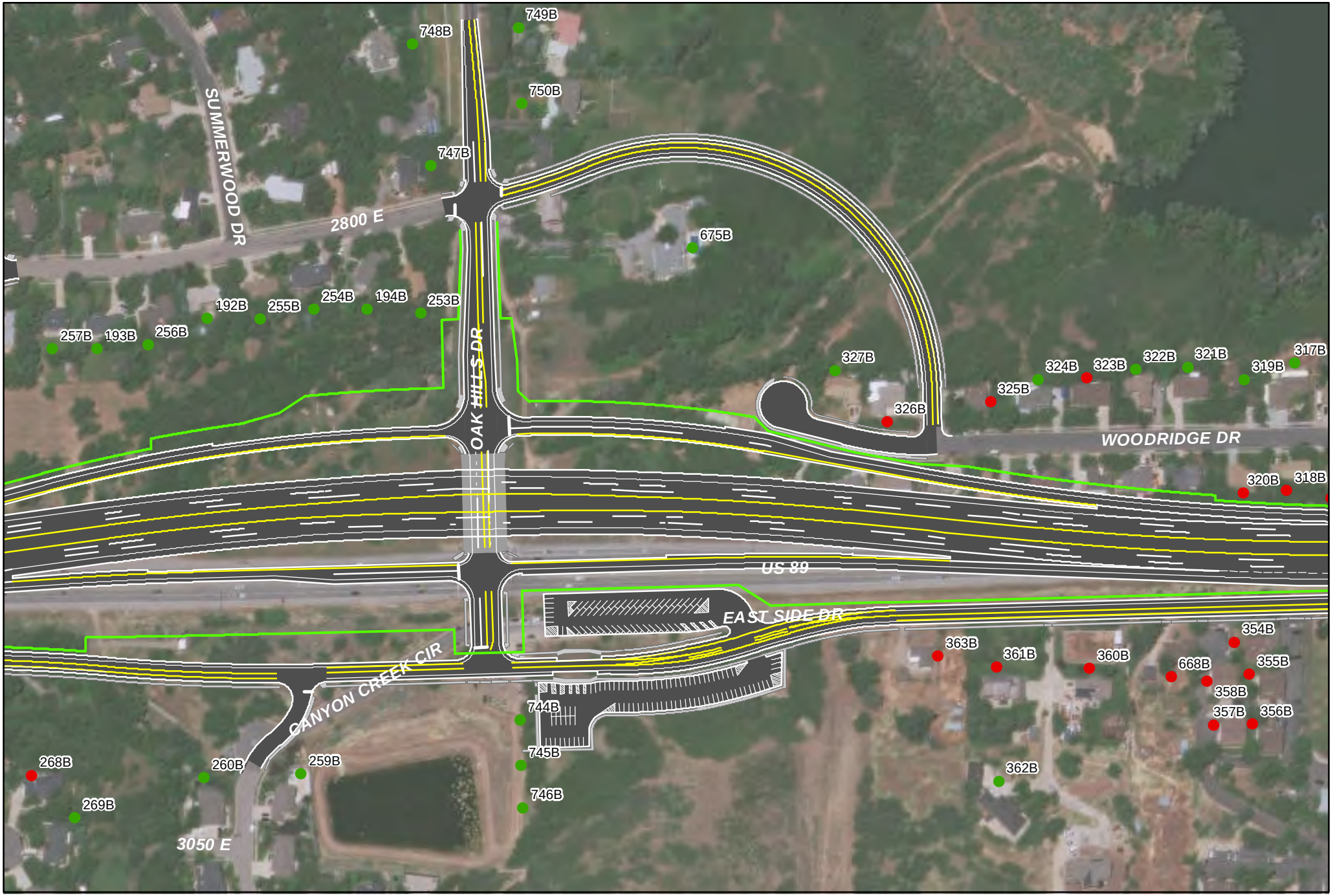
Build Noise Impacts

Map 9 of 16

0 175 350 Feet

- Impacted Receptor
- Non-impacted Receptor
- Right-of-way





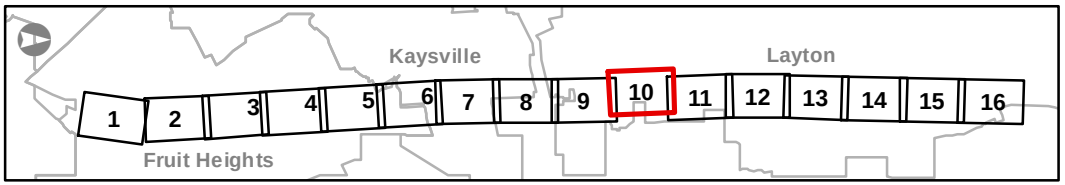
US-89: Shepard Lane to SR-193

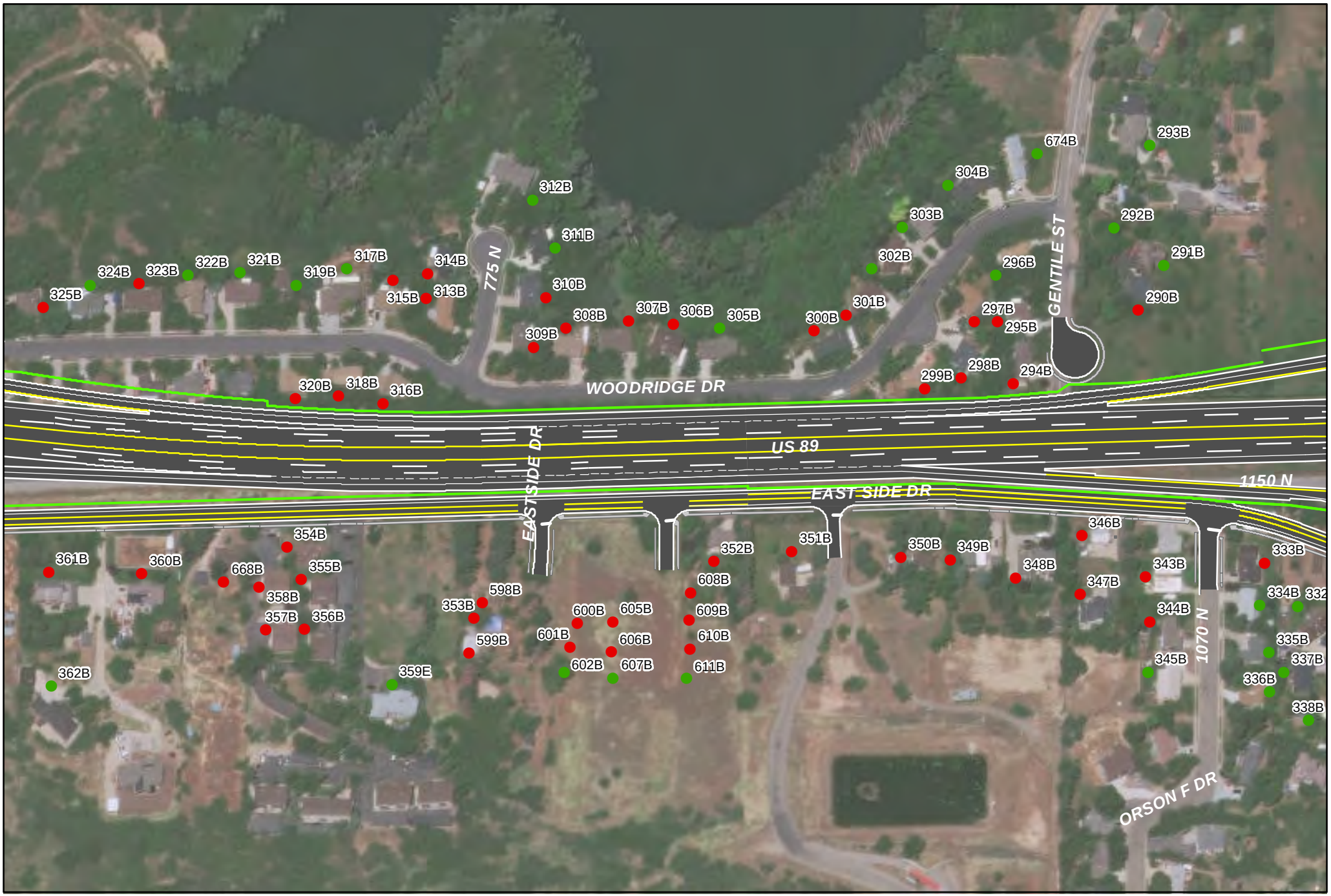
Build Noise Impacts

Map 10 of 16

0 175 350 Feet

- Impacted Receptor
- Non-impacted Receptor
- Right-of-way





US-89: Shepard Lane to SR-193

Build Noise Impacts

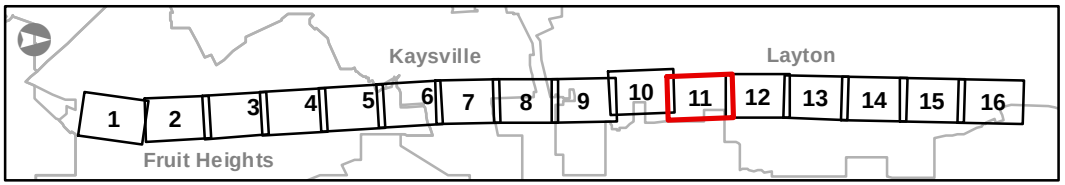
Map 11 of 16

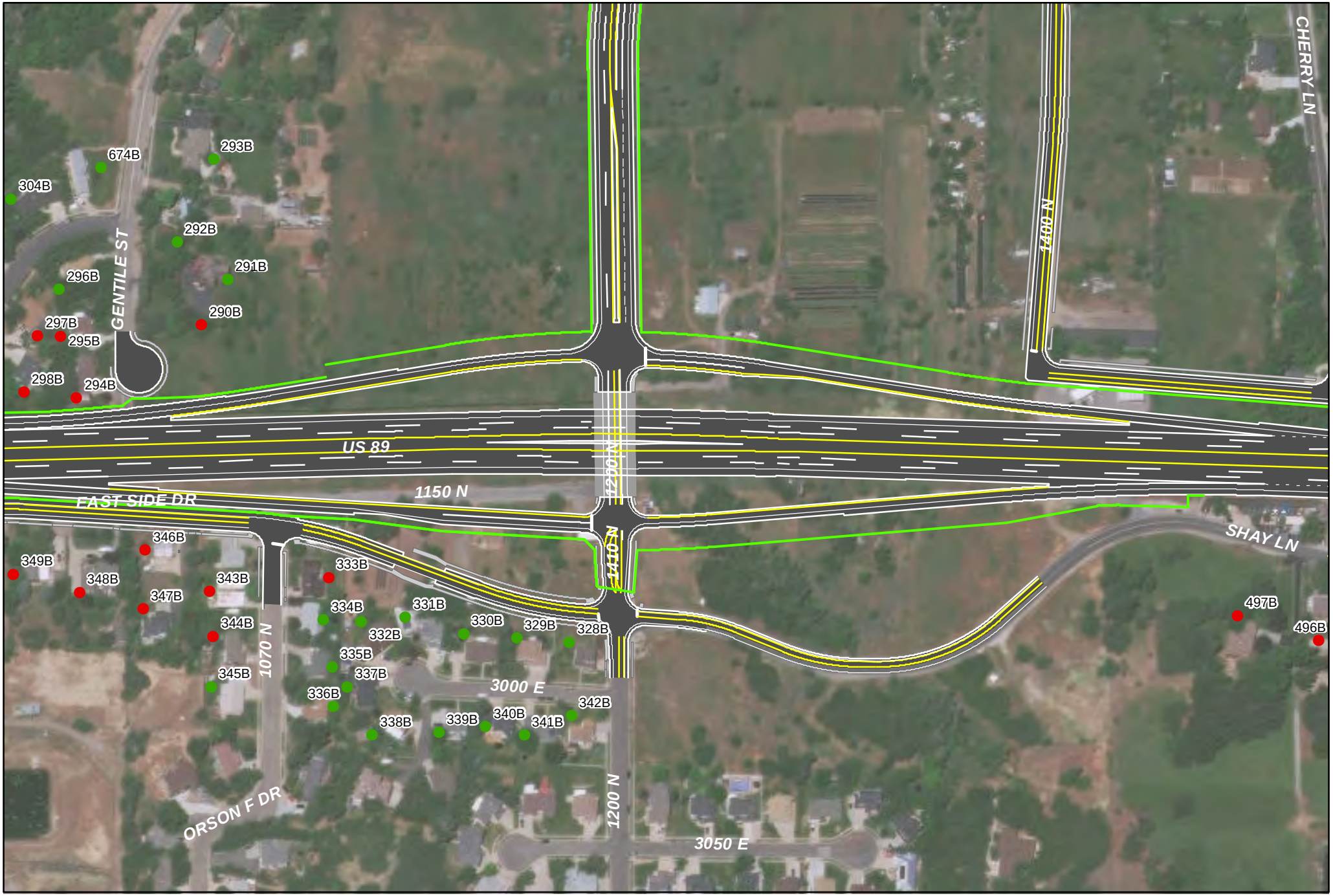
0 175 350 Feet

Impacted Receptor

Non-impacted Receptor

Right-of-way





US-89: Shepard Lane to SR-193

Build Noise Impacts

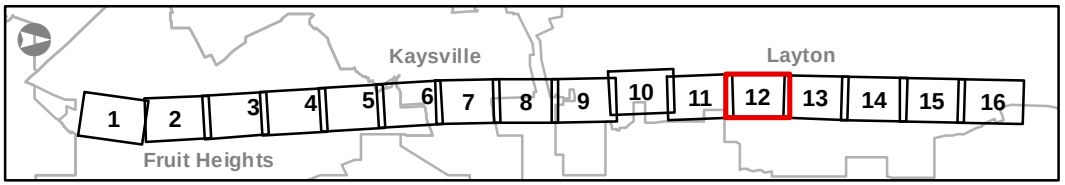
Map 12 of 16

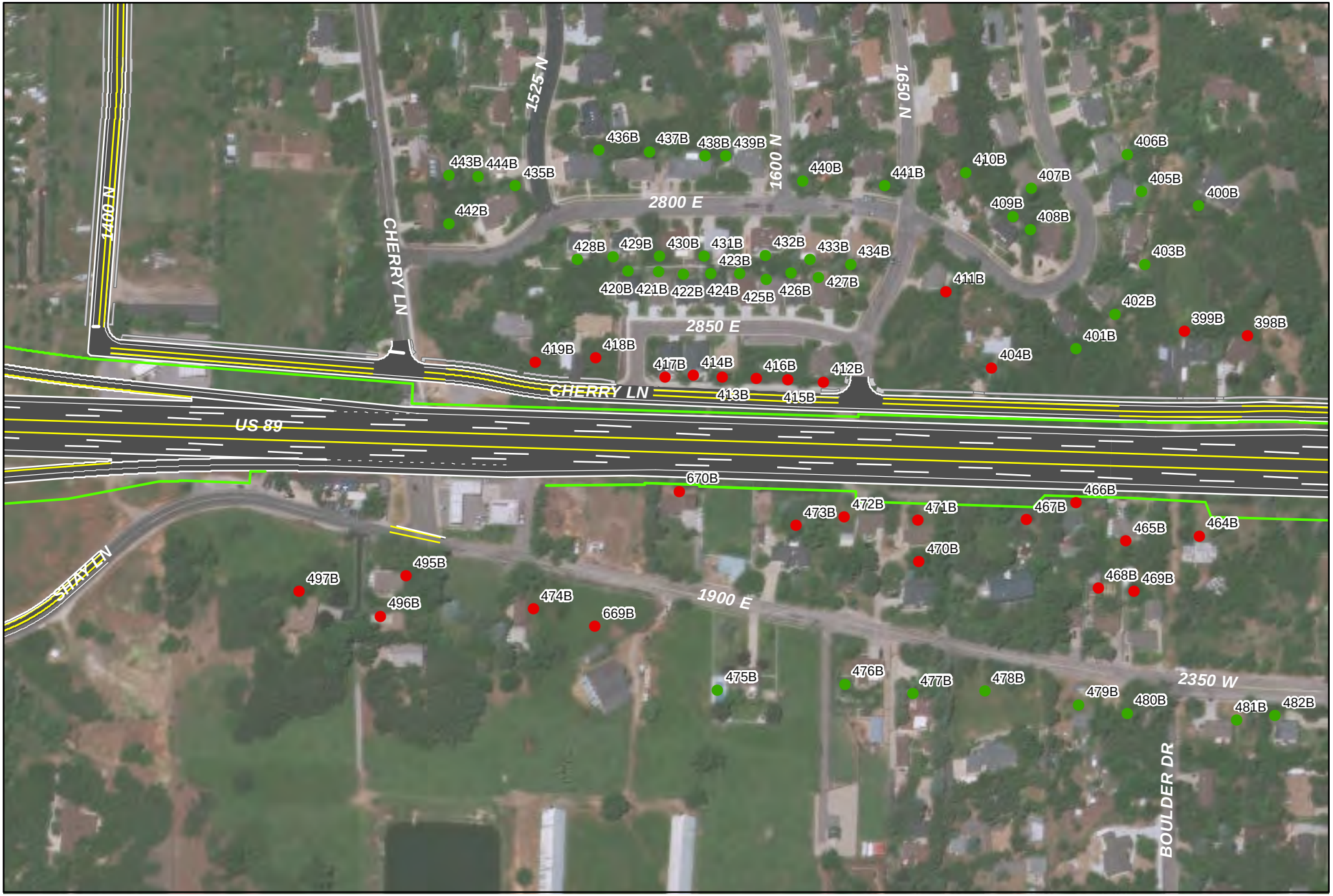
0 175 350 Feet

Impacted Receptor

Non-impacted Receptor

Right-of-way





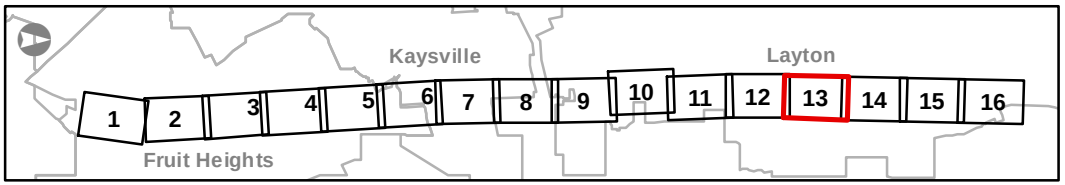
US-89: Shepard Lane to SR-193

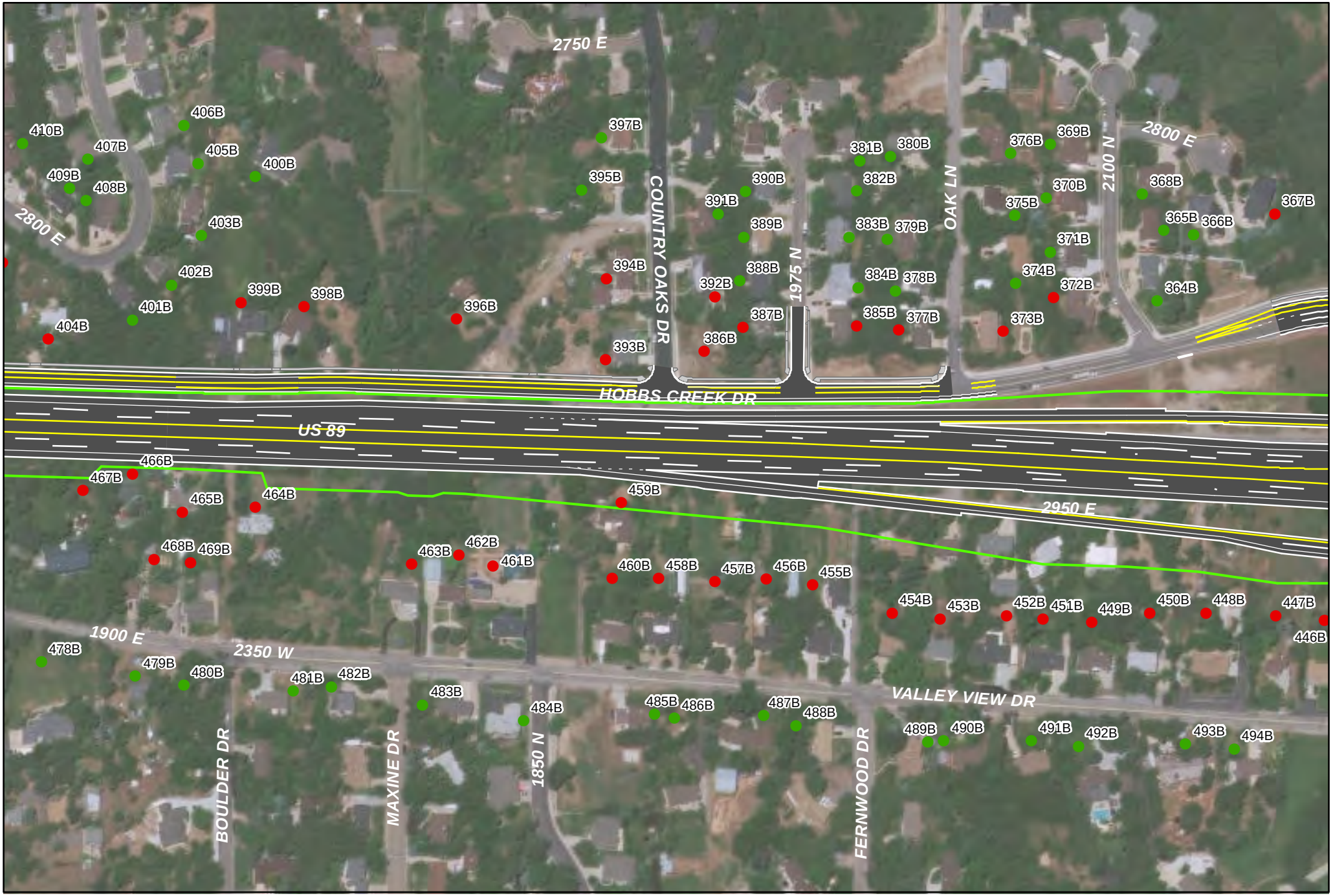
Build Noise Impacts

Map 13 of 16

0 175 350 Feet

- Impacted Receptor
- Non-impacted Receptor
- Right-of-way





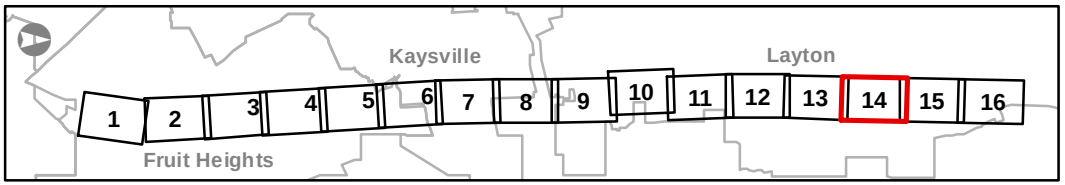
US-89: Shepard Lane to SR-193

Build Noise Impacts

Map 14 of 16

0 175 350 Feet

- Impacted Receptor
- Non-impacted Receptor
- Right-of-way



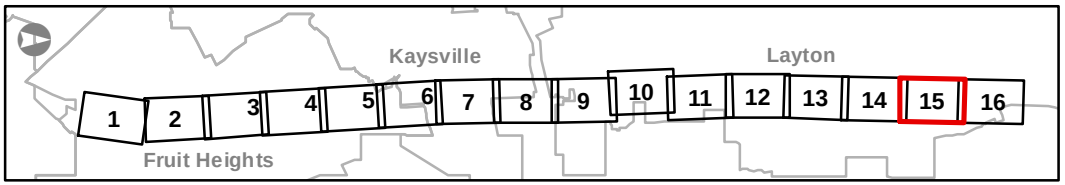
US-89: Shepard Lane to SR-193

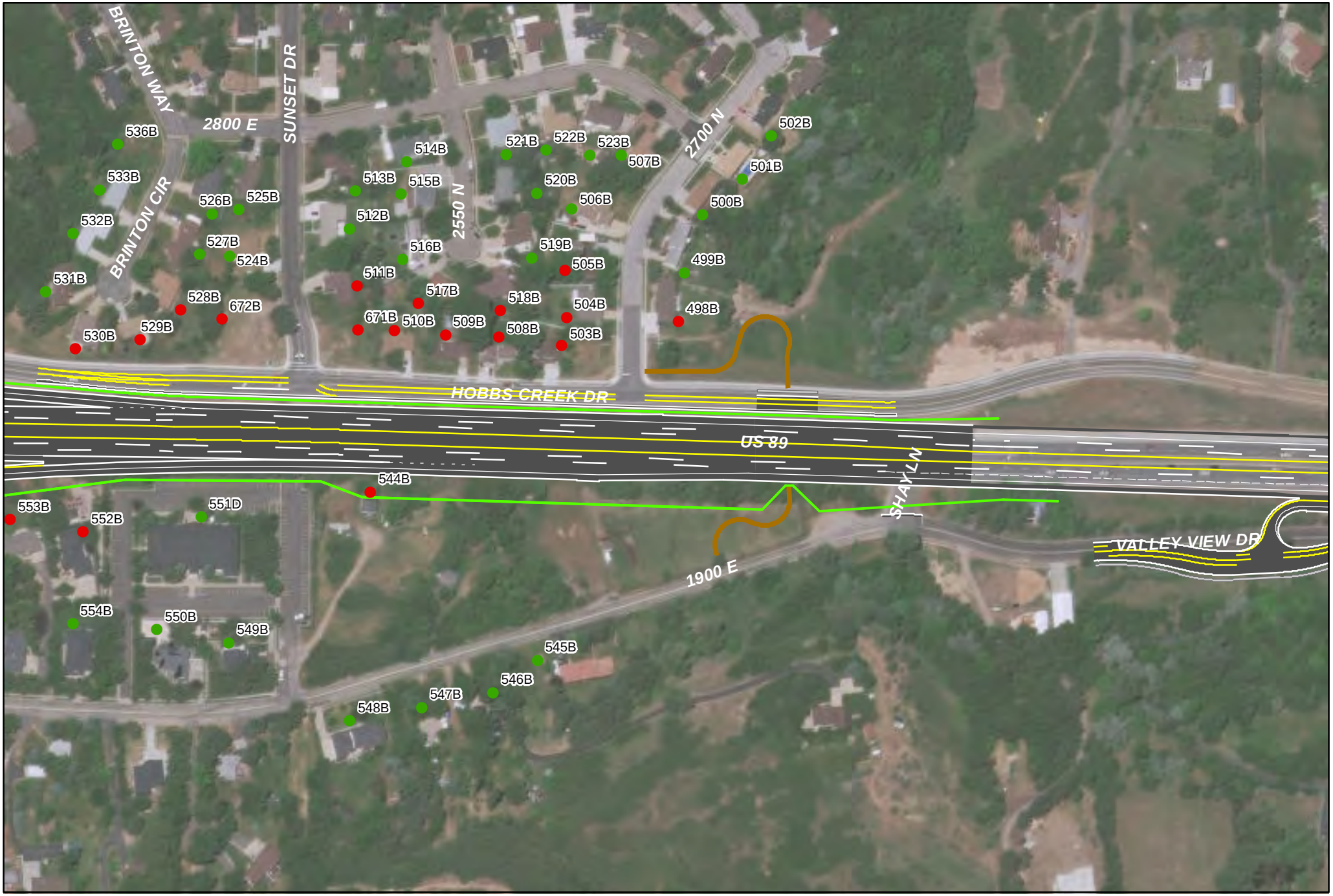
Build Noise Impacts

Map 15 of 16

0 175 350 Feet

- Impacted Receptor
- Non-impacted Receptor
- Right-of-way





US-89: Shepard Lane to SR-193

Build Noise Impacts

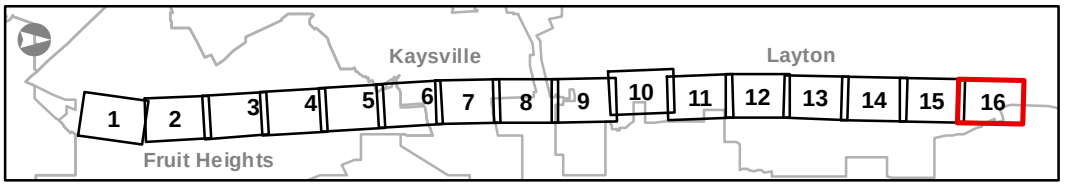
Map 16 of 16

0 175 350 Feet

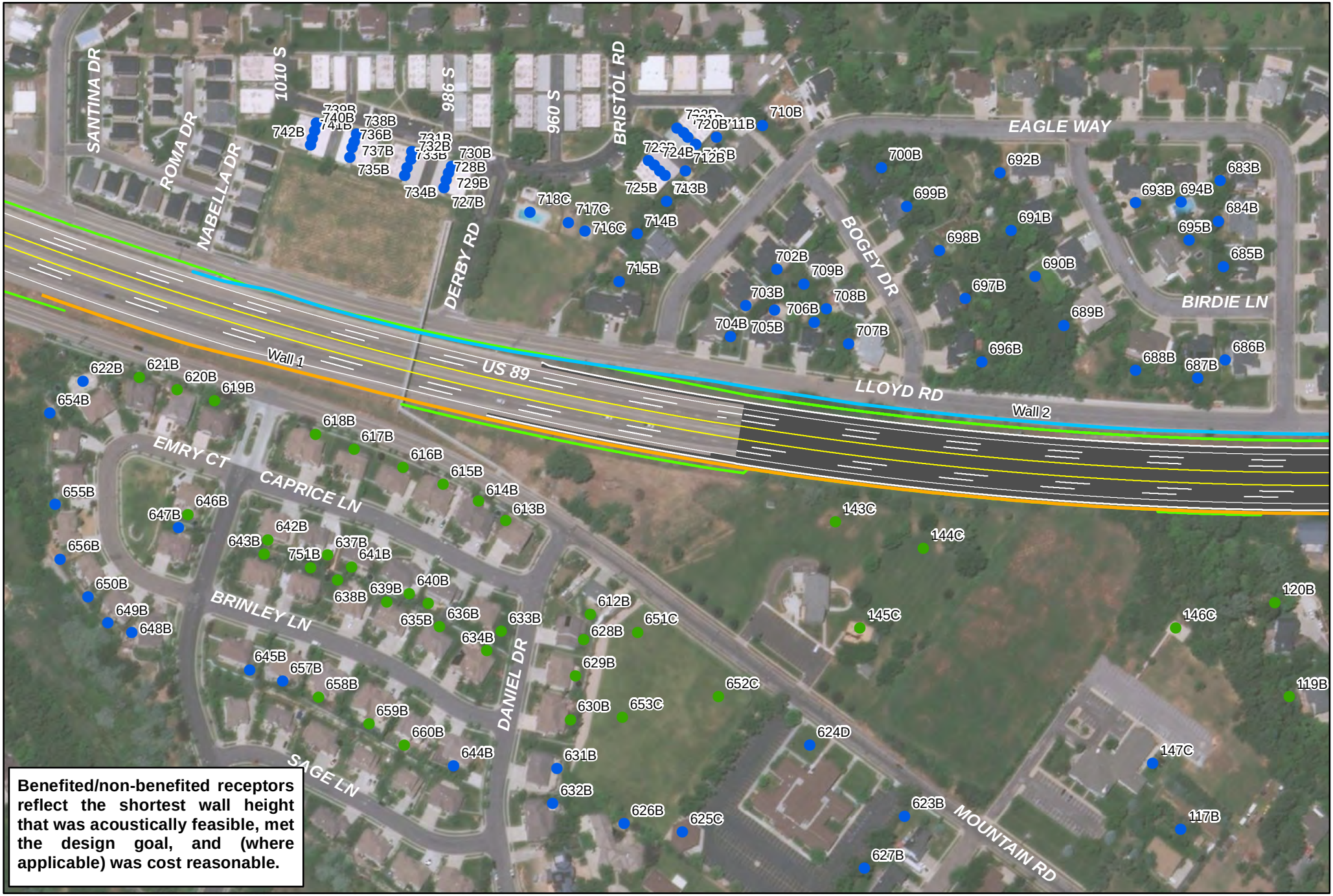
Impacted Receptor

Non-impacted Receptor

Right-of-way



APPENDIX C: NOISE WALL MAPS



Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 1 of 16

0 175 350 Feet

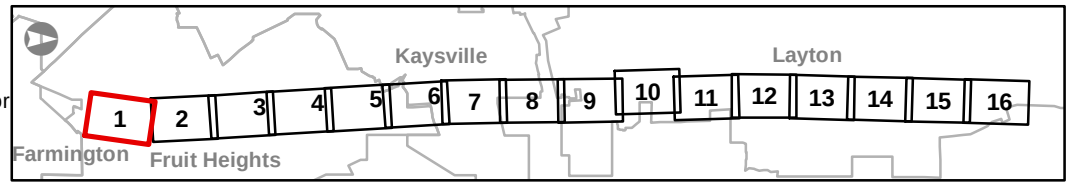
Feasible and Reasonable

Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor



Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 2 of 16

0 175 350 Feet

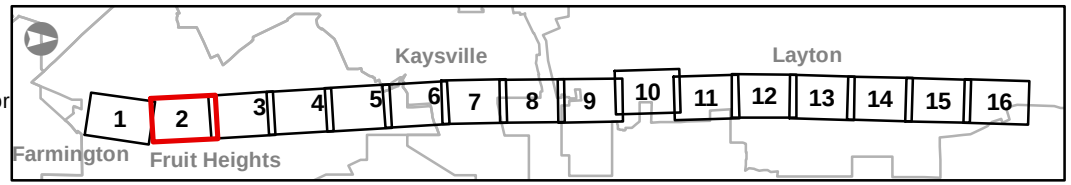
Feasible and Reasonable

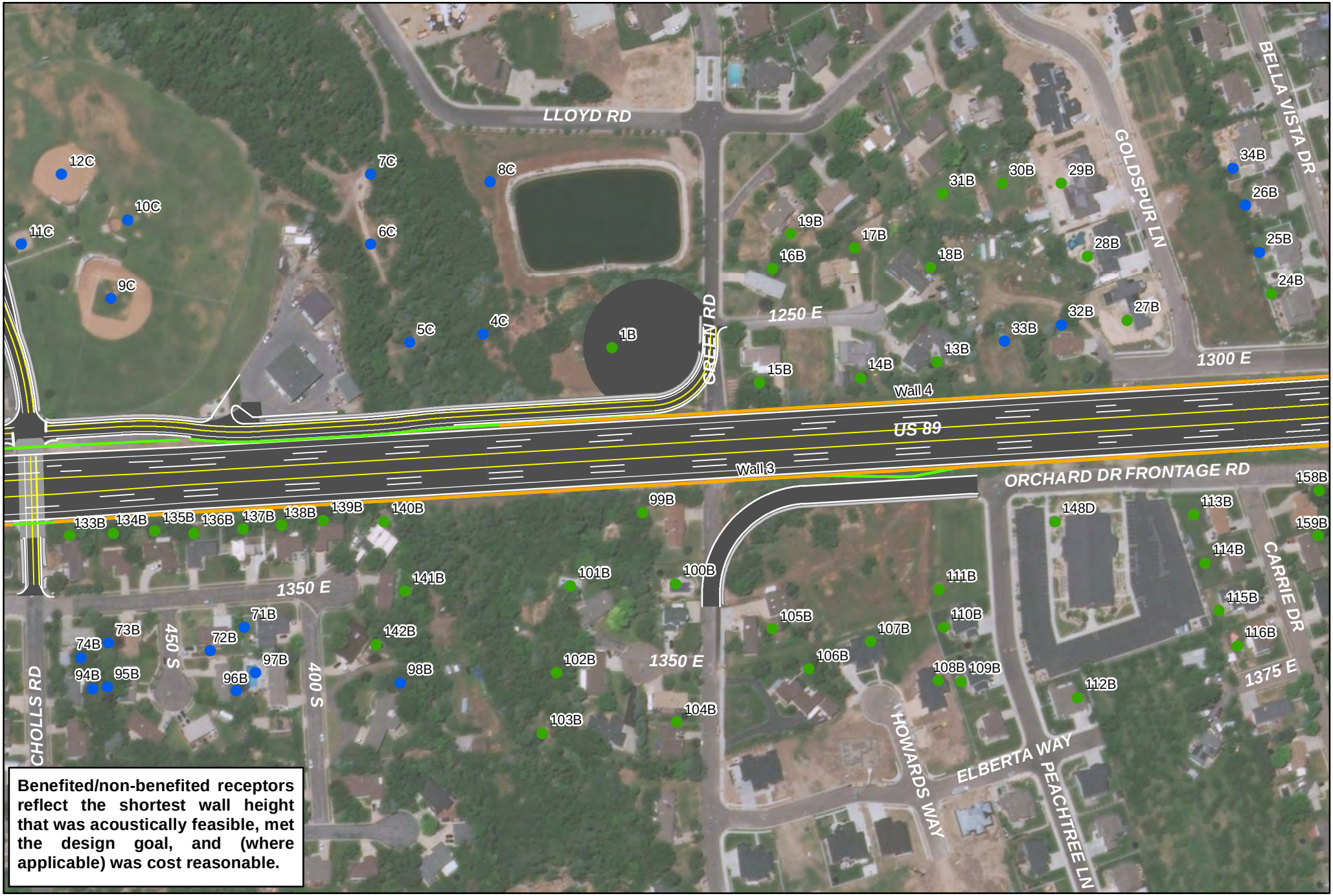
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 3 of 16

0 175 350 Feet

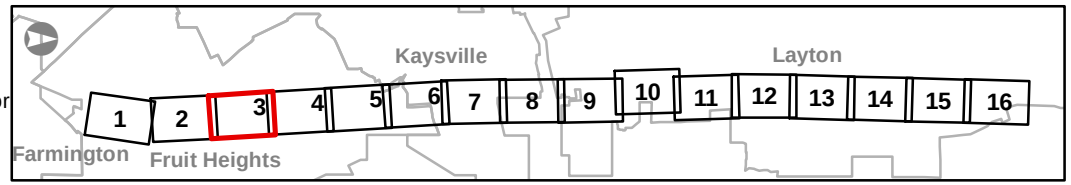
Feasible and Reasonable

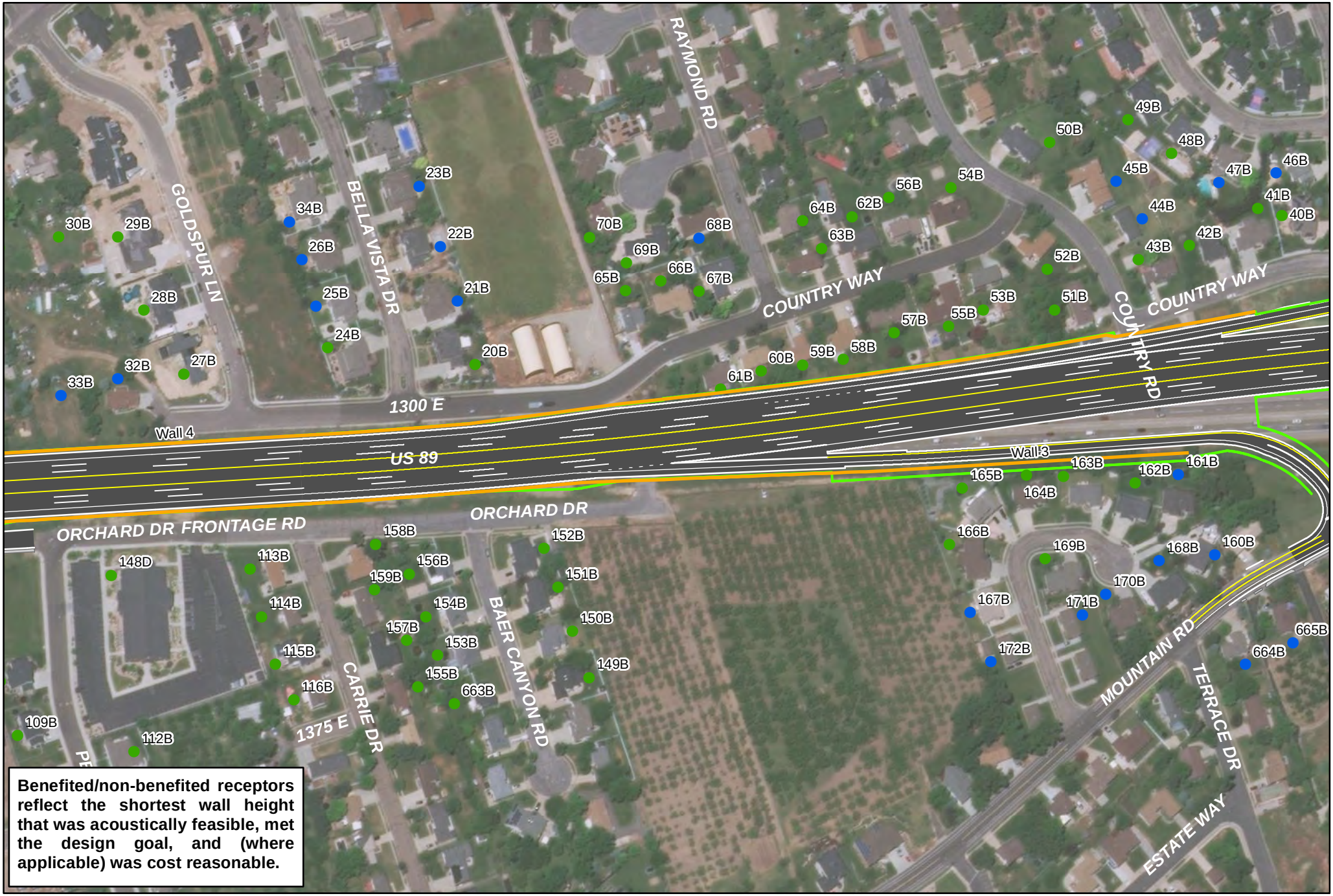
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 4 of 16

0 175 350 Feet

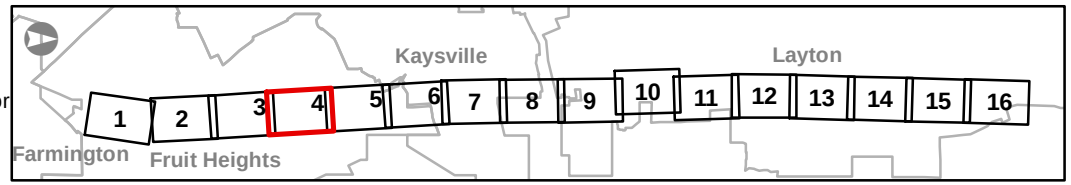
Feasible and Reasonable

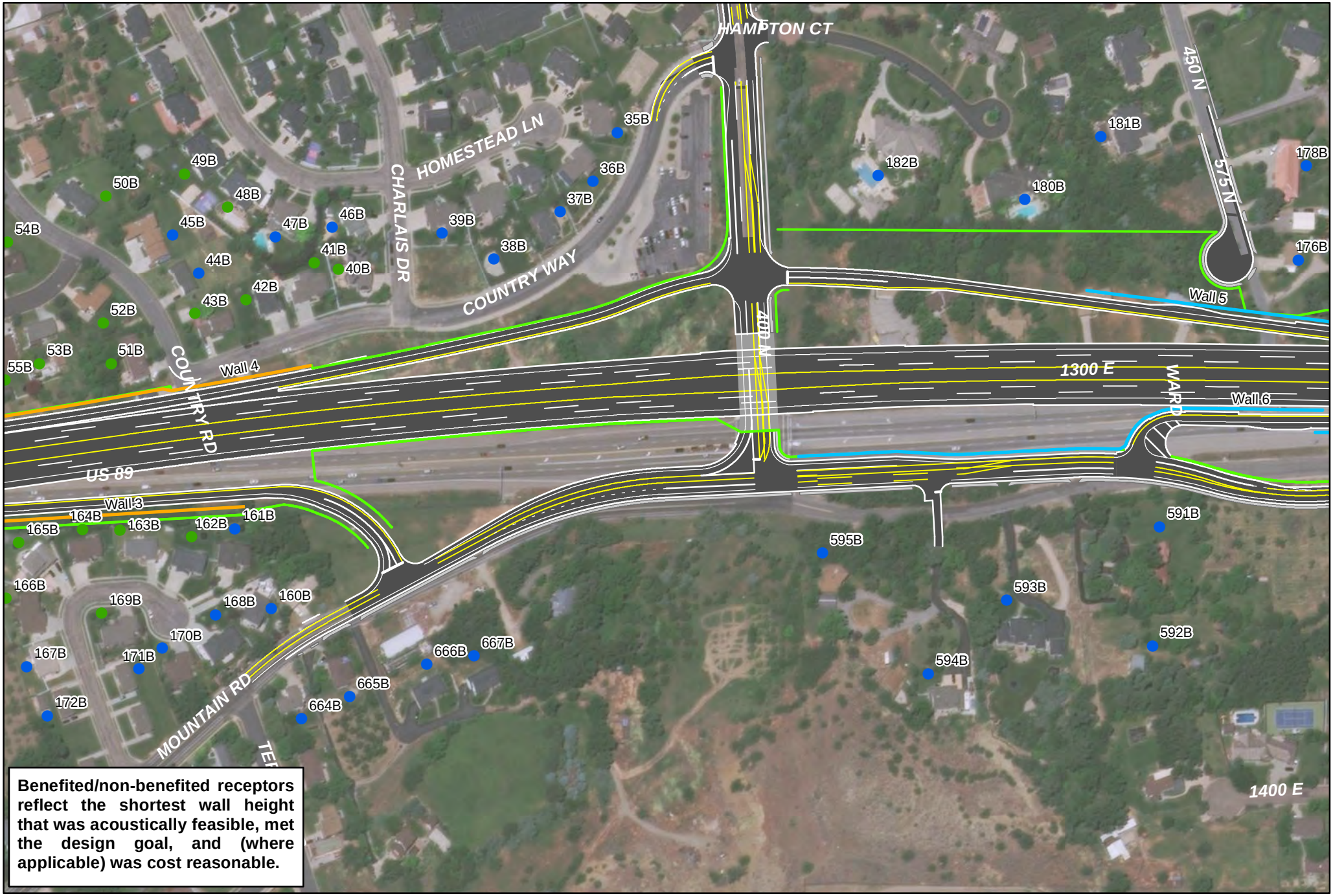
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 5 of 16

0 175 350 Feet

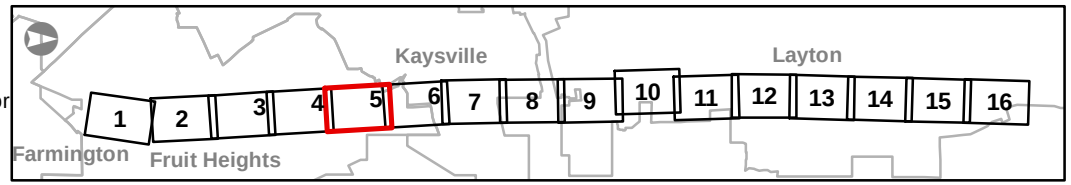
Feasible and Reasonable

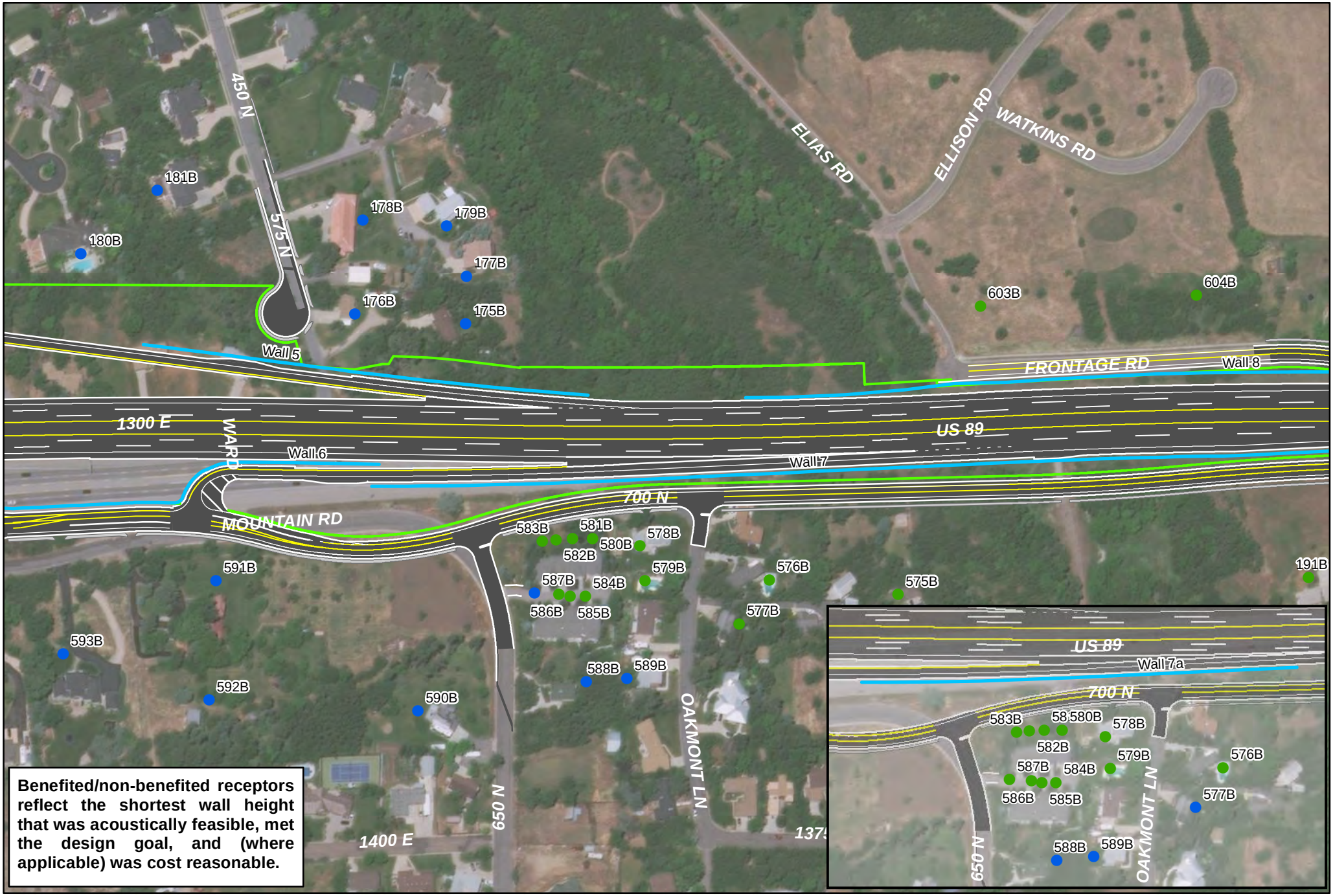
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





US-89: Shepard Lane to SR-193

Noise Walls

Map 6 of 16

0 175 350 Feet

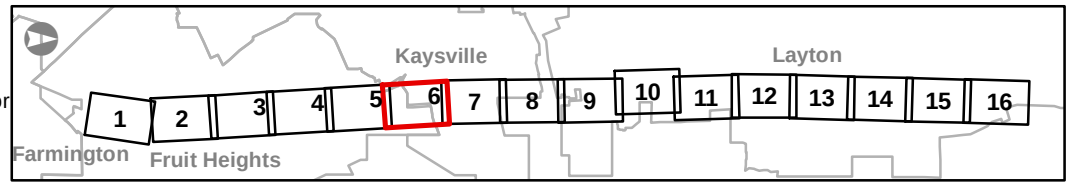
Feasible and Reasonable

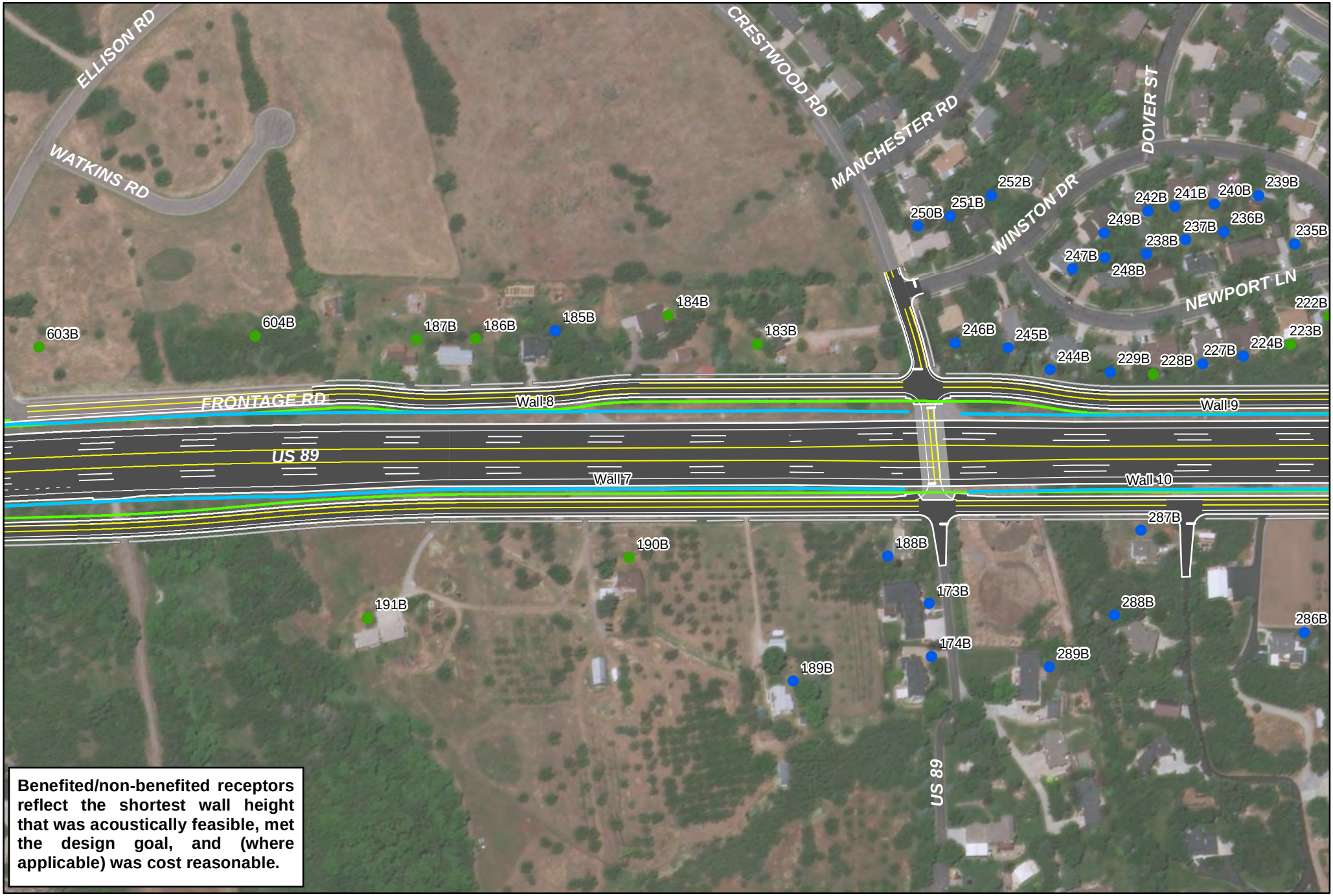
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 7 of 16

0 175 350 Feet

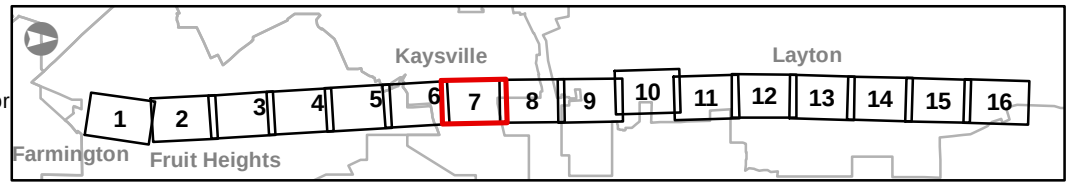
Feasible and Reasonable

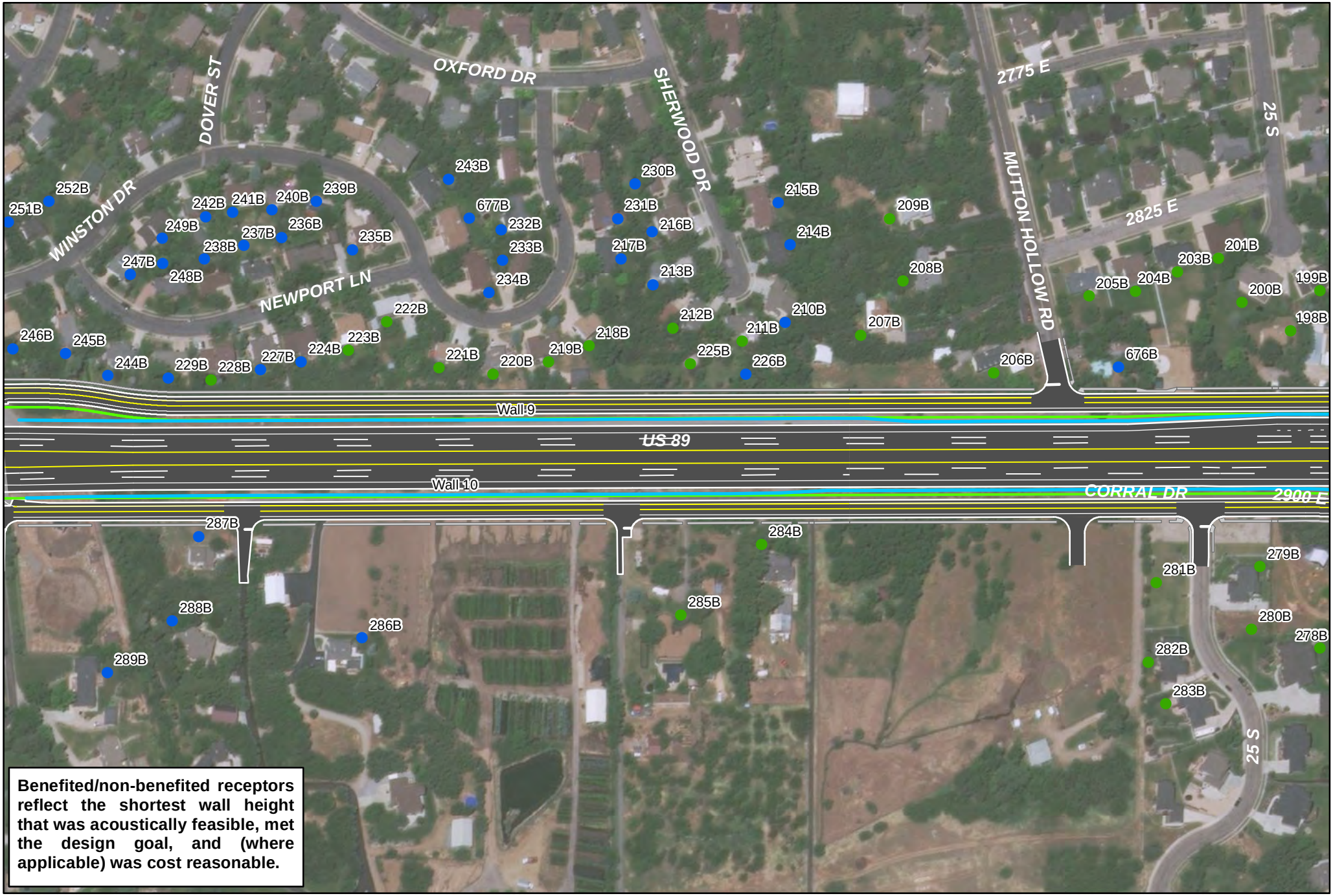
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 8 of 16

0 175 350 Feet

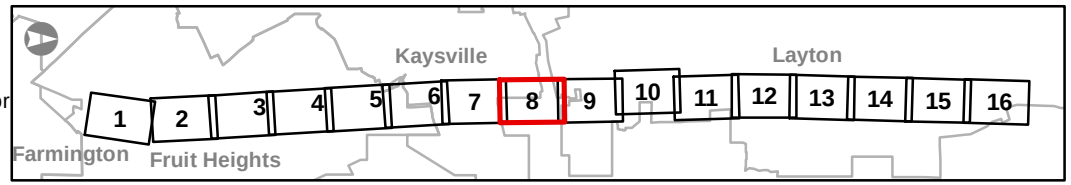
Feasible and Reasonable

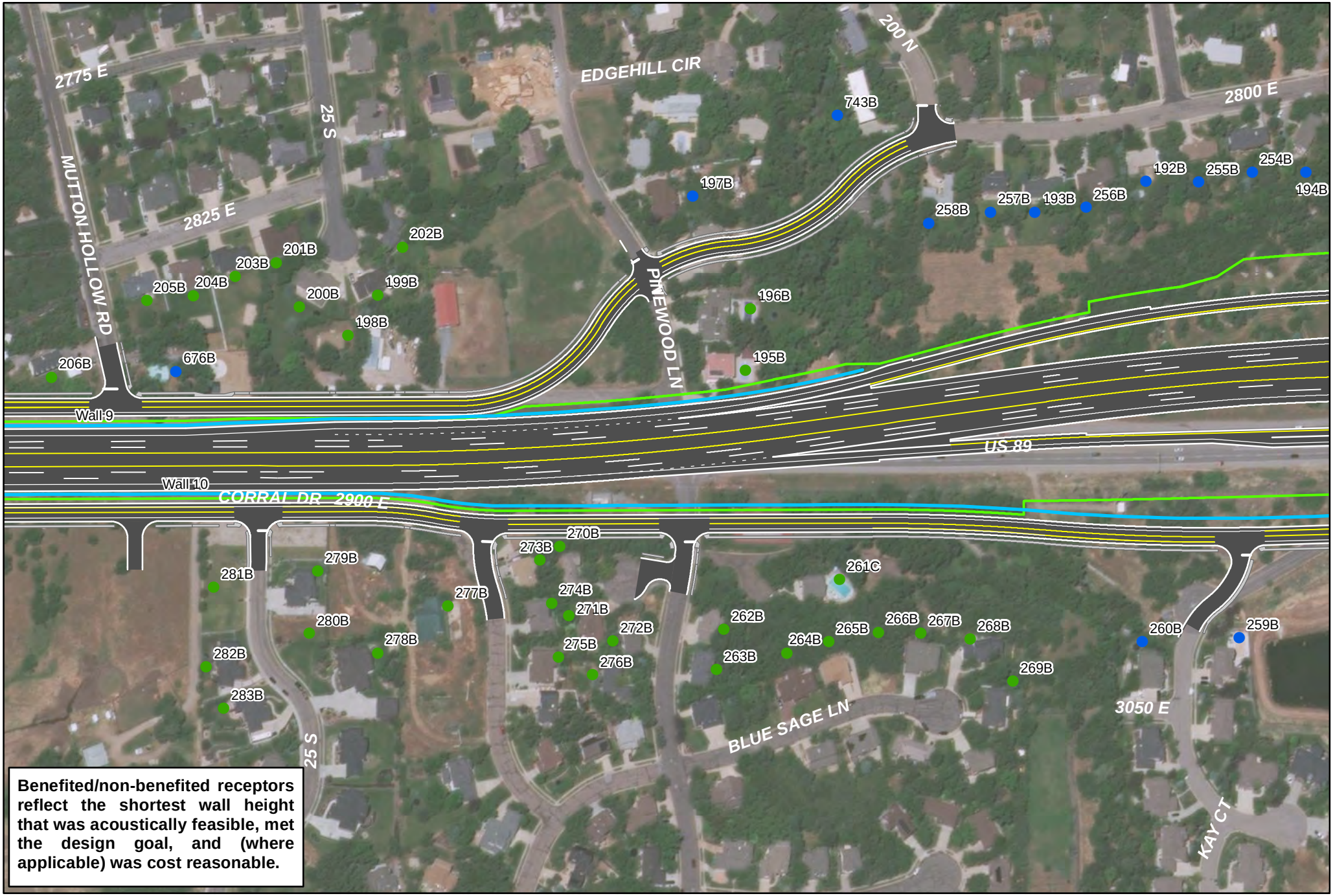
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 9 of 16

0 175 350 Feet

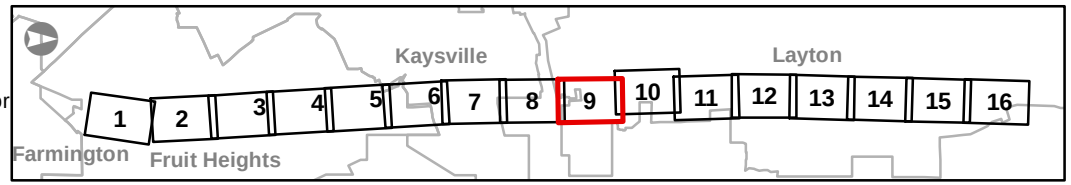
Feasible and Reasonable

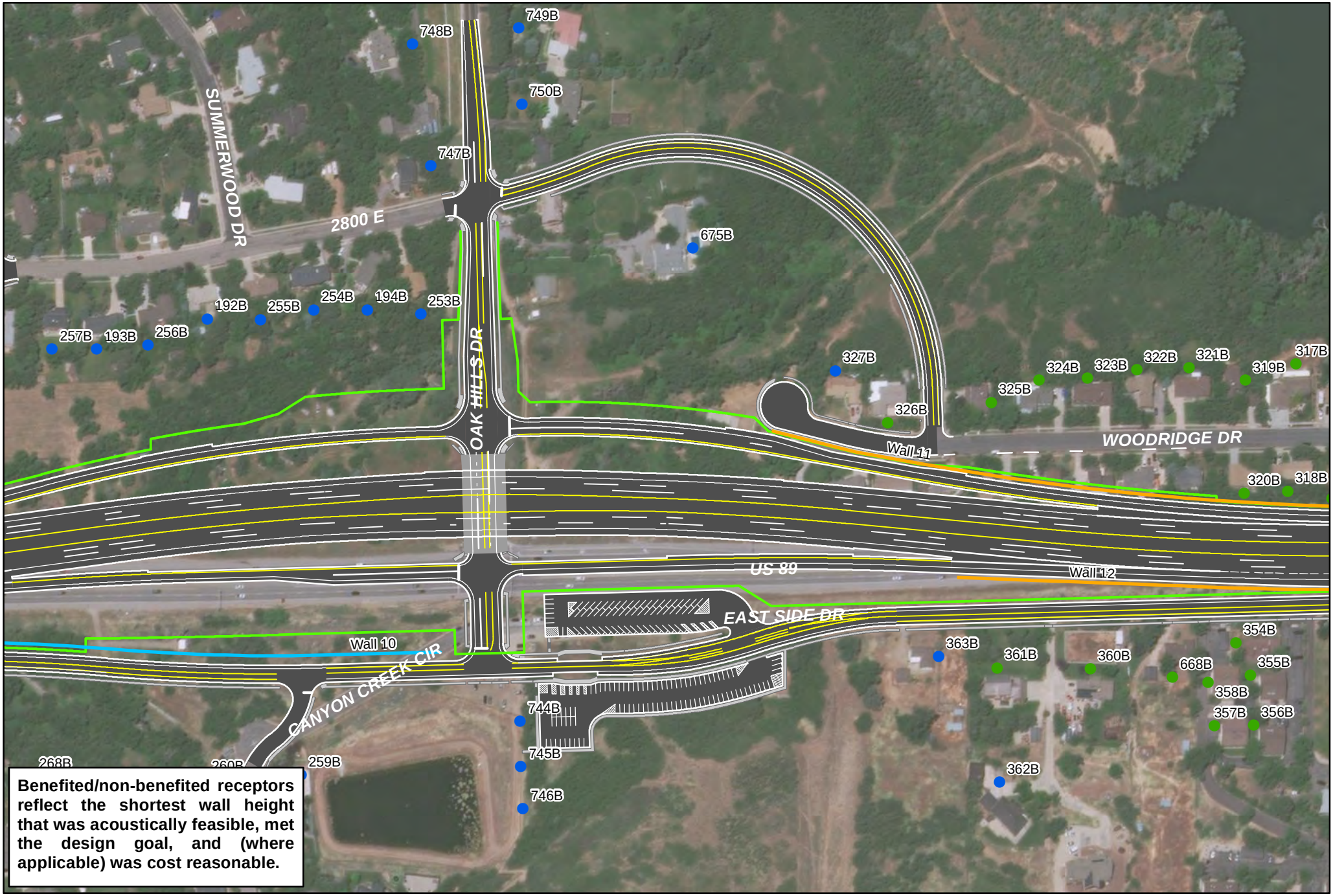
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 10 of 16

0 175 350 Feet

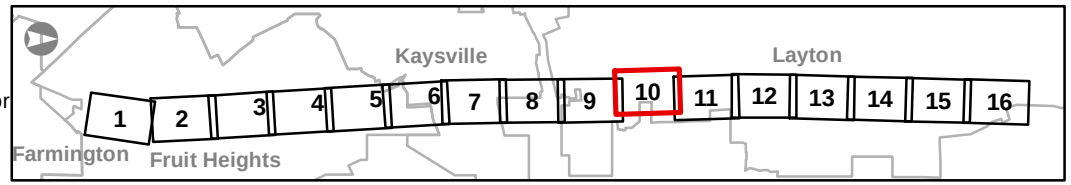
Feasible and Reasonable

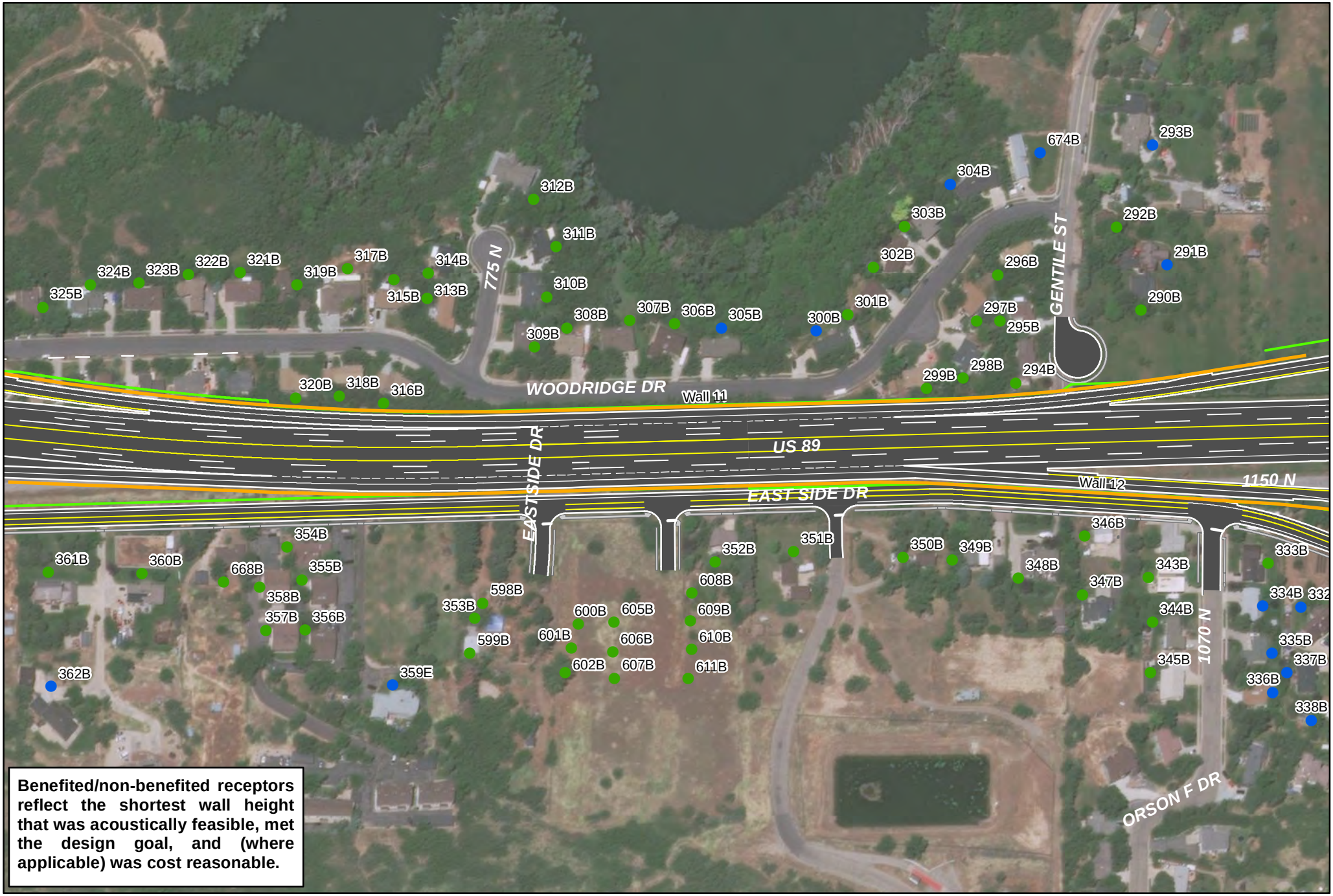
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 11 of 16

0 175 350 Feet

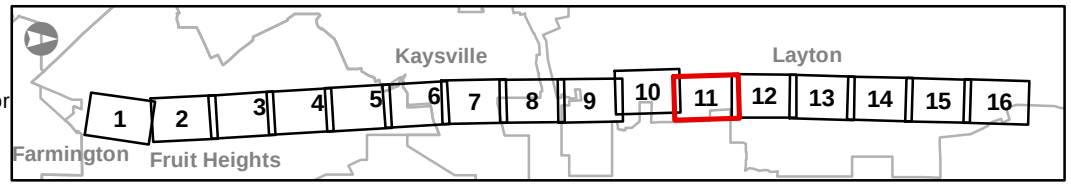
Feasible and Reasonable

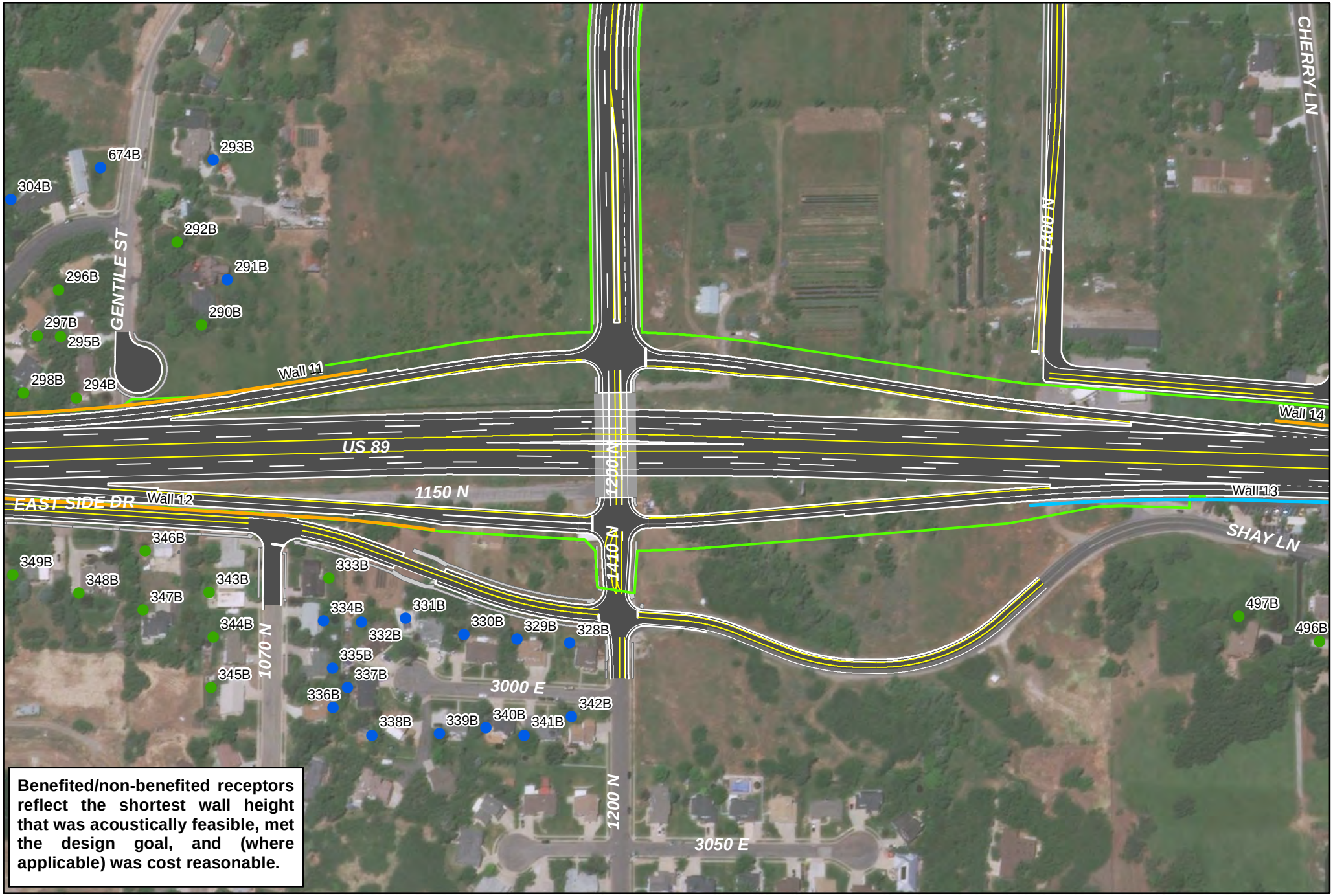
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 12 of 16

0 175 350 Feet

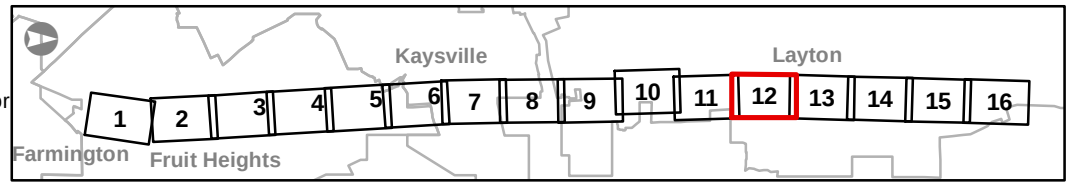
Feasible and Reasonable

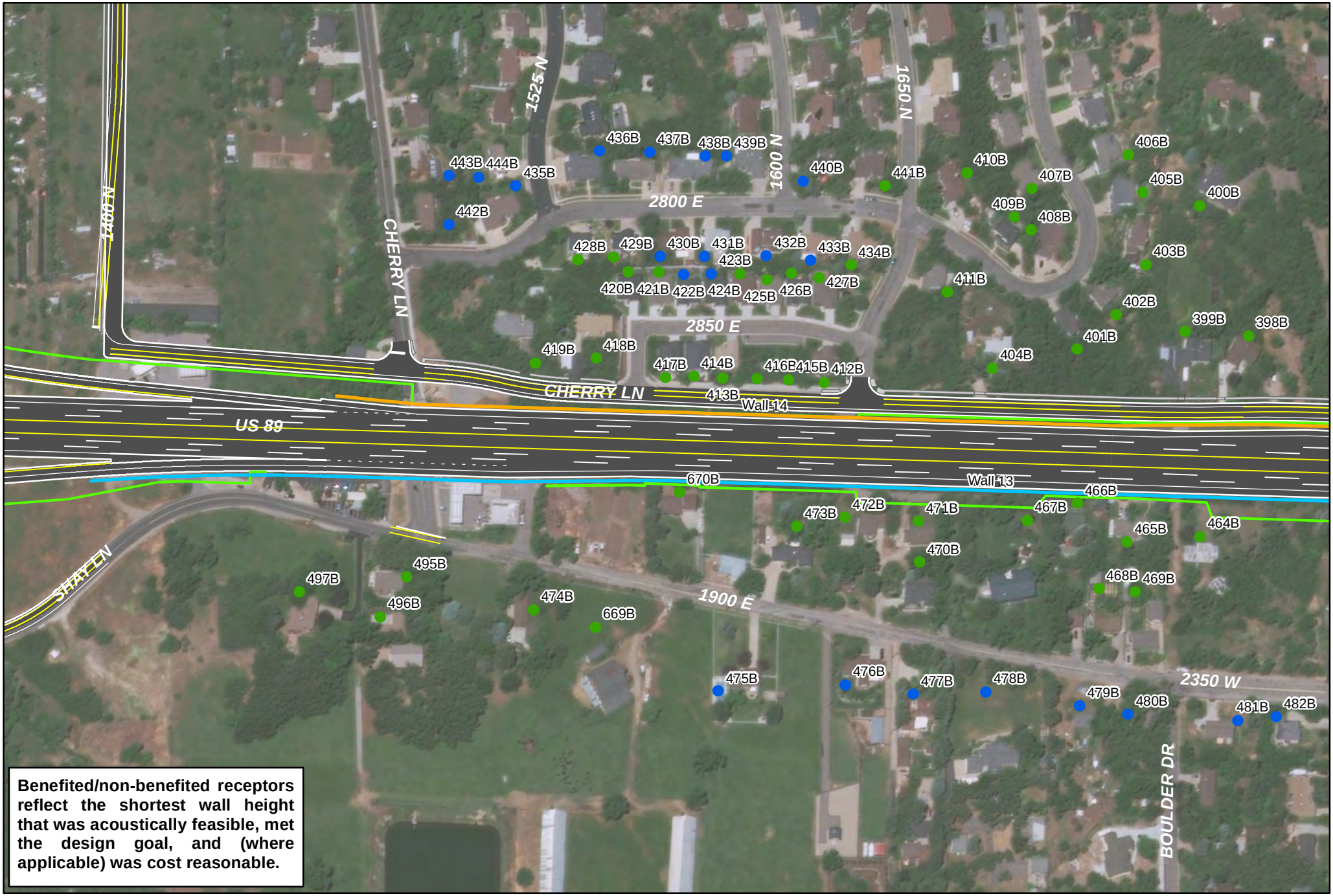
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 13 of 16

0 175 350 Feet

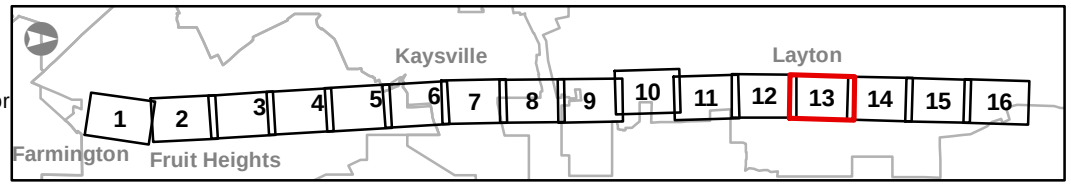
Feasible and Reasonable

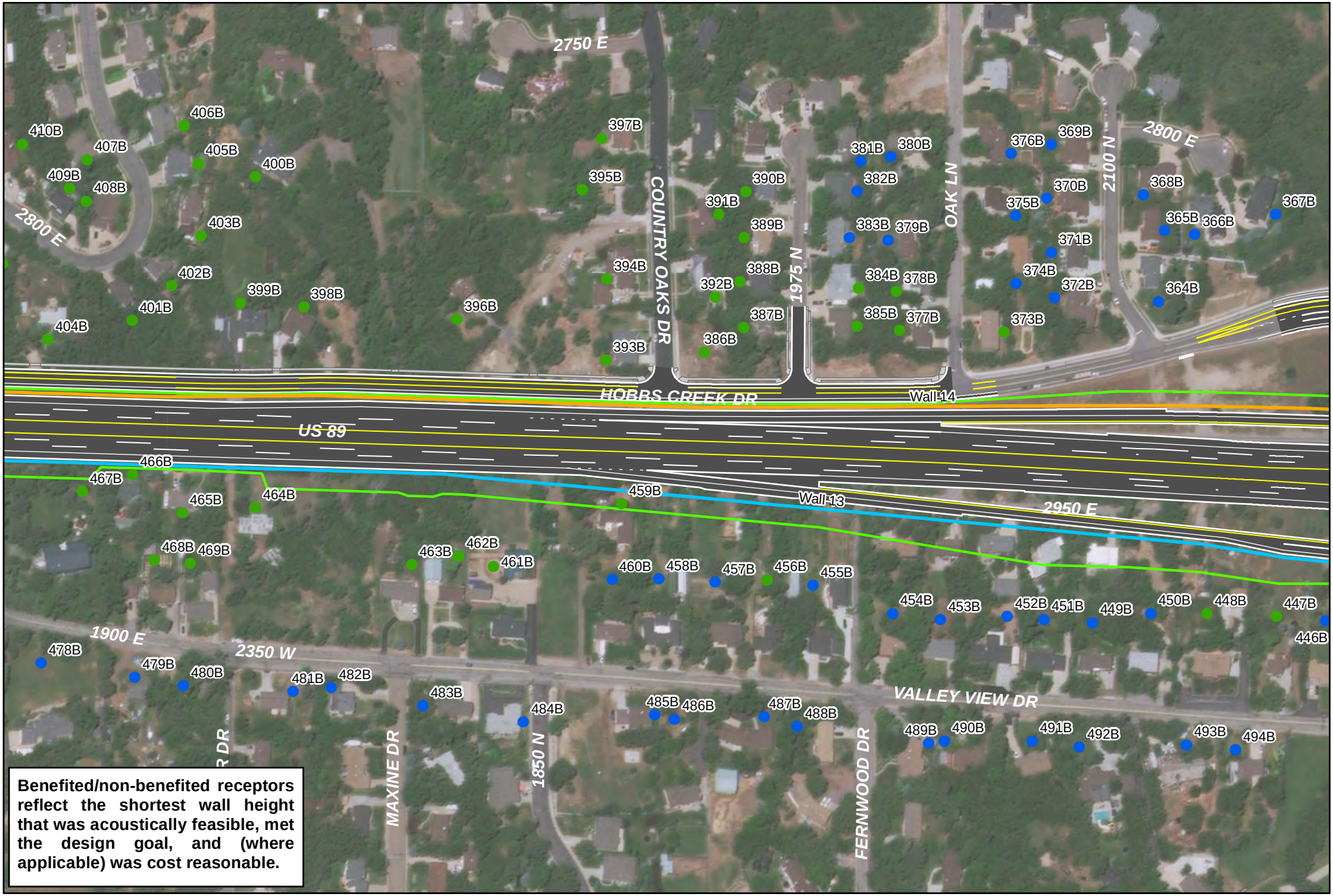
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

US-89: Shepard Lane to SR-193

Noise Walls

Map 14 of 16

0 175 350 Feet

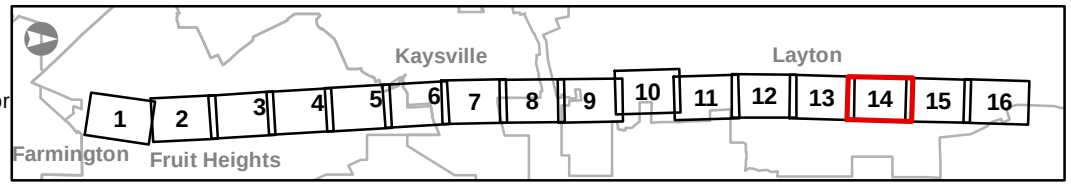
Feasible and Reasonable

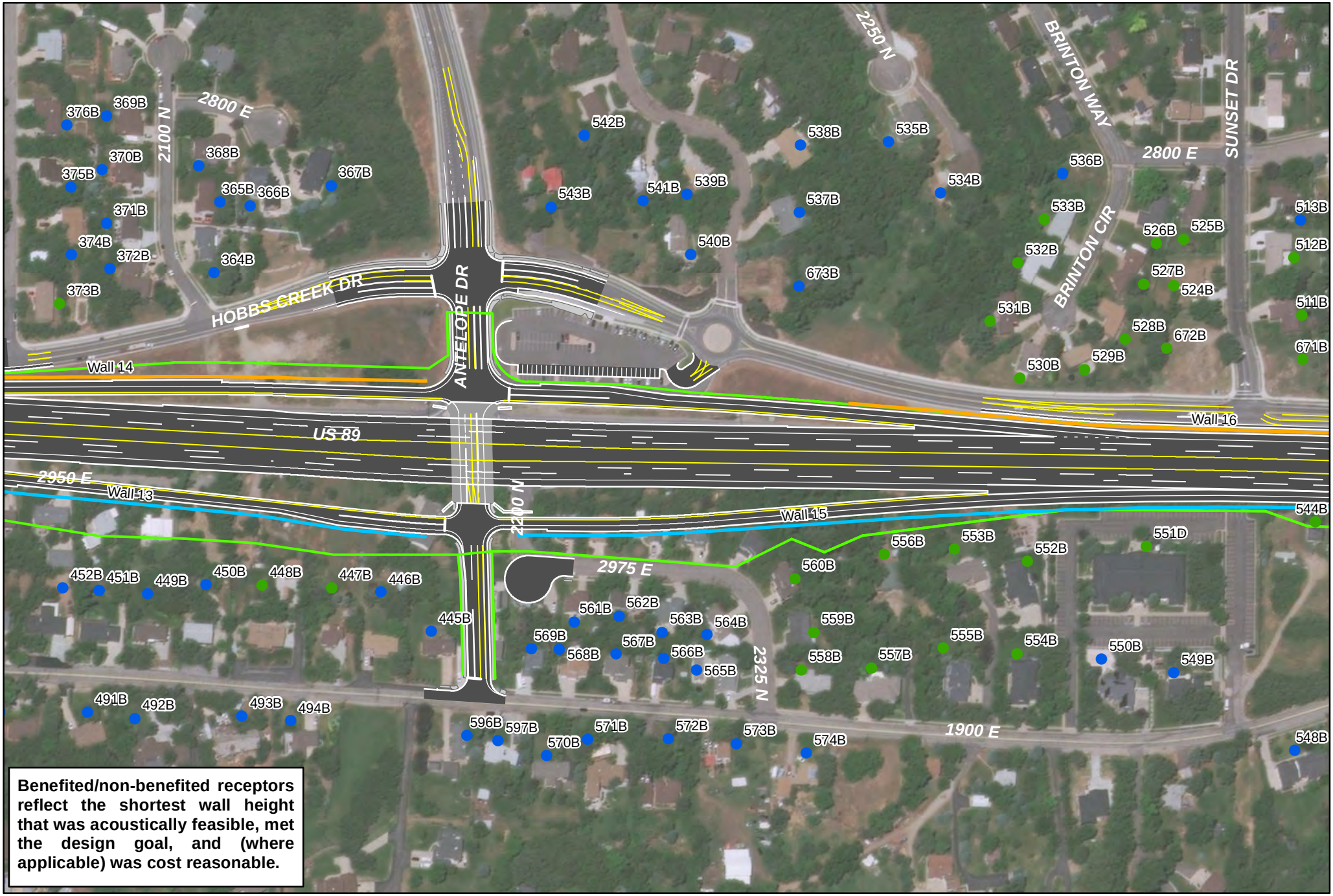
Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor





Benefited/non-benefited receptors reflect the shortest wall height that was acoustically feasible, met the design goal, and (where applicable) was cost reasonable.

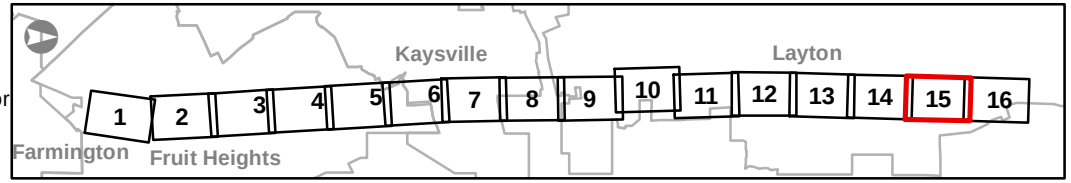
US-89: Shepard Lane to SR-193

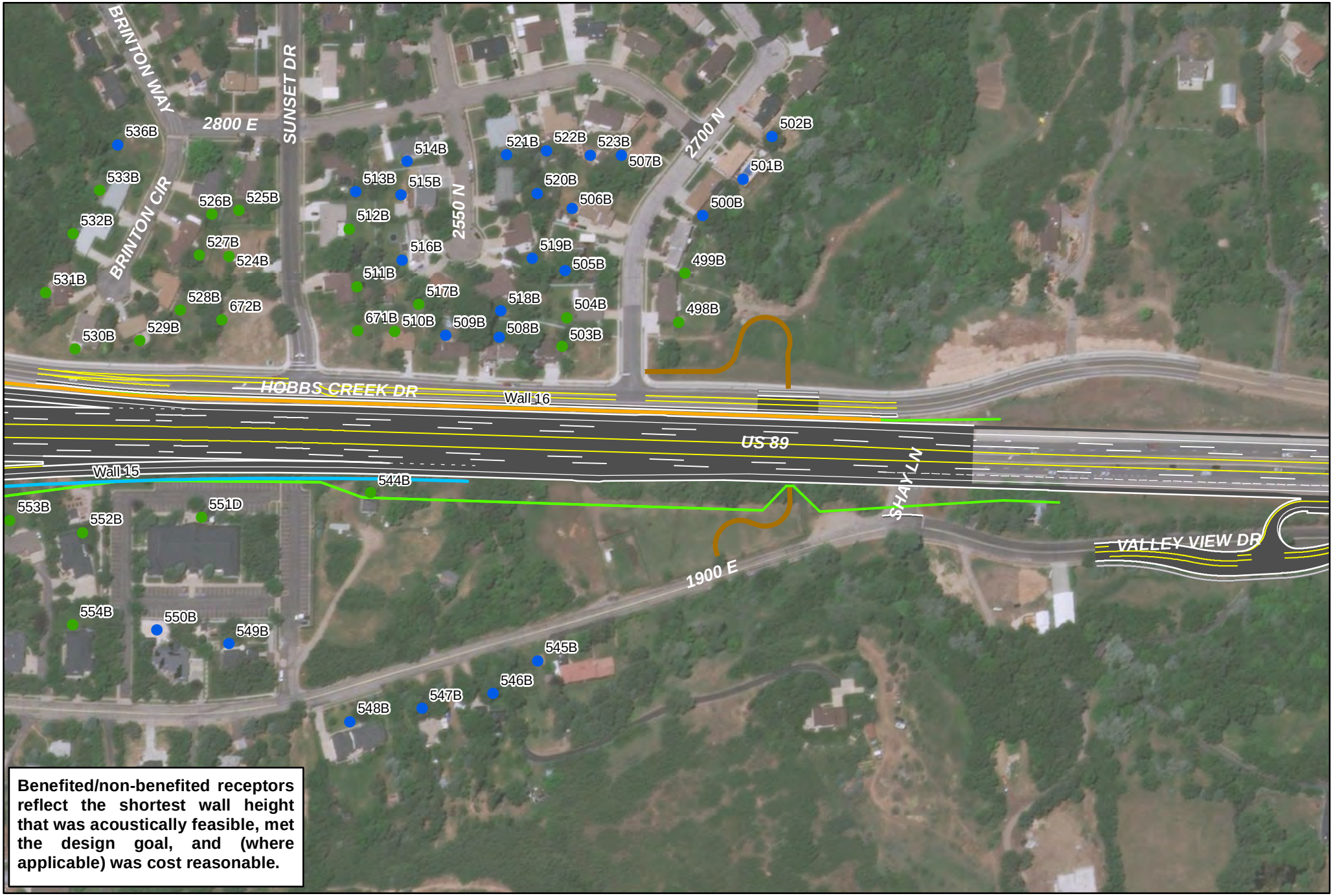
Noise Walls

Map 15 of 16

0 175 350 Feet

- Feasible and Reasonable
- Not Feasible and Reasonable
- Right-of-way
- Benefited Receptor
- Non-benefited Receptor





US-89: Shepard Lane to SR-193

Noise Walls

Map 16 of 16

0 175 350 Feet

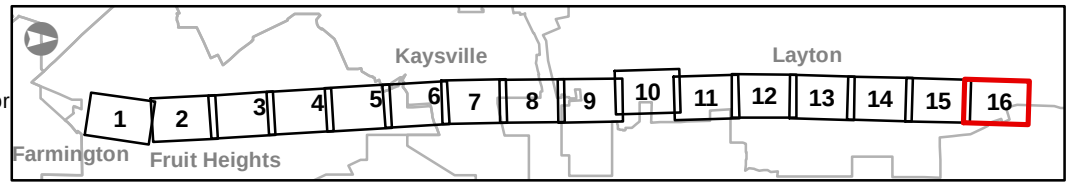
Feasible and Reasonable

Not Feasible and Reasonable

Right-of-way

Benefited Receptor

Non-benefited Receptor



APPENDIX D: NOISE WALL ANALYSES

Wall 1

Total Wall Length	3981	ft
Length of Activity Category C/E Land Use:	590	ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	29	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
75B	1	B		0	1.6	No	No	No	0	No	0	0	2.4	No	No	No	0	No	0	0
76B	1	B		0	1.9	No	No	No	0	No	0	0	3.1	No	No	No	0	No	0	0
77B	1	B		0	2.3	No	No	No	0	No	0	0	3.3	No	No	No	0	No	0	0
78B	1	B		0	2.6	No	No	No	0	No	0	0	3.8	No	No	No	0	No	0	0
79B	1	B		0	2.2	No	No	No	0	No	0	0	4.3	No	No	No	0	No	0	0
80B	1	B		0	1.7	No	No	No	0	No	0	0	3.4	No	No	No	0	No	0	0
81B	1	B		0	1.8	No	No	No	0	No	0	0	4.4	No	No	No	0	No	0	0
82B	1	B		0	2.2	No	No	No	0	No	0	0	4.2	No	No	No	0	No	0	0
83B	1	B		0	1.4	No	No	No	0	No	0	0	2.6	No	No	No	0	No	0	0
84B	1	B		0	1.4	No	No	No	0	No	0	0	2.6	No	No	No	0	No	0	0
85B	1	B		0	1.6	No	No	No	0	No	0	0	2.7	No	No	No	0	No	0	0
86B	1	B		0	1.8	No	No	No	0	No	0	0	3	No	No	No	0	No	0	0
87B	1	B		0	2.1	No	No	No	0	No	0	0	3	No	No	No	0	No	0	0
88B	1	B		0	2.3	No	No	No	0	No	0	0	3.2	No	No	No	0	No	0	0
89B	1	B		0	2.2	No	No	No	0	No	0	0	3	No	No	No	0	No	0	0
90B	1	B		0	2.1	No	No	No	0	No	0	0	2.5	No	No	No	0	No	0	0
91B	1	B		0	1.3	No	No	No	0	No	0	0	2	No	No	No	0	No	0	0
92B	1	B		0	1.3	No	No	No	0	No	0	0	2.2	No	No	No	0	No	0	0
93B	1	B		0	1.1	No	No	No	0	No	0	0	1.7	No	No	No	0	No	0	0
117B	1	B		0	1.2	No	No	No	0	No	0	0	1.7	No	No	No	0	No	0	0
118B	1	B		0	3.5	No	No	No	0	No	0	0	4.7	No	No	No	0	No	0	0
119B	1	B		0	4.4	No	No	No	0	No	0	0	5.7	No	Yes	No	0	No	0	1
120B	1	B	Yes	1	5.8	No	Yes	No	0	Yes	1	1	6.5	No	Yes	No	0	Yes	1	1
121B	1	B	Yes	1	9.3	Yes	Yes	Yes	1	Yes	1	1	11	Yes	Yes	Yes	1	Yes	1	1
122B	1	B	Yes	1	8.8	Yes	Yes	Yes	1	Yes	1	1	10.6	Yes	Yes	Yes	1	Yes	1	1
123B	1	B	Yes	1	8.7	Yes	Yes	Yes	1	Yes	1	1	10.8	Yes	Yes	Yes	1	Yes	1	1
124B	1	B	Yes	1	7.2	Yes	Yes	Yes	1	Yes	1	1	10.2	Yes	Yes	Yes	1	Yes	1	1
125B	1	B	Yes	1	8	Yes	Yes	Yes	1	Yes	1	1	10.3	Yes	Yes	Yes	1	Yes	1	1
126B	1	B	Yes	1	9.9	Yes	Yes	Yes	1	Yes	1	1	11.5	Yes	Yes	Yes	1	Yes	1	1
127B	1	B	Yes	1	7.4	Yes	Yes	Yes	1	Yes	1	1	9.2	Yes	Yes	Yes	1	Yes	1	1
128B	1	B	Yes	1	8.2	Yes	Yes	Yes	1	Yes	1	1	10.3	Yes	Yes	Yes	1	Yes	1	1
129B	1	B	Yes	1	9.2	Yes	Yes	Yes	1	Yes	1	1	10.5	Yes	Yes	Yes	1	Yes	1	1
130B	1	B	Yes	1	9.3	Yes	Yes	Yes	1	Yes	1	1	10.8	Yes	Yes	Yes	1	Yes	1	1
131B	1	B	Yes	1	8.5	Yes	Yes	Yes	1	Yes	1	1	11	Yes	Yes	Yes	1	Yes	1	1
132B	1	B	Yes	1	4.2	No	No	No	0	No	0	0	5.1	No	Yes	No	0	Yes	1	1
143C	1	C	Yes	1	8.6	Yes	Yes	Yes	1	Yes	1	0	10.1	Yes	Yes	Yes	1	Yes	1	0
144C	1	C	Yes	1	5.3	No	Yes	No	0	Yes	1	0	8.8	Yes	Yes	Yes	1	Yes	1	0
145C	1	C		0	2	No	No	No	0	No	0	0	5	No	Yes	No	0	No	0	0
146C	1	C	Yes	1	2.7	No	No	No	0	No	0	0	2.9	No	No	No	0	No	0	0
147C	1	C		0	1.5	No	No	No	0	No	0	0	2.2	No	No	No	0	No	0	0
612B	1	B	Yes	1	1.4	No	No	No	0	No	0	0	3.9	No	No	No	0	No	0	0
613B	1	B	Yes	1	2.4	No	No	No	0	No	0	0	5.6	No	Yes	No	0	Yes	1	1
614B	1	B	Yes	1	3.2	No	No	No	0	No	0	0	6.5	No	Yes	No	0	Yes	1	1
615B	1	B	Yes	1	4.1	No	No	No	0	No	0	0	7.4	Yes	Yes	Yes	1	Yes	1	1
616B	1	B	Yes	1	4.7	No	No	No	0	No	0	0	8.1	Yes	Yes	Yes	1	Yes	1	1
617B	1	B	Yes	1	5.1	No	Yes	No	0	Yes	1	1	8.5	Yes	Yes	Yes	1	Yes	1	1
618B	1	B	Yes	1	6	No	Yes	No	0	Yes	1	1	8.6	Yes	Yes	Yes	1	Yes	1	1
619B	1	B	Yes	1	5.1	No	Yes	No	0	Yes	1	1	7.9	Yes	Yes	Yes	1	Yes	1	1
620B	1	B	Yes	1	4.7	No	No	No	0	No	0	0	7.2	Yes	Yes	Yes	1	Yes	1	1
621B	1	B	Yes	1	4.5	No	No	No	0	No	0	0	6.4	No	Yes	No	0	Yes	1	1
622B	1	B	Yes	1	2.5	No	No	No	0	No	0	0	3.6	No	No	No	0	No	0	0
623B	1	B		0	1	No	No	No	0	No	0	0	1.2	No	No	No	0	No	0	0
624D	1	D		0	1	No	No	No	0	No	0	0	1.2	No	No	No	0	No	0	0
625C	1	C		0	0.7	No	No	No	0	No	0	0	1.4	No	No	No	0	No	0	0
626B	1	B		0	0.7	No	No	No	0	No	0	0	2	No	No	No	0	No	0	0
627B	1	B		0	0.9	No	No	No	0	No	0	0	1.1	No	No	No	0	No	0	0
628B	1	B		0	1.2	No	No	No	0	No	0	0	3.6	No	No	No	0	No	0	0
629B	1	B		0	1.1	No	No	No	0	No	0	0	3.3	No	No	No	0	No	0	0
630B	1	B		0	1	No	No	No	0	No	0	0	3	No	No	No	0	No	0	0
631B	1	B		0	0.9	No	No	No	0	No	0	0	2.7	No	No	No	0	No	0	0
632B	1	B		0	0.8	No	No	No	0	No	0	0	2	No	No	No	0	No	0	0
633B	1	B		0	1.4	No	No	No	0	No	0	0	3.7	No	No	No	0	No	0	0
634B	1	B		0	1.3	No	No	No	0	No	0	0	3.6	No	No	No	0	No	0	0
635B	1	B		0	1.7	No	No	No	0	No	0	0	4.4	No	No	No	0	No	0	0
636B	1	B		0	1.3	No	No	No	0	No	0	0	3.9	No	No	No	0	No	0	0
637B	1	B		0	2	No	No	No	0	No	0	0	4.8	No	No	No	0	No	0	0
638B	1	B		0	1.8	No	No	No	0	No	0	0	4.6	No	No	No	0	No	0	0
639B	1	B		0	1.9	No	No	No	0	No	0	0	4.6	No	No	No	0	No	0	0
640B	1	B		0	1.7	No	No	No	0	No	0	0	4.6	No	No	No	0	No	0	0
641B	1	B		0	1.8	No	No	No	0	No	0	0	4.7	No	No	No	0	No	0	0
642B	1	B		0	1.7	No	No	No	0	No	0	0	4.7	No	No	No	0	No	0	0
643B	1	B		0	1.7	No	No	No	0	No	0	0	4.5	No	No	No	0	No	0	0
644B	1	B		0	0.8	No	No	No	0	No	0	0	2.7	No	No	No	0	No	0	0
645B	1	B		0	1.4	No	No	No	0	No	0	0	3.7	No	No	No	0	No	0	0
646B	1	B		0	1.4	No	No	No	0	No	0	0	3.9	No	No	No	0	No	0	0
647B	1	B		0	1.2	No	No	No	0	No	0	0	3.7	No	No	No	0	No	0	0
648B	1	B		0	1.2	No	No	No	0	No	0	0	2.1	No	No	No	0	No	0	0
649B	1	B		0	1	No	No	No	0	No	0	0	2	No	No	No	0	No	0	0
650B	1	B		0	1.1	No	No	No	0	No	0	0	1.8	No	No	No	0	No	0	0
651C	1	C	Yes	1	1.1	No	No	No	0	No	0	0	2.2	No	No	No	0	No	0	0
652C	1	C		0	1.1	No	No	No	0	No	0	0	2.7	No	No	No	0	No	0	0
653C	1	C		0	0.9	No	No	No	0	No	0	0	2.4	No	No	No	0	No	0	0
654B	1	B		0	2.3	No	No	No	0	No	0	0	3.6	No	No	No	0	No	0	0
655B	1	B		0	1	No	No	No	0	No	0	0	1.9	No	No	No	0	No	0	0
656B	1	B		0	1.7	No	No	No	0	No	0	0	2.5	No	No	No	0	No	0	0
657B	1	B		0	1.5	No	No	No	0	No	0	0	3.8	No	No	No	0	No	0	0
658B	1	B		0	1.5	No	No	No	0	No	0	0	3.8	No	No	No	0	No	0	0
659B	1	B		0	1.1	No	No	No	0	No	0	0	3.4	No	No	No	0	No	0	0
660B	1	B		0	1.2	No	No	No	0	No	0	0	3.4	No	No	No	0	No	0	0
661B	1	B	Yes	1	9.7	Yes	Yes	Yes	1	Yes	1	1	11.3	Yes	Yes	Yes	1	Yes	1	1
662B	1	B		0	1.9	No	No	No	0	No	0	0	3.9	No	No	No	0	No	0	0
751B	1	B		0	1.8	No	No	No	0	No	0	0	4.7	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
75B	2.7	No	No	No	0	No	0	0	2	No	No	No	0	No	0	0
76B	3.3	No	No	No	0	No	0	0	2.9	No	No	No	0	No	0	0
77B	4.4	No	No	No	0	No	0	0	5.1	No	Yes	No	0	No	0	1
78B	4.6	No	No	No	0	No	0	0	5.3	No	Yes	No	0	No	0	1
79B	5.6	No	Yes	No	0	No	0	1	6.4	No	Yes	No	0	No	0	1
80B	5.4	No	Yes	No	0	No	0	1	6.1	No	Yes	No	0	No	0	1
81B	5.4	No	Yes	No	0	No	0	1	5.9	No	Yes	No	0	No	0	1
82B	5.1	No	Yes	No	0	No	0	1	5.5	No	Yes	No	0	No	0	1
83B	4.7	No	No	No	0	No	0	0	5.3	No	Yes	No	0	No	0	1
84B	4.6	No	No	No	0	No	0	0	5.1	No	Yes	No	0	No	0	1
85B	4.5	No	No	No	0	No	0	0	5	No	Yes	No	0	No	0	1
86B	4.7	No	No	No	0	No	0	0	5.3	No	Yes	No	0	No	0	1
87B	4.5	No	No	No	0	No	0	0	5.1	No	Yes	No	0	No	0	1
88B	4.6	No	No	No	0	No	0	0	5.2	No	Yes	No	0	No	0	1
89B	4.3	No	No	No	0	No	0	0	4.9	No	No	No	0	No	0	0
90B	3.6	No	No	No	0	No	0	0	4.1	No	No	No	0	No	0	0
91B	1.9	No	No	No	0	No	0	0	2	No	No	No	0	No	0	0
92B	2.2	No	No	No	0	No	0	0	2.2	No	No	No	0	No	0	0
93B	1.6	No	No	No	0	No	0	0	1.9	No	No	No	0	No	0	0
117B	4.2	No	No	No	0	No	0	0	5.2	No	Yes	No	0	No	0	1
118B	5.2	No	Yes	No	0	No	0	1	5.5	No	Yes	No	0	No	0	1
119B	6	No	Yes	No	0	No	0	1	6.4	No	Yes	No	0	No	0	1
120B	7	Yes	Yes	Yes	1	Yes	1	1	7.4	Yes	Yes	Yes	1	Yes	1	1
121B	11.9	Yes	Yes	Yes	1	Yes	1	1	12.9	Yes	Yes	Yes	1	Yes	1	1
122B	11.7	Yes	Yes	Yes	1	Yes	1	1	12.6	Yes	Yes	Yes	1	Yes	1	1
123B	12.1	Yes	Yes	Yes	1	Yes	1	1	12.9	Yes	Yes	Yes	1	Yes	1	1
124B	11.6	Yes	Yes	Yes	1	Yes	1	1	12.5	Yes	Yes	Yes	1	Yes	1	1
125B	11.6	Yes	Yes	Yes	1	Yes	1	1	12.5	Yes	Yes	Yes	1	Yes	1	1
126B	12.6	Yes	Yes	Yes	1	Yes	1	1	13.7	Yes	Yes	Yes	1	Yes	1	1
127B	10.6	Yes	Yes	Yes	1	Yes	1	1	11.8	Yes	Yes	Yes	1	Yes	1	1
128B	11.8	Yes	Yes	Yes	1	Yes	1	1	13	Yes	Yes	Yes	1	Yes	1	1
129B	11.5	Yes	Yes	Yes	1	Yes	1	1	12.5	Yes	Yes	Yes	1	Yes	1	1
130B	12.1	Yes	Yes	Yes	1	Yes	1	1	13.2	Yes	Yes	Yes	1	Yes	1	1
131B	12.6	Yes	Yes	Yes	1	Yes	1	1	14	Yes	Yes	Yes	1	Yes	1	1
132B	6.2	No	Yes	No	0	Yes	1	1	7	Yes	Yes	Yes	1	Yes	1	1
143C	11.2	Yes	Yes	Yes	1	Yes	1	0	12	Yes	Yes	Yes	1	Yes	1	0
144C	10.1	Yes	Yes	Yes	1	Yes	1	0	10.9	Yes	Yes	Yes	1	Yes	1	0
145C	6.7	No	Yes	No	0	No	0	0	7.6	Yes	Yes	No	0	No	0	0
146C	6.8	No	Yes	No	0	Yes	1	0	7.7	Yes	Yes	Yes	1	Yes	1	0
147C	4.6	No	No	No	0	No	0	0	5.5	No	Yes	No	0	No	0	0
612B	5.9	No	Yes	No	0	Yes	1	1	6.7	No	Yes	No	0	Yes	1	1
613B	7.3	Yes	Yes	Yes	1	Yes	1	1	8.3	Yes	Yes	Yes	1	Yes	1	1
614B	8.1	Yes	Yes	Yes	1	Yes	1	1	9.1	Yes	Yes	Yes	1	Yes	1	1
615B	8.8	Yes	Yes	Yes	1	Yes	1	1	9.7	Yes	Yes	Yes	1	Yes	1	1
616B	9.4	Yes	Yes	Yes	1	Yes	1	1	10.3	Yes	Yes	Yes	1	Yes	1	1
617B	9.7	Yes	Yes	Yes	1	Yes	1	1	10.6	Yes	Yes	Yes	1	Yes	1	1
618B	9.8	Yes	Yes	Yes	1	Yes	1	1	10.6	Yes	Yes	Yes	1	Yes	1	1
619B	9	Yes	Yes	Yes	1	Yes	1	1	9.9	Yes	Yes	Yes	1	Yes	1	1
620B	8.2	Yes	Yes	Yes	1	Yes	1	1	8.9	Yes	Yes	Yes	1	Yes	1	1
621B	7.3	Yes	Yes	Yes	1	Yes	1	1	7.8	Yes	Yes	Yes	1	Yes	1	1
622B	4	No	No	No	0	No	0	0	3.3	No	No	No	0	No	0	0
623B	4.4	No	No	No	0	No	0	0	5.4	No	Yes	No	0	No	0	1
624D	4.6	No	No	No	0	No	0	0	5.6	No	Yes	No	0	No	0	0
625C	4.4	No	No	No	0	No	0	0	5.4	No	Yes	No	0	No	0	0
626B	4.6	No	No	No	0	No	0	0	5.3	No	Yes	No	0	No	0	1
627B	4	No	No	No	0	No	0	0	5.1	No	Yes	No	0	No	0	1
628B	5.7	No	Yes	No	0	No	0	1	6.6	No	Yes	No	0	No	0	1
629B	5.4	No	Yes	No	0	No	0	1	6.3	No	Yes	No	0	No	0	1
630B	5.2	No	Yes	No	0	No	0	1	6	No	Yes	No	0	No	0	1
631B	4.9	No	No	No	0	No	0	0	5.6	No	Yes	No	0	No	0	1
632B	4.6	No	No	No	0	No	0	0	5.4	No	Yes	No	0	No	0	1
633B	5.6	No	Yes	No	0	No	0	1	6.5	No	Yes	No	0	No	0	1
634B	5.7	No	Yes	No	0	No	0	1	6.5	No	Yes	No	0	No	0	1
635B	6.1	No	Yes	No	0	No	0	1	6.9	No	Yes	No	0	No	0	1
636B	5.8	No	Yes	No	0	No	0	1	6.6	No	Yes	No	0	No	0	1
637B	5.9	No	Yes	No	0	No	0	1	6.7	No	Yes	No	0	No	0	1
638B	5.8	No	Yes	No	0	No	0	1	6.6	No	Yes	No	0	No	0	1
639B	5.9	No	Yes	No	0	No	0	1	6.7	No	Yes	No	0	No	0	1
640B	6.2	No	Yes	No	0	No	0	1	7	Yes	Yes	No	0	No	0	1
641B	6	No	Yes	No	0	No	0	1	6.8	No	Yes	No	0	No	0	1
642B	5.7	No	Yes	No	0	No	0	1	6.4	No	Yes	No	0	No	0	1
643B	5.5	No	Yes	No	0	No	0	1	6.2	No	Yes	No	0	No	0	1
644B	4.9	No	No	No	0	No	0	0	5.6	No	Yes	No	0	No	0	1
645B	4.8	No	No	No	0	No	0	0	5.4	No	Yes	No	0	No	0	1
646B	5.1	No	Yes	No	0	No	0	1	5.8	No	Yes	No	0	No	0	1
647B	4.9	No	No	No	0	No	0	0	5.5	No	Yes	No	0	No	0	1
648B	2.7	No	No	No	0	No	0	0	3.1	No	No	No	0	No	0	0
649B	2.6	No	No	No	0	No	0	0	2.9	No	No	No	0	No	0	0
650B	2.2	No	No	No	0	No	0	0	2.4	No	No	No	0	No	0	0
651C	5.4	No	Yes	No	0	Yes	1	0	6.4	No	Yes	No	0	Yes	1	0
652C	5.3	No	Yes	No	0	No	0	0	6	No	Yes	No	0	No	0	0
653C	5.1	No	Yes	No	0	No	0	0	5.9	No	Yes	No	0	No	0	0
654B	2.9	No	No	No	0	No	0	0	2.5	No	No	No	0	No	0	0
655B	2.4	No	No	No	0	No	0	0	2.7	No	No	No	0	No	0	0
656B	3	No	No	No	0	No	0	0	3.3	No	No	No	0	No	0	0
657B	4.9	No	No	No	0	No	0	0	5.6	No	Yes	No	0	No	0	1
658B	5.1	No	Yes	No	0	No	0	1	5.7	No	Yes	No	0	No	0	1
659B	5	No	Yes	No	0	No	0	1	5.7	No	Yes	No	0	No	0	1
660B	5	No	Yes	No	0	No	0	1	5.7	No	Yes	No	0	No	0	1
661B	12.7	Yes	Yes	Yes	1	Yes	1	1	13.5	Yes	Yes	Yes	1	Yes	1	1
662B	5.1	No	Yes	No	0	No	0	1	5.6	No	Yes	No	0	No	0	1
751B	5.9	No	Yes	No	0	No	0	1	6.6	No	Yes	No	0	No	0	1

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
75B	2.6	No	No	No	0	No	0	0	3.1	No	No	No	0	No	0	0
76B	3.6	No	No	No	0	No	0	0	4.2	No	No	No	0	No	0	0
77B	5.6	No	Yes	No	0	No	0	1	6.1	No	Yes	No	0	No	0	1
78B	5.9	No	Yes	No	0	No	0	1	6.5	No	Yes	No	0	No	0	1
79B	7.2	Yes	Yes	No	0	No	0	1	8	Yes	Yes	No	0	No	0	1
80B	6.9	No	Yes	No	0	No	0	1	7.6	Yes	Yes	No	0	No	0	1
81B	6.6	No	Yes	No	0	No	0	1	7.2	Yes	Yes	No	0	No	0	1
82B	6.1	No	Yes	No	0	No	0	1	6.8	No	Yes	No	0	No	0	1
83B	5.9	No	Yes	No	0	No	0	1	6.5	No	Yes	No	0	No	0	1
84B	5.8	No	Yes	No	0	No	0	1	6.3	No	Yes	No	0	No	0	1
85B	5.6	No	Yes	No	0	No	0	1	6.1	No	Yes	No	0	No	0	1
86B	5.9	No	Yes	No	0	No	0	1	6.4	No	Yes	No	0	No	0	1
87B	5.6	No	Yes	No	0	No	0	1	6.1	No	Yes	No	0	No	0	1
88B	5.7	No	Yes	No	0	No	0	1	6.3	No	Yes	No	0	No	0	1
89B	5.3	No	Yes	No	0	No	0	1	5.9	No	Yes	No	0	No	0	1
90B	4.6	No	No	No	0	No	0	0	5	No	Yes	No	0	No	0	1
91B	2.4	No	No	No	0	No	0	0	2.7	No	No	No	0	No	0	0
92B	2.6	No	No	No	0	No	0	0	2.9	No	No	No	0	No	0	0
93B	2.2	No	No	No	0	No	0	0	2.5	No	No	No	0	No	0	0
117B	5.8	No	Yes	No	0	No	0	1	6.4	No	Yes	No	0	No	0	1
118B	5.8	No	Yes	No	0	No	0	1	6.2	No	Yes	No	0	No	0	1
119B	6.6	No	Yes	No	0	No	0	1	7.1	Yes	Yes	No	0	No	0	1
120B	7.9	Yes	Yes	Yes	1	Yes	1	1	8.5	Yes	Yes	Yes	1	Yes	1	1
121B	13.8	Yes	Yes	Yes	1	Yes	1	1	14.6	Yes	Yes	Yes	1	Yes	1	1
122B	13.5	Yes	Yes	Yes	1	Yes	1	1	14.3	Yes	Yes	Yes	1	Yes	1	1
123B	13.7	Yes	Yes	Yes	1	Yes	1	1	14.5	Yes	Yes	Yes	1	Yes	1	1
124B	13.5	Yes	Yes	Yes	1	Yes	1	1	14.5	Yes	Yes	Yes	1	Yes	1	1
125B	13.5	Yes	Yes	Yes	1	Yes	1	1	14.4	Yes	Yes	Yes	1	Yes	1	1
126B	14.7	Yes	Yes	Yes	1	Yes	1	1	15.6	Yes	Yes	Yes	1	Yes	1	1
127B	12.8	Yes	Yes	Yes	1	Yes	1	1	13.7	Yes	Yes	Yes	1	Yes	1	1
128B	14.2	Yes	Yes	Yes	1	Yes	1	1	15.1	Yes	Yes	Yes	1	Yes	1	1
129B	13.3	Yes	Yes	Yes	1	Yes	1	1	14.1	Yes	Yes	Yes	1	Yes	1	1
130B	14.1	Yes	Yes	Yes	1	Yes	1	1	15	Yes	Yes	Yes	1	Yes	1	1
131B	15.1	Yes	Yes	Yes	1	Yes	1	1	16.2	Yes	Yes	Yes	1	Yes	1	1
132B	7.5	Yes	Yes	Yes	1	Yes	1	1	7.8	Yes	Yes	Yes	1	Yes	1	1
143C	12.6	Yes	Yes	Yes	1	Yes	1	0	13.4	Yes	Yes	Yes	1	Yes	1	0
144C	11.6	Yes	Yes	Yes	1	Yes	1	0	12.5	Yes	Yes	Yes	1	Yes	1	0
145C	8.2	Yes	Yes	No	0	No	0	0	9.1	Yes	Yes	No	0	No	0	0
146C	8.4	Yes	Yes	Yes	1	Yes	1	0	9.3	Yes	Yes	Yes	1	Yes	1	0
147C	6	No	Yes	No	0	No	0	0	6.7	No	Yes	No	0	No	0	0
612B	7.2	Yes	Yes	Yes	1	Yes	1	1	7.9	Yes	Yes	Yes	1	Yes	1	1
613B	8.9	Yes	Yes	Yes	1	Yes	1	1	9.6	Yes	Yes	Yes	1	Yes	1	1
614B	9.7	Yes	Yes	Yes	1	Yes	1	1	10.5	Yes	Yes	Yes	1	Yes	1	1
615B	10.3	Yes	Yes	Yes	1	Yes	1	1	11.1	Yes	Yes	Yes	1	Yes	1	1
616B	10.9	Yes	Yes	Yes	1	Yes	1	1	11.7	Yes	Yes	Yes	1	Yes	1	1
617B	11.2	Yes	Yes	Yes	1	Yes	1	1	12	Yes	Yes	Yes	1	Yes	1	1
618B	11.3	Yes	Yes	Yes	1	Yes	1	1	11.9	Yes	Yes	Yes	1	Yes	1	1
619B	10.6	Yes	Yes	Yes	1	Yes	1	1	11.1	Yes	Yes	Yes	1	Yes	1	1
620B	9.5	Yes	Yes	Yes	1	Yes	1	1	9.8	Yes	Yes	Yes	1	Yes	1	1
621B	8.2	Yes	Yes	Yes	1	Yes	1	1	8.3	Yes	Yes	Yes	1	Yes	1	1
622B	3.4	No	No	No	0	No	0	0	3.6	No	No	No	0	No	0	0
623B	5.9	No	Yes	No	0	No	0	1	6.6	No	Yes	No	0	No	0	1
624D	6.1	No	Yes	No	0	No	0	0	6.8	No	Yes	No	0	No	0	0
625C	5.8	No	Yes	No	0	No	0	0	6.2	No	Yes	No	0	No	0	0
626B	5.8	No	Yes	No	0	No	0	1	6.1	No	Yes	No	0	No	0	1
627B	5.6	No	Yes	No	0	No	0	1	6.3	No	Yes	No	0	No	0	1
628B	7.1	Yes	Yes	No	0	No	0	1	7.7	Yes	Yes	No	0	No	0	1
629B	6.7	No	Yes	No	0	No	0	1	7.3	Yes	Yes	No	0	No	0	1
630B	6.4	No	Yes	No	0	No	0	1	6.8	No	Yes	No	0	No	0	1
631B	6	No	Yes	No	0	No	0	1	6.5	No	Yes	No	0	No	0	1
632B	5.8	No	Yes	No	0	No	0	1	6	No	Yes	No	0	No	0	1
633B	7	Yes	Yes	No	0	No	0	1	7.6	Yes	Yes	No	0	No	0	1
634B	7	Yes	Yes	No	0	No	0	1	7.6	Yes	Yes	No	0	No	0	1
635B	7.5	Yes	Yes	No	0	No	0	1	8.1	Yes	Yes	No	0	No	0	1
636B	7.2	Yes	Yes	No	0	No	0	1	7.7	Yes	Yes	No	0	No	0	1
637B	7.2	Yes	Yes	No	0	No	0	1	7.8	Yes	Yes	No	0	No	0	1
638B	7.1	Yes	Yes	No	0	No	0	1	7.7	Yes	Yes	No	0	No	0	1
639B	7.3	Yes	Yes	No	0	No	0	1	7.8	Yes	Yes	No	0	No	0	1
640B	7.6	Yes	Yes	No	0	No	0	1	8.2	Yes	Yes	No	0	No	0	1
641B	7.3	Yes	Yes	No	0	No	0	1	7.9	Yes	Yes	No	0	No	0	1
642B	7	Yes	Yes	No	0	No	0	1	7.5	Yes	Yes	No	0	No	0	1
643B	6.7	No	Yes	No	0	No	0	1	7.2	Yes	Yes	No	0	No	0	1
644B	6	No	Yes	No	0	No	0	1	6.2	No	Yes	No	0	No	0	1
645B	5.9	No	Yes	No	0	No	0	1	6.2	No	Yes	No	0	No	0	1
646B	6.3	No	Yes	No	0	No	0	1	6.7	No	Yes	No	0	No	0	1
647B	6	No	Yes	No	0	No	0	1	6.3	No	Yes	No	0	No	0	1
648B	3.3	No	No	No	0	No	0	0	3.3	No	No	No	0	No	0	0
649B	3.2	No	No	No	0	No	0	0	3.3	No	No	No	0	No	0	0
650B	2.6	No	No	No	0	No	0	0	2.8	No	No	No	0	No	0	0
651C	7	Yes	Yes	Yes	1	Yes	1	0	7.7	Yes	Yes	Yes	1	Yes	1	0
652C	6.3	No	Yes	No	0	No	0	0	6.9	No	Yes	No	0	No	0	0
653C	6.3	No	Yes	No	0	No	0	0	6.9	No	Yes	No	0	No	0	0
654B	2.9	No	No	No	0	No	0	0	3.2	No	No	No	0	No	0	0
655B	2.9	No	No	No	0	No	0	0	2.9	No	No	No	0	No	0	0
656B	3.5	No	No	No	0	No	0	0	3.6	No	No	No	0	No	0	0
657B	6	No	Yes	No	0	No	0	1	6.4	No	Yes	No	0	No	0	1
658B	6.2	No	Yes	No	0	No	0	1	6.6	No	Yes	No	0	No	0	1
659B	6.2	No	Yes	No	0	No	0	1	6.5	No	Yes	No	0	No	0	1
660B	6.1	No	Yes	No	0	No	0	1	6.5	No	Yes	No	0	No	0	1
661B	14.5	Yes	Yes	Yes	1	Yes	1	1	15.3	Yes	Yes	Yes	1	Yes	1	1
662B	6.2	No	Yes	No	0	No	0	1	6.8	No	Yes	No	0	No	0	1
751B	7.2	Yes	Yes	No	0	No	0	1	7.8	Yes	Yes	No	0	No	0	1

	10-ft Wall	12-ft Wall	14-ft Wall	16-ft Wall	18-ft Wall	20-ft Wall
Feasibility Factors:						
# of First-Row 5 dBA Reduction:	18	25	28	28	28	28
% of First-Row 5 dBA Reduction:	62.1%	86.2%	96.6%	96.6%	96.6%	96.6%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Reasonableness Factors:						
# of First-Row Design Goal:	13	20	24	26	28	28
% of First-Row Design Goal:	44.8%	69.0%	82.8%	89.7%	96.6%	96.6%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
# of Benefited (Category B):	16	24	50	68	69	70
Cost of Noise Wall (Length x Height x $20/sq ft):	$796,200.00	$955,440.00	$1,114,680.00	$1,273,920.00	$1,433,160.00	$1,592,400.00
Cost of any other items critical to safety (snow storage on overpass):	$99,525.00	$99,525.00	$99,525.00	$99,525.00	$99,525.00	$99,525.00
Anticipated Cost of Noise Abatement:	$895,725.00	$1,054,965.00	$1,214,205.00	$1,373,445.00	$1,532,685.00	$1,691,925.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$480,000.00	$720,000.00	$1,500,000.00	$2,040,000.00	$2,070,000.00	$2,100,000.00
Activity Category C Allowable Cost ($360/linear ft):	$212,400.00	$212,400.00	$212,400.00	$212,400.00	$212,400.00	$212,400.00
Allowable Cost:	$692,400.00	$932,400.00	$1,712,400.00	$2,252,400.00	$2,282,400.00	$2,312,400.00
Difference between Anticipated Cost and Allowable Cost:	-$203,325.00	-$122,565.00	$498,195.00	$878,955.00	$749,715.00	$620,475.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
Feasible and Reasonable:	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**

Wall 2

Total Wall Length	2365	ft
Length of Activity Category C/E Land Use:	235	ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	18	

Name	# of DU	Category	1st Row	# of 1st Row	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
678B	1	B	Yes	1	0.8	No	No	No	0	No	0	0
679B	1	B		0	0.9	No	No	No	0	No	0	0
680B	1	B		0	0.8	No	No	No	0	No	0	0
681B	1	B		0	0.7	No	No	No	0	No	0	0
682B	1	B		0	0.6	No	No	No	0	No	0	0
683B	1	B		0	0.6	No	No	No	0	No	0	0
684B	1	B		0	0.8	No	No	No	0	No	0	0
685B	1	B		0	0.9	No	No	No	0	No	0	0
686B	1	B	Yes	1	1.4	No	No	No	0	No	0	0
687B	1	B	Yes	1	1.6	No	No	No	0	No	0	0
688B	1	B	Yes	1	2.4	No	No	No	0	No	0	0
689B	1	B	Yes	1	2.2	No	No	No	0	No	0	0
690B	1	B		0	2.1	No	No	No	0	No	0	0
691B	1	B		0	1.1	No	No	No	0	No	0	0
692B	1	B		0	0.6	No	No	No	0	No	0	0
693B	1	B		0	0.7	No	No	No	0	No	0	0
694B	1	B		0	0.7	No	No	No	0	No	0	0
695B	1	B		0	0.9	No	No	No	0	No	0	0
696B	1	B	Yes	1	2.3	No	No	No	0	No	0	0
697B	1	B		0	1.2	No	No	No	0	No	0	0
698B	1	B		0	1.5	No	No	No	0	No	0	0
699B	1	B		0	1.7	No	No	No	0	No	0	0
700B	1	B		0	1.8	No	No	No	0	No	0	0
702B	1	B		0	2.3	No	No	No	0	No	0	0
703B	1	B		0	3.1	No	No	No	0	No	0	0
704B	1	B	Yes	1	2.1	No	No	No	0	No	0	0
705B	1	B	Yes	1	2.7	No	No	No	0	No	0	0
706B	1	B	Yes	1	2.7	No	No	No	0	No	0	0
707B	1	B	Yes	1	2.3	No	No	No	0	No	0	0
708B	1	B		0	2.4	No	No	No	0	No	0	0
709B	1	B		0	2.3	No	No	No	0	No	0	0
710B	1	B		0	0.9	No	No	No	0	No	0	0
711B	1	B		0	1.1	No	No	No	0	No	0	0
712B	1	B		0	1.2	No	No	No	0	No	0	0
713B	1	B		0	1.4	No	No	No	0	No	0	0
714B	1	B		0	2.1	No	No	No	0	No	0	0
715B	1	B	Yes	1	2.7	No	No	No	0	No	0	0
716C	1	C	Yes	1	1.9	No	No	No	0	No	0	0
717C	1	C	Yes	1	1.9	No	No	No	0	No	0	0
718C	1	C	Yes	1	1.9	No	No	No	0	No	0	0
719B	1	B		0	0.9	No	No	No	0	No	0	0
720B	1	B		0	0.6	No	No	No	0	No	0	0
721B	1	B		0	0.6	No	No	No	0	No	0	0
722B	1	B		0	0.5	No	No	No	0	No	0	0
723B	1	B		0	1.1	No	No	No	0	No	0	0
724B	1	B		0	1	No	No	No	0	No	0	0
725B	1	B		0	1.3	No	No	No	0	No	0	0
726B	1	B		0	1.2	No	No	No	0	No	0	0
727B	1	B	Yes	1	0.8	No	No	No	0	No	0	0
728B	1	B		0	0.9	No	No	No	0	No	0	0
729B	1	B		0	0.9	No	No	No	0	No	0	0
730B	1	B		0	0.7	No	No	No	0	No	0	0
731B	1	B		0	0.5	No	No	No	0	No	0	0
732B	1	B		0	0.7	No	No	No	0	No	0	0
733B	1	B		0	0.6	No	No	No	0	No	0	0
734B	1	B	Yes	1	0.7	No	No	No	0	No	0	0
735B	1	B	Yes	1	0.4	No	No	No	0	No	0	0
736B	1	B		0	0.4	No	No	No	0	No	0	0
737B	1	B		0	0.4	No	No	No	0	No	0	0
738B	1	B		0	0.3	No	No	No	0	No	0	0
739B	1	B		0	0.2	No	No	No	0	No	0	0
740B	1	B		0	0.2	No	No	No	0	No	0	0
741B	1	B		0	0.2	No	No	No	0	No	0	0
742B	1	B	Yes	1	0.2	No	No	No	0	No	0	0

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
678B	1.1	No	No	No	0	No	0	0
679B	1.4	No	No	No	0	No	0	0
680B	1.3	No	No	No	0	No	0	0
681B	1.2	No	No	No	0	No	0	0
682B	1.2	No	No	No	0	No	0	0
683B	1.6	No	No	No	0	No	0	0
684B	1.8	No	No	No	0	No	0	0
685B	2	No	No	No	0	No	0	0
686B	3.1	No	No	No	0	No	0	0
687B	3.6	No	No	No	0	No	0	0
688B	4.1	No	No	No	0	No	0	0
689B	4.3	No	No	No	0	No	0	0
690B	3.5	No	No	No	0	No	0	0
691B	2.7	No	No	No	0	No	0	0
692B	1.9	No	No	No	0	No	0	0
693B	1.7	No	No	No	0	No	0	0
694B	1.7	No	No	No	0	No	0	0
695B	2.2	No	No	No	0	No	0	0
696B	3.5	No	No	No	0	No	0	0
697B	3.2	No	No	No	0	No	0	0
698B	3.6	No	No	No	0	No	0	0
699B	3.4	No	No	No	0	No	0	0
700B	3.3	No	No	No	0	No	0	0
702B	4	No	No	No	0	No	0	0
703B	4.4	No	No	No	0	No	0	0
704B	3.4	No	No	No	0	No	0	0
705B	4.1	No	No	No	0	No	0	0
706B	4.3	No	No	No	0	No	0	0
707B	4.1	No	No	No	0	No	0	0
708B	4.3	No	No	No	0	No	0	0
709B	4.3	No	No	No	0	No	0	0
710B	2.9	No	No	No	0	No	0	0
711B	3.2	No	No	No	0	No	0	0
712B	3.4	No	No	No	0	No	0	0
713B	3.9	No	No	No	0	No	0	0
714B	4.3	No	No	No	0	No	0	0
715B	4.1	No	No	No	0	No	0	0
716C	3.4	No	No	No	0	No	0	0
717C	3.3	No	No	No	0	No	0	0
718C	2.9	No	No	No	0	No	0	0
719B	3.2	No	No	No	0	No	0	0
720B	3.1	No	No	No	0	No	0	0
721B	3	No	No	No	0	No	0	0
722B	2.9	No	No	No	0	No	0	0
723B	3.3	No	No	No	0	No	0	0
724B	3.3	No	No	No	0	No	0	0
725B	3.5	No	No	No	0	No	0	0
726B	3.5	No	No	No	0	No	0	0
727B	1.5	No	No	No	0	No	0	0
728B	1.7	No	No	No	0	No	0	0
729B	1.7	No	No	No	0	No	0	0
730B	1.6	No	No	No	0	No	0	0
731B	1.2	No	No	No	0	No	0	0
732B	1.3	No	No	No	0	No	0	0
733B	1.2	No	No	No	0	No	0	0
734B	1.2	No	No	No	0	No	0	0
735B	0.7	No	No	No	0	No	0	0
736B	0.8	No	No	No	0	No	0	0
737B	0.8	No	No	No	0	No	0	0
738B	0.8	No	No	No	0	No	0	0
739B	0.5	No	No	No	0	No	0	0
740B	0.5	No	No	No	0	No	0	0
741B	0.5	No	No	No	0	No	0	0
742B	0.5	No	No	No	0	No	0	0

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
678B	1.4	No	No	No	0	No	0	0
679B	1.9	No	No	No	0	No	0	0
680B	1.9	No	No	No	0	No	0	0
681B	2	No	No	No	0	No	0	0
682B	2	No	No	No	0	No	0	0
683B	3.1	No	No	No	0	No	0	0
684B	3.6	No	No	No	0	No	0	0
685B	3.8	No	No	No	0	No	0	0
686B	4.8	No	No	No	0	No	0	0
687B	5.2	No	Yes	No	0	Yes	1	1
688B	5.2	No	Yes	No	0	Yes	1	1
689B	5.4	No	Yes	No	0	Yes	1	1
690B	4.2	No	No	No	0	No	0	0
691B	4.7	No	No	No	0	No	0	0
692B	4.2	No	No	No	0	No	0	0
693B	4	No	No	No	0	No	0	0
694B	3.7	No	No	No	0	No	0	0
695B	4.1	No	No	No	0	No	0	0
696B	4.5	No	No	No	0	No	0	0
697B	5.5	No	Yes	No	0	No	0	1
698B	4.5	No	No	No	0	No	0	0
699B	4.7	No	No	No	0	No	0	0
700B	4.2	No	No	No	0	No	0	0
702B	5.2	No	Yes	No	0	No	0	1
703B	5.5	No	Yes	No	0	No	0	1
704B	4.2	No	No	No	0	No	0	0
705B	5.1	No	Yes	No	0	Yes	1	1
706B	5.5	No	Yes	No	0	Yes	1	1
707B	5.4	No	Yes	No	0	Yes	1	1
708B	5.8	No	Yes	No	0	No	0	1
709B	5.7	No	Yes	No	0	No	0	1
710B	4.2	No	No	No	0	No	0	0
711B	4.3	No	No	No	0	No	0	0
712B	4.5	No	No	No	0	No	0	0
713B	4.9	No	No	No	0	No	0	0
714B	5.3	No	Yes	No	0	No	0	1
715B	5	No	Yes	No	0	Yes	1	1
716C	4.1	No	No	No	0	No	0	0
717C	3.9	No	No	No	0	No	0	0
718C	3.5	No	No	No	0	No	0	0
719B	4.2	No	No	No	0	No	0	0
720B	4.1	No	No	No	0	No	0	0
721B	4	No	No	No	0	No	0	0
722B	3.9	No	No	No	0	No	0	0
723B	4.2	No	No	No	0	No	0	0
724B	4.2	No	No	No	0	No	0	0
725B	4.4	No	No	No	0	No	0	0
726B	4.5	No	No	No	0	No	0	0
727B	1.8	No	No	No	0	No	0	0
728B	1.9	No	No	No	0	No	0	0
729B	1.9	No	No	No	0	No	0	0
730B	1.8	No	No	No	0	No	0	0
731B	1.4	No	No	No	0	No	0	0
732B	1.5	No	No	No	0	No	0	0
733B	1.3	No	No	No	0	No	0	0
734B	1.4	No	No	No	0	No	0	0
735B	0.9	No	No	No	0	No	0	0
736B	0.9	No	No	No	0	No	0	0
737B	0.9	No	No	No	0	No	0	0
738B	0.9	No	No	No	0	No	0	0
739B	0.6	No	No	No	0	No	0	0
740B	0.6	No	No	No	0	No	0	0
741B	0.6	No	No	No	0	No	0	0
742B	0.5	No	No	No	0	No	0	0

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
678B	1.5	No	No	No	0	No	0	0
679B	2.2	No	No	No	0	No	0	0
680B	2.2	No	No	No	0	No	0	0
681B	2.3	No	No	No	0	No	0	0
682B	2.4	No	No	No	0	No	0	0
683B	3.8	No	No	No	0	No	0	0
684B	4.2	No	No	No	0	No	0	0
685B	4.6	No	No	No	0	No	0	0
686B	5.8	No	Yes	No	0	Yes	1	1
687B	6.1	No	Yes	No	0	Yes	1	1
688B	6	No	Yes	No	0	Yes	1	1
689B	6.1	No	Yes	No	0	Yes	1	1
690B	4.7	No	No	No	0	No	0	0
691B	5.4	No	Yes	No	0	No	0	1
692B	5.3	No	Yes	No	0	No	0	1
693B	4.9	No	No	No	0	No	0	0
694B	4.5	No	No	No	0	No	0	0
695B	4.7	No	No	No	0	No	0	0
696B	5.3	No	Yes	No	0	Yes	1	1
697B	6.5	No	Yes	No	0	No	0	1
698B	5.2	No	Yes	No	0	No	0	1
699B	5.4	No	Yes	No	0	No	0	1
700B	4.8	No	No	No	0	No	0	0
702B	6.1	No	Yes	No	0	No	0	1
703B	6.3	No	Yes	No	0	No	0	1
704B	5	No	Yes	No	0	Yes	1	1
705B	5.9	No	Yes	No	0	Yes	1	1
706B	6.4	No	Yes	No	0	Yes	1	1
707B	6.3	No	Yes	No	0	Yes	1	1
708B	6.8	No	Yes	No	0	No	0	1
709B	6.6	No	Yes	No	0	No	0	1
710B	5	No	Yes	No	0	No	0	1
711B	5	No	Yes	No	0	No	0	1
712B	5.2	No	Yes	No	0	No	0	1
713B	5.6	No	Yes	No	0	No	0	1
714B	5.9	No	Yes	No	0	No	0	1
715B	5.7	No	Yes	No	0	Yes	1	1
716C	4.6	No	No	No	0	No	0	0
717C	4.4	No	No	No	0	No	0	0
718C	3.8	No	No	No	0	No	0	0
719B	5	No	Yes	No	0	No	0	1
720B	4.8	No	No	No	0	No	0	0
721B	4.7	No	No	No	0	No	0	0
722B	4.6	No	No	No	0	No	0	0
723B	4.8	No	No	No	0	No	0	0
724B	4.9	No	No	No	0	No	0	0
725B	5.1	No	Yes	No	0	No	0	1
726B	5.1	No	Yes	No	0	No	0	1
727B	1.9	No	No	No	0	No	0	0
728B	2.1	No	No	No	0	No	0	0
729B	2.1	No	No	No	0	No	0	0
730B	2	No	No	No	0	No	0	0
731B	1.5	No	No	No	0	No	0	0
732B	1.6	No	No	No	0	No	0	0
733B	1.5	No	No	No	0	No	0	0
734B	1.5	No	No	No	0	No	0	0
735B	0.9	No	No	No	0	No	0	0
736B	0.9	No	No	No	0	No	0	0
737B	1	No	No	No	0	No	0	0
738B	1	No	No	No	0	No	0	0
739B	0.7	No	No	No	0	No	0	0
740B	0.7	No	No	No	0	No	0	0
741B	0.7	No	No	No	0	No	0	0
742B	0.6	No	No	No	0	No	0	0

Feasibility Factors:				
# of First-Row 5 dBA Reduction:	0	0	7	10
% of First-Row 5 dBA Reduction:	0.0%	0.0%	38.9%	55.6%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**No**	**No**	Yes
Reasonableness Factors:				
# of First-Row Design Goal:	0	0	0	0
% of First-Row Design Goal:	0.0%	0.0%	0.0%	0.0%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**No**	**No**
# of Benefited (Category B):	0	0	13	27
Cost of Noise Wall (Length x Height x $20/sq ft):	$662,200.00	$756,800.00	$851,400.00	$946,000.00
Cost of any other items critical to safety [Adjusted] (snow storage on overpass):	$59,125.00	$59,125.00	$59,125.00	$59,125.00
Anticipated Cost of Noise Abatement:	$721,325.00	$815,925.00	$910,525.00	$1,005,125.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$0.00	$0.00	$390,000.00	$810,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$0.00	$0.00	$390,000.00	$810,000.00
Difference between Anticipated Cost and Allowable Cost:	-$721,325.00	-$815,925.00	-$520,525.00	-$195,125.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**No**
Feasible and Reasonable:	**No**	**No**	**No**	**No**

Wall 3

Total Wall Length	4187	ft
Length of Activity Category C/E Land Use:	325	ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	23	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
71B	1	B		0	1.5	No	No	No	0	No	0	0
72B	1	B		0	1.4	No	No	No	0	No	0	0
73B	1	B		0	1.5	No	No	No	0	No	0	0
74B	1	B		0	0.4	No	No	No	0	No	0	0
94B	1	B		0	0.4	No	No	No	0	No	0	0
95B	1	B		0	0.6	No	No	No	0	No	0	0
96B	1	B		0	1.4	No	No	No	0	No	0	0
97B	1	B		0	1.5	No	No	No	0	No	0	0
98B	1	B		0	1.7	No	No	No	0	No	0	0
99B	1	B	Yes	1	4.7	No	No	No	0	No	0	0
100B	1	B		0	3.2	No	No	No	0	No	0	0
101B	1	B	Yes	1	2.9	No	No	No	0	No	0	0
102B	1	B		0	1.8	No	No	No	0	No	0	0
103B	1	B		0	1.5	No	No	No	0	No	0	0
104B	1	B		0	1.3	No	No	No	0	No	0	0
105B	1	B	Yes	1	2	No	No	No	0	No	0	0
106B	1	B		0	1.6	No	No	No	0	No	0	0
107B	1	B	Yes	1	1.8	No	No	No	0	No	0	0
108B	1	B		0	1.5	No	No	No	0	No	0	0
109B	1	B		0	1.5	No	No	No	0	No	0	0
110B	1	B		0	2	No	No	No	0	No	0	0
111B	1	B	Yes	1	2.6	No	No	No	0	No	0	0
112B	1	B		0	1.5	No	No	No	0	No	0	0
113B	1	B	Yes	1	4.7	No	No	No	0	No	0	0
114B	1	B		0	3.4	No	No	No	0	No	0	0
115B	1	B		0	2.5	No	No	No	0	No	0	0
116B	1	B		0	2	No	No	No	0	No	0	0
133B	1	B	Yes	1	5.4	No	Yes	No	0	Yes	1	1
134B	1	B	Yes	1	9.8	Yes	Yes	Yes	1	Yes	1	1
135B	1	B	Yes	1	10.3	Yes	Yes	Yes	1	Yes	1	1
136B	1	B	Yes	1	10	Yes	Yes	Yes	1	Yes	1	1
137B	1	B	Yes	1	9.5	Yes	Yes	Yes	1	Yes	1	1
138B	1	B	Yes	1	9	Yes	Yes	Yes	1	Yes	1	1
139B	1	B	Yes	1	10.2	Yes	Yes	Yes	1	Yes	1	1
140B	1	B	Yes	1	6.5	No	Yes	No	0	Yes	1	1
141B	1	B		0	3.5	No	No	No	0	No	0	0
142B	1	B		0	2.1	No	No	No	0	No	0	0
148D	1	D	Yes	1	4.3	No	No	No	0	No	0	0
149B	1	B		0	1.9	No	No	No	0	No	0	0
150B	1	B		0	2.7	No	No	No	0	No	0	0
151B	1	B		0	4	No	No	No	0	No	0	0
152B	1	B	Yes	1	5.8	No	Yes	No	0	Yes	1	1
153B	1	B		0	2.5	No	No	No	0	No	0	0
154B	1	B		0	3.5	No	No	No	0	No	0	0
155B	1	B		0	1.9	No	No	No	0	No	0	0
156B	1	B	Yes	1	4.6	No	No	No	0	No	0	0
157B	1	B		0	2.8	No	No	No	0	No	0	0
158B	1	B	Yes	1	6	No	Yes	No	0	Yes	1	1
159B	1	B		0	3.9	No	No	No	0	No	0	0
160B	1	B		0	1.1	No	No	No	0	No	0	0
161B	1	B	Yes	1	4	No	No	No	0	No	0	0
162B	1	B	Yes	1	5.7	No	Yes	No	0	Yes	1	1
163B	1	B	Yes	1	7.5	Yes	Yes	Yes	1	Yes	1	1
164B	1	B	Yes	1	7.9	Yes	Yes	Yes	1	Yes	1	1
165B	1	B	Yes	1	5.3	No	Yes	No	0	Yes	1	1
166B	1	B		0	2	No	No	No	0	No	0	0
167B	1	B		0	0.8	No	No	No	0	No	0	0
168B	1	B		0	1.3	No	No	No	0	No	0	0
169B	1	B		0	1.9	No	No	No	0	No	0	0
170B	1	B		0	0.7	No	No	No	0	No	0	0
171B	1	B		0	0.7	No	No	No	0	No	0	0
172B	1	B		0	0.5	No	No	No	0	No	0	0
663B	1	B		0	1.8	No	No	No	0	No	0	0

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
71B	2.1	No	No	No	0	No	0	0
72B	1.7	No	No	No	0	No	0	0
73B	1.7	No	No	No	0	No	0	0
74B	0.5	No	No	No	0	No	0	0
94B	0.5	No	No	No	0	No	0	0
95B	0.7	No	No	No	0	No	0	0
96B	1.7	No	No	No	0	No	0	0
97B	1.8	No	No	No	0	No	0	0
98B	2.2	No	No	No	0	No	0	0
99B	5.6	No	Yes	No	0	Yes	1	0
100B	3.7	No	No	No	0	No	0	0
101B	3.6	No	No	No	0	No	0	0
102B	2.2	No	No	No	0	No	0	0
103B	2.9	No	No	No	0	No	0	0
104B	1.6	No	No	No	0	No	0	0
105B	2.4	No	No	No	0	No	0	0
106B	1.9	No	No	No	0	No	0	0
107B	2.3	No	No	No	0	No	0	0
108B	1.9	No	No	No	0	No	0	0
109B	1.8	No	No	No	0	No	0	0
110B	2.4	No	No	No	0	No	0	0
111B	3.8	No	No	No	0	No	0	0
112B	1.9	No	No	No	0	No	0	0
113B	8	Yes	Yes	Yes	1	Yes	1	1
114B	4	No	No	No	0	No	0	0
115B	2.7	No	No	No	0	No	0	0
116B	2.2	No	No	No	0	No	0	0
133B	5.7	No	Yes	No	0	Yes	1	1
134B	10.7	Yes	Yes	Yes	1	Yes	1	1
135B	11.3	Yes	Yes	Yes	1	Yes	1	1
136B	11	Yes	Yes	Yes	1	Yes	1	1
137B	10.8	Yes	Yes	Yes	1	Yes	1	1
138B	10.6	Yes	Yes	Yes	1	Yes	1	1
139B	11.5	Yes	Yes	Yes	1	Yes	1	1
140B	7.8	Yes	Yes	Yes	1	Yes	1	1
141B	4.8	No	No	No	0	No	0	0
142B	2.6	No	No	No	0	No	0	0
148D	5	No	Yes	No	0	Yes	1	0
149B	2.2	No	No	No	0	No	0	0
150B	2.9	No	No	No	0	No	0	0
151B	5.6	No	Yes	No	0	No	0	1
152B	8.8	Yes	Yes	Yes	1	Yes	1	1
153B	2.8	No	No	No	0	No	0	0
154B	4.4	No	No	No	0	No	0	0
155B	2.1	No	No	No	0	No	0	0
156B	8.3	Yes	Yes	Yes	1	Yes	1	1
157B	3	No	No	No	0	No	0	0
158B	9.7	Yes	Yes	Yes	1	Yes	1	1
159B	7.5	Yes	Yes	No	0	No	0	1
160B	1.6	No	No	No	0	No	0	0
161B	4.4	No	No	No	0	No	0	0
162B	6.7	No	Yes	No	0	Yes	1	1
163B	8.7	Yes	Yes	Yes	1	Yes	1	1
164B	9.3	Yes	Yes	Yes	1	Yes	1	1
165B	7.9	Yes	Yes	Yes	1	Yes	1	1
166B	2.9	No	No	No	0	No	0	0
167B	1.4	No	No	No	0	No	0	0
168B	2	No	No	No	0	No	0	0
169B	2.8	No	No	No	0	No	0	0
170B	1.4	No	No	No	0	No	0	0
171B	1.3	No	No	No	0	No	0	0
172B	0.9	No	No	No	0	No	0	0
663B	2	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
71B	2.5	No	No	No	0	No	0	0
72B	1.9	No	No	No	0	No	0	0
73B	1.9	No	No	No	0	No	0	0
74B	0.6	No	No	No	0	No	0	0
94B	0.6	No	No	No	0	No	0	0
95B	0.8	No	No	No	0	No	0	0
96B	1.9	No	No	No	0	No	0	0
97B	2.1	No	No	No	0	No	0	0
98B	2.8	No	No	No	0	No	0	0
99B	9.7	Yes	Yes	Yes	1	Yes	1	0
100B	7.2	Yes	Yes	No	0	No	0	1
101B	4.6	No	No	No	0	No	0	0
102B	3.9	No	No	No	0	No	0	0
103B	4.8	No	No	No	0	No	0	0
104B	2.3	No	No	No	0	No	0	0
105B	4	No	No	No	0	No	0	0
106B	3.8	No	No	No	0	No	0	0
107B	5	No	Yes	No	0	Yes	1	1
108B	4.5	No	No	No	0	No	0	0
109B	4	No	No	No	0	No	0	0
110B	4.9	No	No	No	0	No	0	0
111B	7.1	Yes	Yes	Yes	1	Yes	1	1
112B	3.6	No	No	No	0	No	0	0
113B	9.5	Yes	Yes	Yes	1	Yes	1	1
114B	8.4	Yes	Yes	No	0	No	0	1
115B	7.2	Yes	Yes	No	0	No	0	1
116B	6.5	No	Yes	No	0	No	0	1
133B	5.8	No	Yes	No	0	Yes	1	1
134B	11.4	Yes	Yes	Yes	1	Yes	1	1
135B	12.2	Yes	Yes	Yes	1	Yes	1	1
136B	11.9	Yes	Yes	Yes	1	Yes	1	1
137B	11.8	Yes	Yes	Yes	1	Yes	1	1
138B	11.7	Yes	Yes	Yes	1	Yes	1	1
139B	12.7	Yes	Yes	Yes	1	Yes	1	1
140B	9.2	Yes	Yes	Yes	1	Yes	1	1
141B	6.4	No	Yes	No	0	No	0	1
142B	3.9	No	No	No	0	No	0	0
148D	8.8	Yes	Yes	Yes	1	Yes	1	0
149B	4.3	No	No	No	0	No	0	0
150B	7.1	Yes	Yes	No	0	No	0	1
151B	8.8	Yes	Yes	No	0	No	0	1
152B	9.9	Yes	Yes	Yes	1	Yes	1	1
153B	6.9	No	Yes	No	0	No	0	1
154B	8.4	Yes	Yes	No	0	No	0	1
155B	6.2	No	Yes	No	0	No	0	1
156B	9.6	Yes	Yes	Yes	1	Yes	1	1
157B	7.6	Yes	Yes	No	0	No	0	1
158B	10.8	Yes	Yes	Yes	1	Yes	1	1
159B	8.8	Yes	Yes	No	0	No	0	1
160B	2.1	No	No	No	0	No	0	0
161B	4.7	No	No	No	0	No	0	0
162B	7.3	Yes	Yes	Yes	1	Yes	1	1
163B	9.7	Yes	Yes	Yes	1	Yes	1	1
164B	10.5	Yes	Yes	Yes	1	Yes	1	1
165B	9.3	Yes	Yes	Yes	1	Yes	1	1
166B	4.8	No	No	No	0	No	0	0
167B	2.1	No	No	No	0	No	0	0
168B	2.6	No	No	No	0	No	0	0
169B	4.7	No	No	No	0	No	0	0
170B	2.1	No	No	No	0	No	0	0
171B	2.1	No	No	No	0	No	0	0
172B	1.4	No	No	No	0	No	0	0
663B	5.6	No	Yes	No	0	No	0	1

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
71B	3	No	No	No	0	No	0	0
72B	2.3	No	No	No	0	No	0	0
73B	2	No	No	No	0	No	0	0
74B	0.7	No	No	No	0	No	0	0
94B	0.7	No	No	No	0	No	0	0
95B	0.9	No	No	No	0	No	0	0
96B	2.4	No	No	No	0	No	0	0
97B	2.7	No	No	No	0	No	0	0
98B	3.7	No	No	No	0	No	0	0
99B	11.1	Yes	Yes	Yes	1	Yes	1	0
100B	8.6	Yes	Yes	No	0	No	0	1
101B	7.7	Yes	Yes	Yes	1	Yes	1	1
102B	5.7	No	Yes	No	0	No	0	1
103B	6.2	No	Yes	No	0	No	0	1
104B	5	No	Yes	No	0	No	0	1
105B	6.8	No	Yes	No	0	Yes	1	1
106B	6.3	No	Yes	No	0	No	0	1
107B	7	Yes	Yes	Yes	1	Yes	1	1
108B	6.3	No	Yes	No	0	No	0	1
109B	6.1	No	Yes	No	0	No	0	1
110B	7	Yes	Yes	No	0	No	0	1
111B	8.3	Yes	Yes	Yes	1	Yes	1	1
112B	6.1	No	Yes	No	0	No	0	1
113B	10.9	Yes	Yes	Yes	1	Yes	1	1
114B	9.8	Yes	Yes	No	0	No	0	1
115B	8.5	Yes	Yes	No	0	No	0	1
116B	7.7	Yes	Yes	No	0	No	0	1
133B	6	No	Yes	No	0	Yes	1	1
134B	11.9	Yes	Yes	Yes	1	Yes	1	1
135B	13	Yes	Yes	Yes	1	Yes	1	1
136B	12.5	Yes	Yes	Yes	1	Yes	1	1
137B	12.7	Yes	Yes	Yes	1	Yes	1	1
138B	12.7	Yes	Yes	Yes	1	Yes	1	1
139B	13.7	Yes	Yes	Yes	1	Yes	1	1
140B	10.4	Yes	Yes	Yes	1	Yes	1	1
141B	8	Yes	Yes	No	0	No	0	1
142B	5	No	Yes	No	0	No	0	1
148D	10.4	Yes	Yes	Yes	1	Yes	1	0
149B	6.8	No	Yes	No	0	No	0	1
150B	8.2	Yes	Yes	No	0	No	0	1
151B	9.9	Yes	Yes	No	0	No	0	1
152B	10.9	Yes	Yes	Yes	1	Yes	1	1
153B	8.1	Yes	Yes	No	0	No	0	1
154B	9.6	Yes	Yes	No	0	No	0	1
155B	7.3	Yes	Yes	No	0	No	0	1
156B	10.8	Yes	Yes	Yes	1	Yes	1	1
157B	8.9	Yes	Yes	No	0	No	0	1
158B	11.9	Yes	Yes	Yes	1	Yes	1	1
159B	10	Yes	Yes	No	0	No	0	1
160B	2.6	No	No	No	0	No	0	0
161B	4.9	No	No	No	0	No	0	0
162B	7.9	Yes	Yes	Yes	1	Yes	1	1
163B	10.5	Yes	Yes	Yes	1	Yes	1	1
164B	11.5	Yes	Yes	Yes	1	Yes	1	1
165B	10.4	Yes	Yes	Yes	1	Yes	1	1
166B	7.5	Yes	Yes	No	0	No	0	1
167B	3.1	No	No	No	0	No	0	0
168B	3.6	No	No	No	0	No	0	0
169B	6.9	No	Yes	No	0	No	0	1
170B	3	No	No	No	0	No	0	0
171B	2.9	No	No	No	0	No	0	0
172B	2.3	No	No	No	0	No	0	0
663B	6.7	No	Yes	No	0	No	0	1

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
71B	3.5	No	No	No	0	No	0	0
72B	2.7	No	No	No	0	No	0	0
73B	2.1	No	No	No	0	No	0	0
74B	0.8	No	No	No	0	No	0	0
94B	0.8	No	No	No	0	No	0	0
95B	1	No	No	No	0	No	0	0
96B	2.9	No	No	No	0	No	0	0
97B	3.2	No	No	No	0	No	0	0
98B	4.9	No	No	No	0	No	0	0
99B	12.3	Yes	Yes	Yes	1	Yes	1	0
100B	9.7	Yes	Yes	No	0	No	0	1
101B	9.3	Yes	Yes	Yes	1	Yes	1	1
102B	7.3	Yes	Yes	No	0	No	0	1
103B	6.9	No	Yes	No	0	No	0	1
104B	6.2	No	Yes	No	0	No	0	1
105B	7.8	Yes	Yes	Yes	1	Yes	1	1
106B	7.2	Yes	Yes	No	0	No	0	1
107B	7.7	Yes	Yes	Yes	1	Yes	1	1
108B	7	Yes	Yes	No	0	No	0	1
109B	6.9	No	Yes	No	0	No	0	1
110B	7.9	Yes	Yes	No	0	No	0	1
111B	9.1	Yes	Yes	Yes	1	Yes	1	1
112B	6.8	No	Yes	No	0	No	0	1
113B	11.9	Yes	Yes	Yes	1	Yes	1	1
114B	10.9	Yes	Yes	No	0	No	0	1
115B	9.4	Yes	Yes	No	0	No	0	1
116B	8.6	Yes	Yes	No	0	No	0	1
133B	6.1	No	Yes	No	0	Yes	1	1
134B	12.5	Yes	Yes	Yes	1	Yes	1	1
135B	13.7	Yes	Yes	Yes	1	Yes	1	1
136B	13.2	Yes	Yes	Yes	1	Yes	1	1
137B	13.5	Yes	Yes	Yes	1	Yes	1	1
138B	13.6	Yes	Yes	Yes	1	Yes	1	1
139B	14.7	Yes	Yes	Yes	1	Yes	1	1
140B	11.5	Yes	Yes	Yes	1	Yes	1	1
141B	8.8	Yes	Yes	No	0	No	0	1
142B	6.3	No	Yes	No	0	No	0	1
148D	11.6	Yes	Yes	Yes	1	Yes	1	0
149B	7.8	Yes	Yes	No	0	No	0	1
150B	9.1	Yes	Yes	No	0	No	0	1
151B	10.8	Yes	Yes	No	0	No	0	1
152B	11.7	Yes	Yes	Yes	1	Yes	1	1
153B	9	Yes	Yes	No	0	No	0	1
154B	10.5	Yes	Yes	No	0	No	0	1
155B	8.2	Yes	Yes	No	0	No	0	1
156B	11.7	Yes	Yes	Yes	1	Yes	1	1
157B	9.8	Yes	Yes	No	0	No	0	1
158B	12.7	Yes	Yes	Yes	1	Yes	1	1
159B	10.9	Yes	Yes	No	0	No	0	1
160B	2.9	No	No	No	0	No	0	0
161B	5	No	Yes	No	0	Yes	1	1
162B	8.3	Yes	Yes	Yes	1	Yes	1	1
163B	11.2	Yes	Yes	Yes	1	Yes	1	1
164B	12.4	Yes	Yes	Yes	1	Yes	1	1
165B	11.4	Yes	Yes	Yes	1	Yes	1	1
166B	8.6	Yes	Yes	No	0	No	0	1
167B	5	No	Yes	No	0	No	0	1
168B	4.2	No	No	No	0	No	0	0
169B	7.9	Yes	Yes	No	0	No	0	1
170B	4.6	No	No	No	0	No	0	0
171B	4.3	No	No	No	0	No	0	0
172B	3.6	No	No	No	0	No	0	0
663B	7.6	Yes	Yes	No	0	No	0	1

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
71B	3.9	No	No	No	0	No	0	0
72B	3.1	No	No	No	0	No	0	0
73B	2.2	No	No	No	0	No	0	0
74B	0.8	No	No	No	0	No	0	0
94B	0.9	No	No	No	0	No	0	0
95B	1.1	No	No	No	0	No	0	0
96B	3.3	No	No	No	0	No	0	0
97B	3.7	No	No	No	0	No	0	0
98B	5.8	No	Yes	No	0	No	0	0
99B	12.8	Yes	Yes	Yes	1	Yes	1	0
100B	10.3	Yes	Yes	No	0	No	0	0
101B	10.1	Yes	Yes	Yes	1	Yes	1	1
102B	7.8	Yes	Yes	No	0	No	0	1
103B	7.2	Yes	Yes	No	0	No	0	1
104B	6.9	No	Yes	No	0	No	0	1
105B	8.5	Yes	Yes	Yes	1	Yes	1	1
106B	7.8	Yes	Yes	No	0	No	0	1
107B	8.4	Yes	Yes	Yes	1	Yes	1	1
108B	7.5	Yes	Yes	No	0	No	0	1
109B	7.5	Yes	Yes	No	0	No	0	1
110B	8.6	Yes	Yes	No	0	No	0	1
111B	9.8	Yes	Yes	Yes	1	Yes	1	1
112B	7.1	Yes	Yes	No	0	No	0	1
113B	12.4	Yes	Yes	Yes	1	Yes	1	1
114B	11.3	Yes	Yes	No	0	No	0	1
115B	9.8	Yes	Yes	No	0	No	0	1
116B	9	Yes	Yes	No	0	No	0	1
133B	6.1	No	Yes	No	0	Yes	1	1
134B	12.8	Yes	Yes	Yes	1	Yes	1	1
135B	14.2	Yes	Yes	Yes	1	Yes	1	1
136B	13.7	Yes	Yes	Yes	1	Yes	1	1
137B	14.1	Yes	Yes	Yes	1	Yes	1	1
138B	14.4	Yes	Yes	Yes	1	Yes	1	1
139B	15.5	Yes	Yes	Yes	1	Yes	1	1
140B	12.7	Yes	Yes	Yes	1	Yes	1	1
141B	9.3	Yes	Yes	No	0	No	0	1
142B	7	Yes	Yes	No	0	No	0	1
148D	12.2	Yes	Yes	Yes	1	Yes	1	0
149B	8.3	Yes	Yes	No	0	No	0	1
150B	9.6	Yes	Yes	No	0	No	0	1
151B	11.3	Yes	Yes	No	0	No	0	1
152B	12.2	Yes	Yes	Yes	1	Yes	1	1
153B	9.3	Yes	Yes	No	0	No	0	1
154B	10.9	Yes	Yes	No	0	No	0	1
155B	8.6	Yes	Yes	No	0	No	0	1
156B	12.1	Yes	Yes	Yes	1	Yes	1	1
157B	10.1	Yes	Yes	No	0	No	0	1
158B	13.1	Yes	Yes	Yes	1	Yes	1	1
159B	11.2	Yes	Yes	No	0	No	0	1
160B	3	No	No	No	0	No	0	0
161B	5.1	No	Yes	No	0	Yes	1	1
162B	8.7	Yes	Yes	Yes	1	Yes	1	1
163B	11.9	Yes	Yes	Yes	1	Yes	1	1
164B	13.2	Yes	Yes	Yes	1	Yes	1	1
165B	12.1	Yes	Yes	Yes	1	Yes	1	1
166B	9.5	Yes	Yes	No	0	No	0	1
167B	6.6	No	Yes	No	0	No	0	1
168B	4.4	No	No	No	0	No	0	0
169B	8.7	Yes	Yes	No	0	No	0	1
170B	5	No	Yes	No	0	No	0	1
171B	5.4	No	Yes	No	0	No	0	1
172B	5.6	No	Yes	No	0	No	0	1
663B	7.9	Yes	Yes	No	0	No	0	1

	10-ft Wall	12-ft Wall	14-ft Wall	16-ft Wall	18-ft Wall	20-ft Wall
Feasibility Factors:						
# of First-Row 5 dBA Reduction:	14	18	20	22	23	23
% of First-Row 5 dBA Reduction:	60.9%	78.3%	87.0%	95.7%	100.0%	100.0%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Reasonableness Factors:						
# of First-Row Design Goal:	8	14	18	20	21	21
% of First-Row Design Goal:	34.8%	60.9%	78.3%	87.0%	91.3%	91.3%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
# of Benefited (Category B):	14	18	31	45	47	49
Cost of Noise Wall (Length x Height x $20/sq ft):	$837,400.00	$1,004,880.00	$1,172,360.00	$1,339,840.00	$1,507,320.00	$1,674,800.00
Cost of any other items critical to safety (snow storage on overpass):	$104,675.00	$104,675.00	$104,675.00	$104,675.00	$104,675.00	$104,675.00
Anticipated Cost of Noise Abatement:	$942,075.00	$1,109,555.00	$1,277,035.00	$1,444,515.00	$1,611,995.00	$1,779,475.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$420,000.00	$540,000.00	$930,000.00	$1,350,000.00	$1,410,000.00	$1,470,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$117,000.00	$117,000.00	$117,000.00	$117,000.00	$117,000.00
Allowable Cost:	$420,000.00	$657,000.00	$1,047,000.00	$1,467,000.00	$1,527,000.00	$1,587,000.00
Difference between Anticipated Cost and Allowable Cost:	-$522,075.00	-$452,555.00	-$230,035.00	$22,485.00	-$84,995.00	-$192,475.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**Yes**	**No**	**No**
Feasible and Reasonable:	**No**	**No**	**No**	**Yes**	**No**	**No**

Wall 4

Total Wall Length	3435	ft
Length of Activity Category C/E Land Use:	97	ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	21	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
1B	1	B	Yes	1	2.5	No	No	No	0	No	0	0
4C	1	C	Yes	1	1.6	No	No	No	0	No	0	0
8C	1	C	0	1	No	No	No	No	0	No	0	0
13B	1	B	Yes	1	4.5	No	No	No	0	No	0	0
14B	1	B	Yes	1	5.5	No	Yes	No	0	Yes	1	1
15B	1	B	Yes	1	6	No	Yes	No	0	Yes	1	1
16B	1	B	0	1.2	No	No	No	No	0	No	0	0
17B	1	B	0	0.8	No	No	No	No	0	No	0	0
18B	1	B	0	0.9	No	No	No	No	0	No	0	0
19B	1	B	0	1.2	No	No	No	No	0	No	0	0
20B	1	B	Yes	1	2.3	No	No	No	0	No	0	0
21B	1	B	0	1.2	No	No	No	No	0	No	0	0
22B	1	B	0	0.8	No	No	No	No	0	No	0	0
23B	1	B	0	0.8	No	No	No	No	0	No	0	0
24B	1	B	Yes	1	1.6	No	No	No	0	No	0	0
25B	1	B	0	1.2	No	No	No	No	0	No	0	0
26B	1	B	0	0.9	No	No	No	No	0	No	0	0
27B	1	B	Yes	1	3	No	No	No	0	No	0	0
28B	1	B	0	1.4	No	No	No	No	0	No	0	0
29B	1	B	0	0.7	No	No	No	No	0	No	0	0
30B	1	B	0	2.7	No	No	No	No	0	No	0	0
31B	1	B	0	3.2	No	No	No	No	0	No	0	0
32B	1	B	Yes	1	0.6	No	No	No	0	No	0	0
33B	1	B	Yes	1	1.5	No	No	No	0	No	0	0
34B	1	B	0	2.1	No	No	No	No	0	No	0	0
40B	1	B	0	4.9	No	No	No	No	0	No	0	0
41B	1	B	0	5.6	No	Yes	No	No	0	No	0	1
42B	1	B	Yes	1	4.4	No	No	No	0	No	0	0
43B	1	B	Yes	1	4	No	No	No	0	No	0	0
44B	1	B	0	1.6	No	No	No	No	0	No	0	0
45B	1	B	0	2.8	No	No	No	No	0	No	0	0
46B	1	B	0	3.1	No	No	No	No	0	No	0	0
47B	1	B	0	3.2	No	No	No	No	0	No	0	0
48B	1	B	0	3.6	No	No	No	No	0	No	0	0
49B	1	B	0	5.8	No	Yes	No	No	0	No	0	1
50B	1	B	0	5.3	No	Yes	No	No	0	No	0	1
51B	1	B	Yes	1	5.8	No	Yes	No	0	Yes	1	1
52B	1	B	0	4.8	No	No	No	No	0	No	0	0
53B	1	B	Yes	1	6	No	Yes	No	0	Yes	1	1
54B	1	B	0	4.4	No	No	No	No	0	No	0	0
55B	1	B	Yes	1	6.4	No	Yes	No	0	Yes	1	1
56B	1	B	0	6.9	No	Yes	No	No	0	No	0	1
57B	1	B	Yes	1	7.1	Yes	Yes	Yes	1	Yes	1	1
58B	1	B	Yes	1	7.6	Yes	Yes	Yes	1	Yes	1	1
59B	1	B	Yes	1	6.6	No	Yes	No	0	Yes	1	1
60B	1	B	Yes	1	4.4	No	No	No	0	No	0	0
61B	1	B	Yes	1	4.7	No	No	No	0	No	0	0
62B	1	B	0	3.7	No	No	No	No	0	No	0	0
63B	1	B	0	2.4	No	No	No	No	0	No	0	0
64B	1	B	0	2.9	No	No	No	No	0	No	0	0
65B	1	B	Yes	1	3.9	No	No	No	0	No	0	0
66B	1	B	0	2.6	No	No	No	No	0	No	0	0
67B	1	B	0	2.1	No	No	No	No	0	No	0	0
68B	1	B	0	1.4	No	No	No	No	0	No	0	0
69B	1	B	0	2.4	No	No	No	No	0	No	0	0
70B	1	B	0	3.1	No	No	No	No	0	No	0	0

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
1B	5.2	No	Yes	No	0	Yes	1	1
4C	1.8	No	No	No	0	No	0	0
8C	1.9	No	No	No	0	No	0	0
13B	5.7	No	Yes	No	0	Yes	1	1
14B	8.8	Yes	Yes	Yes	1	Yes	1	1
15B	8.7	Yes	Yes	Yes	1	Yes	1	1
16B	2.2	No	No	No	0	No	0	0
17B	1.4	No	No	No	0	No	0	0
18B	1.6	No	No	No	0	No	0	0
19B	2.1	No	No	No	0	No	0	0
20B	3.5	No	No	No	0	No	0	0
21B	1.9	No	No	No	0	No	0	0
22B	1.5	No	No	No	0	No	0	0
23B	1.6	No	No	No	0	No	0	0
24B	2.5	No	No	No	0	No	0	0
25B	1.8	No	No	No	0	No	0	0
26B	1.4	No	No	No	0	No	0	0
27B	5	No	Yes	No	0	Yes	1	1
28B	2.2	No	No	No	0	No	0	0
29B	1.5	No	No	No	0	No	0	0
30B	4	No	No	No	0	No	0	0
31B	4.6	No	No	No	0	No	0	0
32B	1.1	No	No	No	0	No	0	0
33B	1.5	No	No	No	0	No	0	0
34B	2.2	No	No	No	0	No	0	0
40B	5.2	No	Yes	No	0	No	0	1
41B	6.1	No	Yes	No	0	No	0	1
42B	4.8	No	No	No	0	No	0	0
43B	4.4	No	No	No	0	No	0	0
44B	1.7	No	No	No	0	No	0	0
45B	2.9	No	No	No	0	No	0	0
46B	3.4	No	No	No	0	No	0	0
47B	3.5	No	No	No	0	No	0	0
48B	4.2	No	No	No	0	No	0	0
49B	6.5	No	Yes	No	0	No	0	1
50B	6	No	Yes	No	0	No	0	1
51B	6.6	No	Yes	No	0	Yes	1	1
52B	5.8	No	Yes	No	0	No	0	1
53B	6.8	No	Yes	No	0	Yes	1	1
54B	5.5	No	Yes	No	0	No	0	1
55B	7.3	Yes	Yes	Yes	1	Yes	1	1
56B	7.7	Yes	Yes	No	0	No	0	1
57B	7.9	Yes	Yes	Yes	1	Yes	1	1
58B	8.5	Yes	Yes	Yes	1	Yes	1	1
59B	7.5	Yes	Yes	Yes	1	Yes	1	1
60B	5.5	No	Yes	No	0	Yes	1	1
61B	5.8	No	Yes	No	0	Yes	1	1
62B	5.2	No	Yes	No	0	No	0	1
63B	3.3	No	No	No	0	No	0	0
64B	3.9	No	No	No	0	No	0	0
65B	5	No	Yes	No	0	Yes	1	1
66B	4	No	No	No	0	No	0	0
67B	3.2	No	No	No	0	No	0	0
68B	2.6	No	No	No	0	No	0	0
69B	3.7	No	No	No	0	No	0	0
70B	4.1	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
1B	6.2	No	Yes	No	0	Yes	1	1
4C	1.9	No	No	No	0	No	0	0
8C	2.2	No	No	No	0	No	0	0
13B	9.2	Yes	Yes	Yes	1	Yes	1	1
14B	10.9	Yes	Yes	Yes	1	Yes	1	1
15B	10.8	Yes	Yes	Yes	1	Yes	1	1
16B	3.1	No	No	No	0	No	0	0
17B	2.5	No	No	No	0	No	0	0
18B	3	No	No	No	0	No	0	0
19B	3	No	No	No	0	No	0	0
20B	4.7	No	No	No	0	No	0	0
21B	2.9	No	No	No	0	No	0	0
22B	2.2	No	No	No	0	No	0	0
23B	2.2	No	No	No	0	No	0	0
24B	3.6	No	No	No	0	No	0	0
25B	3.2	No	No	No	0	No	0	0
26B	2.5	No	No	No	0	No	0	0
27B	6.9	No	Yes	No	0	Yes	1	1
28B	4.2	No	No	No	0	No	0	0
29B	2.6	No	No	No	0	No	0	0
30B	6.8	No	Yes	No	0	No	0	1
31B	7.6	Yes	Yes	No	0	No	0	1
32B	2	No	No	No	0	No	0	0
33B	1.6	No	No	No	0	No	0	0
34B	2.3	No	No	No	0	No	0	0
40B	5.5	No	Yes	No	0	No	0	1
41B	6.5	No	Yes	No	0	No	0	1
42B	5.1	No	Yes	No	0	Yes	1	1
43B	4.7	No	No	No	0	No	0	0
44B	1.8	No	No	No	0	No	0	0
45B	3.1	No	No	No	0	No	0	0
46B	3.6	No	No	No	0	No	0	0
47B	3.8	No	No	No	0	No	0	0
48B	4.7	No	No	No	0	No	0	0
49B	7.2	Yes	Yes	No	0	No	0	1
50B	6.7	No	Yes	No	0	No	0	1
51B	7.3	Yes	Yes	Yes	1	Yes	1	1
52B	6.6	No	4.8	Yes	No	0	No	1
53B	7.5	Yes	Yes	Yes	1	Yes	1	1
54B	6.3	No	Yes	No	0	No	0	1
55B	8	Yes	6.4	Yes	Yes	1	Yes	1
56B	8.5	Yes	Yes	No	0	No	0	1
57B	8.7	Yes	Yes	Yes	1	Yes	1	1
58B	9.4	Yes	7.6	Yes	Yes	1	Yes	1
59B	8.2	Yes	Yes	Yes	1	Yes	1	1
60B	6.4	No	Yes	No	0	Yes	1	1
61B	6.8	No	Yes	No	0	Yes	1	1
62B	6.2	No	Yes	No	0	No	0	1
63B	4.4	No	No	No	0	No	0	0
64B	5	No	2.9	Yes	No	0	No	0
65B	6	No	Yes	No	0	Yes	1	1
66B	5	No	Yes	No	0	No	0	1
67B	4.2	No	No	No	0	No	0	0
68B	3.4	No	No	No	0	No	0	0
69B	4.9	No	No	No	0	No	0	0
70B	5	No	Yes	No	0	No	0	1

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
1B	7.2	Yes	Yes	Yes	1	Yes	1	1
4C	2	No	No	No	0	No	0	0
8C	2.5	No	No	No	0	No	0	0
13B	10.8	Yes	Yes	Yes	1	Yes	1	1
14B	12.2	Yes	Yes	Yes	1	Yes	1	1
15B	11.8	Yes	Yes	Yes	1	Yes	1	1
16B	5.5	No	Yes	No	0	No	0	1
17B	5.2	No	Yes	No	0	No	0	1
18B	5.9	No	Yes	No	0	No	0	1
19B	5.3	No	Yes	No	0	No	0	1
20B	8	Yes	Yes	Yes	1	Yes	1	1
21B	4.6	No	No	No	0	No	0	0
22B	3.5	No	No	No	0	No	0	0
23B	3.2	No	No	No	0	No	0	0
24B	5.4	No	Yes	No	0	Yes	1	1
25B	4.8	No	No	No	0	No	0	0
26B	3.9	No	No	No	0	No	0	0
27B	9	Yes	Yes	Yes	1	Yes	1	1
28B	6.1	No	Yes	No	0	No	0	1
29B	5	No	Yes	No	0	No	0	1
30B	8.7	Yes	Yes	No	0	No	0	1
31B	9.4	Yes	Yes	No	0	No	0	1
32B	3.4	No	No	No	0	No	0	0
33B	1.7	No	No	No	0	No	0	0
34B	2.3	No	No	No	0	No	0	0
40B	5.6	No	Yes	No	0	No	0	1
41B	6.9	No	Yes	No	0	No	0	1
42B	5.4	No	Yes	No	0	Yes	1	1
43B	5	No	Yes	No	0	Yes	1	1
44B	1.9	No	No	No	0	No	0	0
45B	3.2	No	No	No	0	No	0	0
46B	3.8	No	No	No	0	No	0	0
47B	4	No	No	No	0	No	0	0
48B	5.1	No	Yes	No	0	No	0	0
49B	7.7	Yes	Yes	No	0	No	0	1
50B	7.2	Yes	Yes	No	0	No	0	1
51B	7.9	Yes	Yes	Yes	1	Yes	1	1
52B	7.2	Yes	Yes	No	0	No	0	1
53B	8.1	Yes	Yes	Yes	1	Yes	1	1
54B	7	Yes	Yes	No	0	No	0	1
55B	8.6	Yes	Yes	Yes	1	Yes	1	1
56B	9	Yes	Yes	No	0	No	0	1
57B	9.3	Yes	Yes	Yes	1	Yes	1	1
58B	10	Yes	Yes	Yes	1	Yes	1	1
59B	8.8	Yes	Yes	Yes	1	Yes	1	1
60B	7.2	Yes	Yes	Yes	1	Yes	1	1
61B	7.7	Yes	Yes	Yes	1	Yes	1	1
62B	7	Yes	Yes	No	0	No	0	1
63B	6.4	No	Yes	No	0	No	0	1
64B	6.6	No	Yes	No	0	No	0	1
65B	7.3	Yes	Yes	Yes	1	Yes	1	1
66B	6	No	Yes	No	0	No	0	1
67B	5.6	No	Yes	No	0	No	0	1
68B	4.5	No	No	No	0	No	0	0
69B	5.4	No	Yes	No	0	No	0	1
70B	5.4	No	Yes	No	0	No	0	1

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
1B	7.6	Yes	Yes	Yes	1	Yes	1	1
4C	2.1	No	No	No	0	No	0	0
8C	2.7	No	No	No	0	No	0	0
13B	12	Yes	Yes	Yes	1	Yes	1	1
14B	13.1	Yes	Yes	Yes	1	Yes	1	1
15B	12.6	Yes	Yes	Yes	1	Yes	1	1
16B	6.3	No	Yes	No	0	No	0	1
17B	6.4	No	Yes	No	0	No	0	1
18B	7.2	Yes	Yes	No	0	No	0	1
19B	6.1	No	Yes	No	0	No	0	1
20B	9.8	Yes	Yes	Yes	1	Yes	1	1
21B	7.4	Yes	Yes	No	0	No	0	1
22B	6.2	No	Yes	No	0	No	0	1
23B	5.7	No	Yes	No	0	No	0	1
24B	8.8	Yes	Yes	Yes	1	Yes	1	1
25B	7.6	Yes	Yes	No	0	No	0	1
26B	6.7	No	Yes	No	0	No	0	1
27B	10.1	Yes	Yes	Yes	1	Yes	1	1
28B	7.6	Yes	Yes	No	0	No	0	1
29B	6.1	No	Yes	No	0	No	0	1
30B	9.7	Yes	Yes	No	0	No	0	1
31B	10.3	Yes	Yes	No	0	No	0	1
32B	6.1	No	Yes	No	0	Yes	1	1
33B	1.7	No	No	No	0	No	0	0
34B	2.3	No	No	No	0	No	0	0
40B	5.8	No	Yes	No	0	No	0	1
41B	7.1	Yes	Yes	No	0	No	0	1
42B	5.6	No	Yes	No	0	Yes	1	1
43B	5.2	No	Yes	No	0	Yes	1	1
44B	1.9	No	No	No	0	No	0	0
45B	3.3	No	No	No	0	No	0	0
46B	3.9	No	No	No	0	No	0	0
47B	4.2	No	No	No	0	No	0	0
48B	5.4	No	Yes	No	0	No	0	1
49B	8.2	Yes	Yes	No	0	No	0	1
50B	7.6	Yes	Yes	No	0	No	0	1
51B	8.4	Yes	Yes	Yes	1	Yes	1	1
52B	7.7	Yes	Yes	No	0	No	0	1
53B	8.6	Yes	Yes	Yes	1	Yes	1	1
54B	7.6	Yes	Yes	No	0	No	0	1
55B	9.2	Yes	Yes	Yes	1	Yes	1	1
56B	9.6	Yes	Yes	No	0	No	0	1
57B	9.9	Yes	Yes	Yes	1	Yes	1	1
58B	10.7	Yes	Yes	Yes	1	Yes	1	1
59B	9.5	Yes	Yes	Yes	1	Yes	1	1
60B	8	Yes	Yes	Yes	1	Yes	1	1
61B	8.5	Yes	Yes	Yes	1	Yes	1	1
62B	8	Yes	Yes	No	0	No	0	1
63B	8.3	Yes	Yes	No	0	No	0	1
64B	8.3	Yes	Yes	No	0	No	0	1
65B	8.6	Yes	Yes	Yes	1	Yes	1	1
66B	7.6	Yes	Yes	No	0	No	0	1
67B	7.9	Yes	Yes	No	0	No	0	1
68B	7.2	Yes	Yes	No	0	No	0	1
69B	5.3	No	Yes	No	0	No	0	1
70B	5	No	Yes	No	0	No	0	1

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
1B	7.9	Yes	Yes	Yes	1	Yes	1	1
4C	2.1	No	No	No	0	No	0	0
8C	2.7	No	No	No	0	No	0	0
13B	12.8	Yes	Yes	Yes	1	Yes	1	1
14B	13.7	Yes	Yes	Yes	1	Yes	1	1
15B	13.2	Yes	Yes	Yes	1	Yes	1	1
16B	6.7	No	Yes	No	0	No	0	1
17B	7	Yes	Yes	No	0	No	0	1
18B	7.9	Yes	Yes	No	0	No	0	1
19B	6.6	No	Yes	No	0	No	0	1
20B	10.9	Yes	Yes	Yes	1	Yes	1	1
21B	8.4	Yes	Yes	No	0	No	0	1
22B	7.2	Yes	Yes	No	0	No	0	1
23B	6.6	No	Yes	No	0	No	0	1
24B	10	Yes	Yes	Yes	1	Yes	1	1
25B	8.6	Yes	Yes	No	0	No	0	1
26B	7.6	Yes	Yes	No	0	No	0	1
27B	10.9	Yes	Yes	Yes	1	Yes	1	1
28B	8.4	Yes	Yes	No	0	No	0	1
29B	6.6	No	Yes	No	0	No	0	1
30B	10.6	Yes	Yes	No	0	No	0	1
31B	11.1	Yes	Yes	No	0	No	0	1
32B	7	Yes	Yes	Yes	1	Yes	1	1
33B	1.7	No	No	No	0	No	0	0
34B	2.4	No	No	No	0	No	0	0
40B	6	No	Yes	No	0	No	0	1
41B	7.3	Yes	Yes	No	0	No	0	1
42B	5.8	No	Yes	No	0	Yes	1	1
43B	5.3	No	Yes	No	0	Yes	1	1
44B	1.9	No	No	No	0	No	0	0
45B	3.4	No	No	No	0	No	0	0
46B	4	No	No	No	0	No	0	0
47B	4.3	No	No	No	0	No	0	0
48B	5.6	No	Yes	No	0	No	0	1
49B	8.7	Yes	Yes	No	0	No	0	1
50B	8.1	Yes	Yes	No	0	No	0	1
51B	9	Yes	Yes	Yes	1	Yes	1	1
52B	8.1	Yes	Yes	No	0	No	0	1
53B	9.2	Yes	Yes	Yes	1	Yes	1	1
54B	8.1	Yes	Yes	No	0	No	0	1
55B	9.8	Yes	Yes	Yes	1	Yes	1	1
56B	10.2	Yes	Yes	No	0	No	0	1
57B	10.5	Yes	Yes	Yes	1	Yes	1	1
58B	11.1	Yes	Yes	Yes	1	Yes	1	1
59B	10.2	Yes	Yes	Yes	1	Yes	1	1
60B	8.5	Yes	Yes	Yes	1	Yes	1	1
61B	9.1	Yes	Yes	Yes	1	Yes	1	1
62B	8.6	Yes	Yes	No	0	No	0	1
63B	9.2	Yes	Yes	No	0	No	0	1
64B	9.1	Yes	Yes	No	0	No	0	1
65B	9.2	Yes	Yes	Yes	1	Yes	1	1
66B	8.2	Yes	Yes	No	0	No	0	1
67B	8.8	Yes	Yes	No	0	No	0	1
68B	8.1	Yes	Yes	No	0	No	0	1
69B	5.3	No	Yes	No	0	No	0	1
70B	5	No	Yes	No	0	No	0	1

Feasibility Factors:					
# of First-Row 5 dBA Reduction:	8	14	15	18	19
% of First-Row 5 dBA Reduction:	38.1%	66.7%	71.4%	85.7%	90.5%	90.5%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Reasonableness Factors:					
# of First-Row Design Goal:	2	6	9	15	16	17
% of First-Row Design Goal:	9.5%	28.6%	42.9%	71.4%	76.2%	81.0%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
# of Benefited (Category B):	12	22	28	41	48	48
Cost of Noise Wall ((Length x Height x $20/sq ft):	$687,000.00	$824,400.00	$961,800.00	$1,099,200.00	$1,236,600.00	$1,374,000.00
Cost of any other items critical to safety (snow storage on overpass):	$85,875.00	$85,875.00	$85,875.00	$85,875.00	$85,875.00	$85,875.00
Anticipated Cost of Noise Abatement:	$772,875.00	$910,275.00	$1,047,675.00	$1,185,075.00	$1,322,475.00	$1,459,875.00
Activity Category B Allowable Cost ($30,000 per benefited receptor):	$360,000.00	$660,000.00	$840,000.00	$1,230,000.00	$1,440,000.00	$1,440,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$360,000.00	$660,000.00	$840,000.00	$1,230,000.00	$1,440,000.00	$1,440,000.00
Difference between Anticipated Cost and Allowable Cost:	-$412,875.00	-$250,275.00	-$207,675.00	$44,925.00	$117,525.00	-$19,875.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**Yes**	**Yes**	**No**
Feasible and Reasonable:	**No**	**No**	**No**	**Yes**	**Yes**	**No**

Wall 5

Total Wall Length	900	ft
Length of Activity Category C/E Land Use:		ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	2	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
175B	1	B	Yes	1	3.6	No	No	No	0	No	0	0
176B	1	B	Yes	1	4.2	No	No	No	0	No	0	0
177B	1	B		0	2.8	No	No	No	0	No	0	0
178B	1	B		0	2.5	No	No	No	0	No	0	0
179B	1	B		0	2.2	No	No	No	0	No	0	0

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
175B	4	No	No	No	0	No	0	0
176B	4.8	No	No	No	0	No	0	0
177B	3.1	No	No	No	0	No	0	0
178B	2.9	No	No	No	0	No	0	0
179B	2.5	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
175B	4.4	No	No	No	0	No	0	0
176B	5.4	No	Yes	No	0	Yes	1	1
177B	3.4	No	No	No	0	No	0	0
178B	3.1	No	No	No	0	No	0	0
179B	2.7	No	No	No	0	No	0	0

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
175B	4.7	No	No	No	0	No	0	0
176B	5.9	No	Yes	No	0	Yes	1	1
177B	3.6	No	No	No	0	No	0	0
178B	3.4	No	No	No	0	No	0	0
179B	2.9	No	No	No	0	No	0	0

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
175B	5	No	Yes	No	0	Yes	1	1
176B	6.4	No	Yes	No	0	Yes	1	1
177B	3.8	No	No	No	0	No	0	0
178B	3.6	No	No	No	0	No	0	0
179B	3	No	No	No	0	No	0	0

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
175B	5.2	No	Yes	No	0	Yes	1	1
176B	6.8	No	Yes	No	0	Yes	1	1
177B	3.9	No	No	No	0	No	0	0
178B	3.8	No	No	No	0	No	0	0
179B	3.2	No	No	No	0	No	0	0

Feasibility Factors:

	12-ft Wall	14-ft Wall	16-ft Wall	18-ft Wall	20-ft Wall
# of First-Row 5 dBA Reduction:	0	1	1	2	2
% of First-Row 5 dBA Reduction:	0.0%	50.0%	50.0%	100.0%	100.0%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**Yes**	**Yes**	**Yes**	**Yes**

Reasonableness Factors:

	12-ft Wall	14-ft Wall	16-ft Wall	18-ft Wall	20-ft Wall
# of First-Row Design Goal:	0	0	0	0	0
% of First-Row Design Goal:	0.0%	0.0%	0.0%	0.0%	0.0%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**No**	**No**	**No**
# of Benefited (Category B):	0	1	1	2	2
Cost of Noise Wall (Length x Height x $20/sq ft):	$180,000.00	$252,000.00	$288,000.00	$324,000.00	$360,000.00
Cost of any other items critical to safety (snow storage on overpass):	$22,500.00	$22,500.00	$22,500.00	$22,500.00	$22,500.00
Anticipated Cost of Noise Abatement:	$202,500.00	$274,500.00	$310,500.00	$346,500.00	$382,500.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$0.00	$30,000.00	$30,000.00	$60,000.00	$60,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$0.00	$30,000.00	$30,000.00	$60,000.00	$60,000.00
Difference between Anticipated Cost and Allowable Cost:	-$202,500.00	-$244,500.00	-$280,500.00	-$286,500.00	-$322,500.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**No**	**No**
Feasible and Reasonable:	**No**	**No**	**No**	**No**	**No**

Wall 6

Total Wall Length	1082	ft
Length of Activity Category C/E Land Use:		ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	4	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
591B	1	B	Yes	1	1.9	No	No	No	0	No	0	0
592B	1	B		0	1.1	No	No	No	0	No	0	0
593B	1	B	Yes	1	1.1	No	No	No	0	No	0	0
594B	1	B	Yes	1	1	No	No	No	0	No	0	0
595B	1	B	Yes	1	1.9	No	No	No	0	No	0	0

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
591B	2.1	No	No	No	0	No	0	0
592B	1.3	No	No	No	0	No	0	0
593B	1.3	No	No	No	0	No	0	0
594B	1.1	No	No	No	0	No	0	0
595B	2	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
591B	2.3	No	No	No	0	No	0	0
592B	1.4	No	No	No	0	No	0	0
593B	1.5	No	No	No	0	No	0	0
594B	1.3	No	No	No	0	No	0	0
595B	2.1	No	No	No	0	No	0	0

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
591B	2.5	No	No	No	0	No	0	0
592B	1.6	No	No	No	0	No	0	0
593B	1.7	No	No	No	0	No	0	0
594B	1.4	No	No	No	0	No	0	0
595B	2.2	No	No	No	0	No	0	0

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
591B	2.7	No	No	No	0	No	0	0
592B	1.7	No	No	No	0	No	0	0
593B	1.8	No	No	No	0	No	0	0
594B	1.5	No	No	No	0	No	0	0
595B	2.3	No	No	No	0	No	0	0

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
591B	2.8	No	No	No	0	No	0	0
592B	1.9	No	No	No	0	No	0	0
593B	2	No	No	No	0	No	0	0
594B	1.7	No	No	No	0	No	0	0
595B	2.3	No	No	No	0	No	0	0

Feasibility Factors:

	12-ft Wall	14-ft Wall	16-ft Wall	18-ft Wall	20-ft Wall
# of First-Row 5 dBA Reduction:	0	0	0	0	0
% of First-Row 5 dBA Reduction:	0.0%	0.0%	0.0%	0.0%	0.0%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**No**	**No**	**No**	**No**

Reasonableness Factors:

	12-ft Wall	14-ft Wall	16-ft Wall	18-ft Wall	20-ft Wall
# of First-Row Design Goal:	0	0	0	0	0
% of First-Row Design Goal:	0.0%	0.0%	0.0%	0.0%	0.0%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**No**	**No**	**No**
# of Benefited (Category B):	0	0	0	0	0
Cost of Noise Wall (Length x Height x $20/sq ft):	$216,400.00	$259,680.00	$302,960.00	$346,240.00	$389,520.00	$432,800.00
Cost of any other items critical to safety (snow storage on overpass):	$27,050.00	$27,050.00	$27,050.00	$27,050.00	$27,050.00	$27,050.00
Anticipated Cost of Noise Abatement:	$243,450.00	$286,730.00	$330,010.00	$373,290.00	$416,570.00	$459,850.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Difference between Anticipated Cost and Allowable Cost:	-$243,450.00	-$286,730.00	-$330,010.00	-$373,290.00	-$416,570.00	-$459,850.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**No**	**No**	**No**
Feasible and Reasonable:	**No**	**No**	**No**	**No**	**No**	**No**

Wall 7

Total Wall Length	2963	ft
Length of Activity Category C/E Land Use:		ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	11	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
173B	1	B		0	1.1	No	No	No	0	No	0	0
174B	1	B		0	1.1	No	No	No	0	No	0	0
188B	1	B	Yes	1	1.9	No	No	No	0	No	0	0
189B	1	B	Yes	1	1.8	No	No	No	0	No	0	0
190B	1	B	Yes	1	4	No	No	No	0	No	0	0
191B	1	B	Yes	1	1.5	No	No	No	0	No	0	0
575B	1	B	Yes	1	0.7	No	No	No	0	No	0	0
576B	1	B	Yes	1	3.3	No	No	No	0	No	0	0
577B	1	B		0	2.2	No	No	No	0	No	0	0
578B	1	B	Yes	1	2.5	No	No	No	0	No	0	0
579B	1	B		0	2.4	No	No	No	0	No	0	0
580B	1	B	Yes	1	2.1	No	No	No	0	No	0	0
581B	1	B	Yes	1	1.7	No	No	No	0	No	0	0
582B	1	B	Yes	1	1.4	No	No	No	0	No	0	0
583B	1	B	Yes	1	1.1	No	No	No	0	No	0	0
584B	1	B		0	1.8	No	No	No	0	No	0	0
585B	1	B		0	1.5	No	No	No	0	No	0	0
586B	1	B		0	1.4	No	No	No	0	No	0	0
587B	1	B		0	0.9	No	No	No	0	No	0	0
588B	1	B		0	1.1	No	No	No	0	No	0	0
589B	1	B		0	0.6	No	No	No	0	No	0	0

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
173B	1.4	No	No	No	0	No	0	0
174B	1.4	No	No	No	0	No	0	0
188B	2.3	No	No	No	0	No	0	0
189B	2.3	No	No	No	0	No	0	0
190B	5.1	No	Yes	No	0	Yes	1	1
191B	2.1	No	No	No	0	No	0	0
575B	1.5	No	No	No	0	No	0	0
576B	4.2	No	No	No	0	No	0	0
577B	3.2	No	No	No	0	No	0	0
578B	3.2	No	No	No	0	No	0	0
579B	3.3	No	No	No	0	No	0	0
580B	2.8	No	No	No	0	No	0	0
581B	2.4	No	No	No	0	No	0	0
582B	2.3	No	No	No	0	No	0	0
583B	1.9	No	No	No	0	No	0	0
584B	2.5	No	No	No	0	No	0	0
585B	2.2	No	No	No	0	No	0	0
586B	2	No	No	No	0	No	0	0
587B	1.7	No	No	No	0	No	0	0
588B	1.7	No	No	No	0	No	0	0
589B	1.4	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
173B	1.7	No	No	No	0	No	0	0
174B	1.6	No	No	No	0	No	0	0
188B	2.7	No	No	No	0	No	0	0
189B	2.7	No	No	No	0	No	0	0
190B	5.9	No	Yes	No	0	Yes	1	1
191B	3	No	No	No	0	No	0	0
575B	2.3	No	No	No	0	No	0	0
576B	4.8	No	No	No	0	No	0	0
577B	3.8	No	No	No	0	No	0	0
578B	5	No	Yes	No	0	Yes	1	1
579B	4	No	No	No	0	No	0	0
580B	4.4	No	No	No	0	No	0	0
581B	3.2	No	No	No	0	No	0	0
582B	3	No	No	No	0	No	0	0
583B	2.6	No	No	No	0	No	0	0
584B	3.3	No	No	No	0	No	0	0
585B	3	No	No	No	0	No	0	0
586B	2.8	No	No	No	0	No	0	0
587B	2.3	No	No	No	0	No	0	0
588B	2.2	No	No	No	0	No	0	0
589B	2	No	No	No	0	No	0	0

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
173B	1.9	No	No	No	0	No	0	0
174B	1.9	No	No	No	0	No	0	0
188B	2.9	No	No	No	0	No	0	0
189B	3.1	No	No	No	0	No	0	0
190B	6.8	No	Yes	No	0	Yes	1	1
191B	4	No	No	No	0	No	0	0
575B	3.9	No	No	No	0	No	0	0
576B	8	Yes	Yes	Yes	1	Yes	1	1
577B	5.1	No	Yes	No	0	No	0	1
578B	6.7	No	Yes	No	0	Yes	1	1
579B	6.2	No	Yes	No	0	No	0	1
580B	6.6	No	Yes	No	0	Yes	1	1
581B	5.6	No	Yes	No	0	Yes	1	1
582B	5.3	No	Yes	No	0	Yes	1	1
583B	3.8	No	No	No	0	No	0	0
584B	4.2	No	No	No	0	No	0	0
585B	4	No	No	No	0	No	0	0
586B	3.8	No	No	No	0	No	0	0
587B	3.2	No	No	No	0	No	0	0
588B	2.9	No	No	No	0	No	0	0
589B	2.7	No	No	No	0	No	0	0

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
173B	2.2	No	No	No	0	No	0	0
174B	2.1	No	No	No	0	No	0	0
188B	3.2	No	No	No	0	No	0	0
189B	3.7	No	No	No	0	No	0	0
190B	7.9	Yes	Yes	Yes	1	Yes	1	1
191B	6.1	No	Yes	No	0	Yes	1	1
575B	5.1	No	Yes	No	0	Yes	1	1
576B	9.5	Yes	Yes	Yes	1	Yes	1	1
577B	8	Yes	Yes	No	0	No	0	1
578B	7.7	Yes	Yes	Yes	1	Yes	1	1
579B	8	Yes	Yes	No	0	No	0	1
580B	7.6	Yes	Yes	Yes	1	Yes	1	1
581B	6.6	No	Yes	No	0	Yes	1	1
582B	6.6	No	Yes	No	0	Yes	1	1
583B	6	No	Yes	No	0	Yes	1	1
584B	6.2	No	Yes	No	0	No	0	1
585B	5.4	No	Yes	No	0	No	0	1
586B	5	No	Yes	No	0	No	0	1
587B	4.3	No	No	No	0	No	0	0
588B	3.8	No	No	No	0	No	0	0
589B	3.7	No	No	No	0	No	0	0

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
173B	2.4	No	No	No	0	No	0	0
174B	2.4	No	No	No	0	No	0	0
188B	3.4	No	No	No	0	No	0	0
189B	4.4	No	No	No	0	No	0	0
190B	8.7	Yes	Yes	Yes	1	Yes	1	1
191B	8.3	Yes	Yes	Yes	1	Yes	1	1
575B	6.7	No	Yes	No	0	Yes	1	1
576B	10.6	Yes	Yes	Yes	1	Yes	1	1
577B	9.3	Yes	Yes	No	0	No	0	1
578B	8.6	Yes	Yes	Yes	1	Yes	1	1
579B	9.1	Yes	Yes	No	0	No	0	1
580B	8.5	Yes	Yes	Yes	1	Yes	1	1
581B	7.6	Yes	Yes	Yes	1	Yes	1	1
582B	7.7	Yes	Yes	Yes	1	Yes	1	1
583B	7.1	Yes	Yes	Yes	1	Yes	1	1
584B	7.9	Yes	Yes	No	0	No	0	1
585B	7.5	Yes	Yes	No	0	No	0	1
586B	7.2	Yes	Yes	No	0	No	0	1
587B	6.2	No	Yes	No	0	No	0	1
588B	5.3	No	Yes	No	0	No	0	1
589B	4.9	No	No	No	0	No	0	0

Feasibility Factors:

	12-ft Wall	14-ft Wall	16-ft Wall	18-ft Wall	20-ft Wall
# of First-Row 5 dBA Reduction:	0	1	2	6	9	9
% of First-Row 5 dBA Reduction:	0.0%	9.1%	18.2%	54.5%	81.8%	81.8%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**No**	**No**	**Yes**	**Yes**	**Yes**

Reasonableness Factors:

	12-ft Wall	14-ft Wall	16-ft Wall	18-ft Wall	20-ft Wall
# of First-Row Design Goal:	0	0	0	1	4	8
% of First-Row Design Goal:	0.0%	0.0%	0.0%	9.1%	36.4%	72.7%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**No**	**No**	**Yes**	**Yes**
# of Benefited (Category B):	0	1	2	8	14	16
Cost of Noise Wall (Length x Height x $20/sq ft):	$592,600.00	$711,120.00	$829,640.00	$948,160.00	$1,066,680.00	$1,185,200.00
Cost of any other items critical to safety (snow storage on overpass):	$74,075.00	$74,075.00	$74,075.00	$74,075.00	$74,075.00	$74,075.00
Anticipated Cost of Noise Abatement:	$666,675.00	$785,195.00	$903,715.00	$1,022,235.00	$1,140,755.00	$1,259,275.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$0.00	$30,000.00	$60,000.00	$240,000.00	$420,000.00	$480,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$0.00	$30,000.00	$60,000.00	$240,000.00	$420,000.00	$480,000.00
Difference between Anticipated Cost and Allowable Cost:	-$666,675.00	-$755,195.00	-$843,715.00	-$782,235.00	-$720,755.00	-$779,275.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**No**	**No**	**No**

Feasible and Reasonable:

12-ft Wall	14-ft Wall	16-ft Wall	18-ft Wall	20-ft Wall
No	**No**	**No**	**No**	**No**

Wall 7

Total Wall Length	963	ft
Length of Activity Category C/E Land Use:		ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	6	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
S76B	1	B	Yes	1	2.3	No	No	No	0	No	0	0
S77B	1	B		0	1.5	No	No	No	0	No	0	0
S78B	1	B	Yes	1	2.4	No	No	No	0	No	0	0
S79B	1	B		0	2.1	No	No	No	0	No	0	0
S80B	1	B	Yes	1	2	No	No	No	0	No	0	0
S81B	1	B	Yes	1	1.7	No	No	No	0	No	0	0
S82B	1	B	Yes	1	1.4	No	No	No	0	No	0	0
S83B	1	B	Yes	1	1.1	No	No	No	0	No	0	0
S84B	1	B		0	1.6	No	No	No	0	No	0	0
S85B	1	B		0	1.4	No	No	No	0	No	0	0
S86B	1	B		0	1.3	No	No	No	0	No	0	0
S87B	1	B		0	0.8	No	No	No	0	No	0	0
S88B	1	B		0	0.9	No	No	No	0	No	0	0
S89B	1	B		0	0.4	No	No	No	0	No	0	0

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
S76B	2.8	No	No	No	0	No	0	0
S77B	2.2	No	No	No	0	No	0	0
S78B	3	No	No	No	0	No	0	0
S79B	2.9	No	No	No	0	No	0	0
S80B	2.8	No	No	No	0	No	0	0
S81B	2.4	No	No	No	0	No	0	0
S82B	2.3	No	No	No	0	No	0	0
S83B	1.9	No	No	No	0	No	0	0
S84B	2.2	No	No	No	0	No	0	0
S85B	2	No	No	No	0	No	0	0
S86B	1.8	No	No	No	0	No	0	0
S87B	1.5	No	No	No	0	No	0	0
S88B	1.3	No	No	No	0	No	0	0
S89B	1.1	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
S76B	3.1	No	No	No	0	No	0	0
S77B	2.5	No	No	No	0	No	0	0
S78B	4.5	No	No	No	0	No	0	0
S79B	3.5	No	No	No	0	No	0	0
S80B	4.3	No	No	No	0	No	0	0
S81B	3.2	No	No	No	0	No	0	0
S82B	2.9	No	No	No	0	No	0	0
S83B	2.6	No	No	No	0	No	0	0
S84B	3	No	No	No	0	No	0	0
S85B	2.7	No	No	No	0	No	0	0
S86B	2.6	No	No	No	0	No	0	0
S87B	2.1	No	No	No	0	No	0	0
S88B	1.7	No	No	No	0	No	0	0
S89B	1.6	No	No	No	0	No	0	0

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
S76B	4.5	No	No	No	0	No	0	0
S77B	3.2	No	No	No	0	No	0	0
S78B	5.9	No	Yes	No	0	Yes	1	1
S79B	5.3	No	Yes	No	0	No	0	1
S80B	6.4	No	Yes	No	0	Yes	1	1
S81B	5.5	No	Yes	No	0	Yes	1	1
S82B	5.2	No	Yes	No	0	Yes	1	1
S83B	3.7	No	No	No	0	No	0	0
S84B	3.7	No	No	No	0	No	0	0
S85B	3.5	No	No	No	0	No	0	0
S86B	3.4	No	No	No	0	No	0	0
S87B	3	No	No	No	0	No	0	0
S88B	2.2	No	No	No	0	No	0	0
S89B	2.1	No	No	No	0	No	0	0

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
S76B	4.9	No	No	No	0	No	0	0
S77B	4.4	No	No	No	0	No	0	0
S78B	6.5	No	Yes	No	0	Yes	1	1
S79B	6.5	No	Yes	No	0	No	0	1
S80B	7.3	Yes	Yes	Yes	1	Yes	1	1
S81B	6.4	No	Yes	No	0	Yes	1	1
S82B	6.4	No	Yes	No	0	Yes	1	1
S83B	5.9	No	Yes	No	0	Yes	1	1
S84B	5.3	No	Yes	No	0	No	0	1
S85B	4.8	No	No	No	0	No	0	0
S86B	4.5	No	No	No	0	No	0	0
S87B	3.9	No	No	No	0	No	0	0
S88B	2.8	No	No	No	0	No	0	0
S89B	2.8	No	No	No	0	No	0	0

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
S76B	5.1	No	Yes	No	0	Yes	1	1
S77B	4.8	No	No	No	0	No	0	0
S78B	7	Yes	Yes	Yes	1	Yes	1	1
S79B	7.1	Yes	Yes	No	0	No	0	1
S80B	8.2	Yes	Yes	Yes	1	Yes	1	1
S81B	7.3	Yes	Yes	Yes	1	Yes	1	1
S82B	7.4	Yes	Yes	Yes	1	Yes	1	1
S83B	6.9	No	Yes	No	0	Yes	1	1
S84B	6.6	No	Yes	No	0	No	0	1
S85B	6.3	No	Yes	No	0	No	0	1
S86B	6.2	No	Yes	No	0	No	0	1
S87B	5.5	No	Yes	No	0	No	0	1
S88B	3.8	No	No	No	0	No	0	0
S89B	3.6	No	No	No	0	No	0	0

	10-ft Wall	12-ft Wall	14-ft Wall	16-ft Wall	18-ft Wall	20-ft Wall
Feasibility Factors:						
# of First-Row 5 dBA Reduction:	0	0	0	4	5	6
% of First-Row 5 dBA Reduction:	0.0%	0.0%	0.0%	66.7%	83.3%	100.0%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	No	No	No	Yes	Yes	Yes
Reasonableness Factors:						
# of First-Row Design Goal:	0	0	0	0	1	4
% of First-Row Design Goal:	0.0%	0.0%	0.0%	0.0%	16.7%	66.7%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	No	No	No	No	No	Yes
# of Benefited (Category B):	0	0	0	5	7	11
Cost of Noise Wall (Length x Height x $20/sq ft):	$192,600.00	$231,120.00	$269,640.00	$308,160.00	$346,680.00	$385,200.00
Cost of any other items critical to safety (snow storage on overpass):	$24,075.00	$24,075.00	$24,075.00	$24,075.00	$24,075.00	$24,075.00
Anticipated Cost of Noise Abatement:	$216,675.00	$255,195.00	$293,715.00	$332,235.00	$370,755.00	$409,275.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$0.00	$0.00	$0.00	$150,000.00	$210,000.00	$330,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$0.00	$0.00	$0.00	$150,000.00	$210,000.00	$330,000.00
Difference between Anticipated Cost and Allowable Cost:	-$216,675.00	-$255,195.00	-$293,715.00	-$182,235.00	-$160,755.00	-$79,275.00
Cost Effective (Anticipated Cost < Allowable Cost):	No	No	No	No	No	No
Feasible and Reasonable:	**No**	**No**	**No**	**No**	**No**	**No**

Wall 8

Total Wall Length	2221	ft
Length of Activity Category C/E Land Use:		ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	7	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
183B	1	B	Yes	1	1.3	No	No	No	0	No	0	0
184B	1	B	Yes	1	1.4	No	No	No	0	No	0	0
185B	1	B	Yes	1	2.1	No	No	No	0	No	0	0
186B	1	B	Yes	1	3	No	No	No	0	No	0	0
187B	1	B	Yes	1	4.3	No	No	No	0	No	0	0
603B	1	B	Yes	1	6.2	No	Yes	No	0	Yes	1	1
604B	1	B	Yes	1	4.6	No	No	No	0	No	0	0

12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
3.9	No	No	No	0	No	0	0
3.5	No	No	No	0	No	0	0
2.9	No	No	No	0	No	0	0
4.2	No	No	No	0	No	0	0
5.4	No	Yes	No	0	Yes	1	1
6.9	No	Yes	No	0	Yes	1	1
5.3	No	Yes	No	0	Yes	1	1

14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
5	No	Yes	No	0	Yes	1	1
4.7	No	No	No	0	No	0	0
3.4	No	No	No	0	No	0	0
5	No	Yes	No	0	Yes	1	1
6.2	No	Yes	No	0	Yes	1	1
7.5	Yes	Yes	Yes	1	Yes	1	1
6	No	Yes	No	0	Yes	1	1

16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
6	No	Yes	No	0	Yes	1	1
5.6	No	Yes	No	0	Yes	1	1
4	No	No	No	0	No	0	0
5.6	No	Yes	No	0	Yes	1	1
6.9	No	Yes	No	0	Yes	1	1
8	Yes	Yes	Yes	1	Yes	1	1
6.5	No	Yes	No	0	Yes	1	1

18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
6.8	No	Yes	No	0	Yes	1	1
6.3	No	Yes	No	0	Yes	1	1
4.6	No	No	No	0	No	0	0
6.2	No	Yes	No	0	Yes	1	1
7.5	Yes	Yes	Yes	1	Yes	1	1
8.4	Yes	Yes	Yes	1	Yes	1	1
7	Yes	Yes	Yes	1	Yes	1	1

20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
7.5	Yes	Yes	Yes	1	Yes	1	1
6.9	No	Yes	No	0	Yes	1	1
5.1	No	Yes	No	0	Yes	1	1
6.8	No	Yes	No	0	Yes	1	1
8	Yes	Yes	Yes	1	Yes	1	1
8.7	Yes	Yes	Yes	1	Yes	1	1
7.5	Yes	Yes	Yes	1	Yes	1	1

Feasibility Factors:

# of First-Row 5 dBA Reduction:	1	3	5	6	6	7
% of First-Row 5 dBA Reduction:	14.3%	42.9%	71.4%	85.7%	85.7%	100.0%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**

Reasonableness Factors:

# of First-Row Design Goal:	0	0	1	1	3	4
% of First-Row Design Goal:	0.0%	0.0%	14.3%	14.3%	42.9%	57.1%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**No**	**No**	**Yes**	**Yes**
# of Benefited (Category B):	1	3	5	6	6	7
Cost of Noise Wall (Length x Height x $20/sq ft):	$444,200.00	$533,040.00	$621,880.00	$710,720.00	$799,560.00	$888,400.00
Cost of any other items critical to safety (snow storage on overpass):	$55,525.00	$55,525.00	$55,525.00	$55,525.00	$55,525.00	$55,525.00
Anticipated Cost of Noise Abatement:	$499,725.00	$588,565.00	$677,405.00	$766,245.00	$855,085.00	$943,925.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$30,000.00	$90,000.00	$150,000.00	$180,000.00	$180,000.00	$210,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$30,000.00	$90,000.00	$150,000.00	$180,000.00	$180,000.00	$210,000.00
Difference between Anticipated Cost and Allowable Cost:	-$469,725.00	-$498,565.00	-$527,405.00	-$586,245.00	-$675,085.00	-$733,925.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**No**	**No**	**No**
Feasible and Reasonable:	**No**	**No**	**No**	**No**	**No**	**No**

Wall 9

Total Wall Length	3598	ft
Length of Activity Category C/E Land Use:		ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	22	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
195B	1	B	Yes	1	9.5	Yes	Yes	Yes	1	Yes	1	1
196B	1	B		0	4.3	No	No	No	0	No	0	0
197B	1	B		0	2.3	No	No	No	0	No	0	0
198B	1	B	Yes	1	5.2	No	Yes	No	0	Yes	1	1
199B	1	B		0	4.1	No	No	No	0	No	0	0
200B	1	B	Yes	1	4.3	No	No	No	0	No	0	0
201B	1	B		0	3.6	No	No	No	0	No	0	0
202B	1	B		0	2.8	No	No	No	0	No	0	0
203B	1	B		0	3.7	No	No	No	0	No	0	0
204B	1	B		0	4.2	No	No	No	0	No	0	0
205B	1	B		0	4.1	No	No	No	0	No	0	0
206B	1	B	Yes	1	6.2	No	Yes	No	0	Yes	1	1
207B	1	B	Yes	1	3.8	No	No	No	0	No	0	0
208B	1	B		0	3.1	No	No	No	0	No	0	0
209B	1	B		0	2.6	No	No	No	0	No	0	0
210B	1	B	Yes	1	1.9	No	No	No	0	No	0	0
211B	1	B		0	2	No	No	No	0	No	0	0
212B	1	B		0	1.6	No	No	No	0	No	0	0
213B	1	B		0	1.8	No	No	No	0	No	0	0
214B	1	B		0	2.1	No	No	No	0	No	0	0
215B	1	B		0	2.1	No	No	No	0	No	0	0
216B	1	B		0	1.7	No	No	No	0	No	0	0
217B	1	B		0	1.4	No	No	No	0	No	0	0
218B	1	B	Yes	1	3.2	No	No	No	0	No	0	0
219B	1	B	Yes	1	3.8	No	No	No	0	No	0	0
220B	1	B	Yes	1	4.1	No	No	No	0	No	0	0
221B	1	B	Yes	1	5	No	Yes	No	0	Yes	1	1
222B	1	B	Yes	1	3.1	No	No	No	0	No	0	0
223B	1	B	Yes	1	4.1	No	No	No	0	No	0	0
224B	1	B	Yes	1	3.1	No	No	No	0	No	0	0
225B	1	B	Yes	1	2	No	No	No	0	No	0	0
226B	1	B	Yes	1	1.3	No	No	No	0	No	0	0
227B	1	B	Yes	1	3.5	No	No	No	0	No	0	0
228B	1	B	Yes	1	4.8	No	No	No	0	No	0	0
229B	1	B	Yes	1	4	No	No	No	0	No	0	0
230B	1	B		0	1.5	No	No	No	0	No	0	0
231B	1	B		0	1.4	No	No	No	0	No	0	0
232B	1	B		0	1.3	No	No	No	0	No	0	0
233B	1	B		0	1.9	No	No	No	0	No	0	0
234B	1	B		0	2.5	No	No	No	0	No	0	0
235B	1	B		0	1.5	No	No	No	0	No	0	0
236B	1	B		0	0.9	No	No	No	0	No	0	0
237B	1	B		0	-0.7	No	No	No	0	No	0	0
238B	1	B		0	-1.1	No	No	No	0	No	0	0
239B	1	B		0	0.5	No	No	No	0	No	0	0
240B	1	B		0	0	No	No	No	0	No	0	0
241B	1	B		0	-0.8	No	No	No	0	No	0	0
242B	1	B		0	-0.9	No	No	No	0	No	0	0
243B	1	B		0	1.3	No	No	No	0	No	0	0
244B	1	B	Yes	1	0.3	No	No	No	0	No	0	0
245B	1	B	Yes	1	0.1	No	No	No	0	No	0	0
246B	1	B	Yes	1	0.2	No	No	No	0	No	0	0
247B	1	B		0	-0.6	No	No	No	0	No	0	0
248B	1	B		0	-0.7	No	No	No	0	No	0	0
249B	1	B		0	-0.5	No	No	No	0	No	0	0
250B	1	B		0	-0.1	No	No	No	0	No	0	0
251B	1	B		0	-0.2	No	No	No	0	No	0	0
252B	1	B		0	-0.4	No	No	No	0	No	0	0
676B	1	B	Yes	1	6.9	No	Yes	No	0	Yes	1	1
677B	1	B		0	1.1	No	No	No	0	No	0	0
743B	1	B		0	1.6	No	No	No	0	No	0	0

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
195B	10.6	Yes	Yes	Yes	1	Yes	1	1
196B	4.9	No	No	No	0	No	0	0
197B	3.6	No	No	No	0	No	0	0
198B	6.7	No	Yes	No	0	Yes	1	1
199B	5.9	No	Yes	No	0	No	0	1
200B	6.2	No	Yes	No	0	Yes	1	1
201B	5.5	No	Yes	No	0	No	0	1
202B	5.1	No	Yes	No	0	No	0	1
203B	5.7	No	Yes	No	0	No	0	1
204B	6.1	No	Yes	No	0	No	0	1
205B	6.2	No	Yes	No	0	No	0	1
206B	7.5	Yes	Yes	Yes	1	Yes	1	1
207B	5	No	Yes	No	0	Yes	1	1
208B	4.7	No	No	No	0	No	0	0
209B	4.1	No	No	No	0	No	0	0
210B	3.4	No	No	No	0	No	0	0
211B	3.4	No	No	No	0	No	0	0
212B	3.5	No	No	No	0	No	0	0
213B	3	No	No	No	0	No	0	0
214B	3.2	No	No	No	0	No	0	0
215B	3	No	No	No	0	No	0	0
216B	2.7	No	No	No	0	No	0	0
217B	2.5	No	No	No	0	No	0	0
218B	5.3	No	Yes	No	0	Yes	1	1
219B	6.4	No	Yes	No	0	Yes	1	1
220B	5.5	No	Yes	No	0	Yes	1	1
221B	6.7	No	Yes	No	0	Yes	1	1
222B	4.2	No	No	No	0	No	0	0
223B	5	No	Yes	No	0	Yes	1	1
224B	3.7	No	No	No	0	No	0	0
225B	4.3	No	No	No	0	No	0	0
226B	3.3	No	No	No	0	No	0	0
227B	4.1	No	No	No	0	No	0	0
228B	5.4	No	Yes	No	0	Yes	1	1
229B	4.5	No	No	No	0	No	0	0
230B	2.4	No	No	No	0	No	0	0
231B	2.4	No	No	No	0	No	0	0
232B	2.1	No	No	No	0	No	0	0
233B	3	No	No	No	0	No	0	0
234B	3.9	No	No	No	0	No	0	0
235B	2.4	No	No	No	0	No	0	0
236B	1.4	No	No	No	0	No	0	0
237B	-0.7	No	No	No	0	No	0	0
238B	-1.1	No	No	No	0	No	0	0
239B	1.1	No	No	No	0	No	0	0
240B	0.4	No	No	No	0	No	0	0
241B	-0.7	No	No	No	0	No	0	0
242B	-0.9	No	No	No	0	No	0	0
243B	1.6	No	No	No	0	No	0	0
244B	0.6	No	No	No	0	No	0	0
245B	0.2	No	No	No	0	No	0	0
246B	0.2	No	No	No	0	No	0	0
247B	-0.8	No	No	No	0	No	0	0
248B	-0.8	No	No	No	0	No	0	0
249B	-0.6	No	No	No	0	No	0	0
250B	-0.1	No	No	No	0	No	0	0
251B	-0.2	No	No	No	0	No	0	0
252B	-0.4	No	No	No	0	No	0	0
676B	8.1	Yes	Yes	Yes	1	Yes	1	1
677B	1.9	No	No	No	0	No	0	0
743B	2.7	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
195B	11.4	Yes	Yes	Yes	1	Yes	1	1
196B	5.3	No	Yes	No	0	No	0	1
197B	4	No	No	No	0	No	0	0
198B	7.6	Yes	Yes	Yes	1	Yes	1	1
199B	6.7	No	Yes	No	0	No	0	1
200B	7.1	Yes	Yes	Yes	1	Yes	1	1
201B	6.3	No	Yes	No	0	No	0	1
202B	5.9	No	Yes	No	0	No	0	1
203B	6.6	No	Yes	No	0	No	0	1
204B	6.9	No	Yes	No	0	No	0	1
205B	7.1	Yes	Yes	No	0	No	0	1
206B	8.5	Yes	Yes	Yes	1	Yes	1	1
207B	6.9	No	Yes	No	0	Yes	1	1
208B	6.1	No	Yes	No	0	No	0	1
209B	5.3	No	Yes	No	0	No	0	1
210B	4.9	No	No	No	0	No	0	0
211B	6	No	Yes	No	0	No	0	1
212B	5.2	No	Yes	No	0	No	0	1
213B	4.9	No	No	No	0	No	0	0
214B	4.8	No	No	No	0	No	0	0
215B	4.5	No	No	No	0	No	0	0
216B	4.4	No	No	No	0	No	0	0
217B	4.2	No	No	No	0	No	0	0
218B	7.2	Yes	Yes	Yes	1	Yes	1	1
219B	8.3	Yes	Yes	Yes	1	Yes	1	1
220B	6.5	No	Yes	No	0	Yes	1	1
221B	7.9	Yes	Yes	Yes	1	Yes	1	1
222B	5.1	No	Yes	No	0	No	0	1
223B	5.8	No	Yes	No	0	Yes	1	1
224B	4.4	No	No	No	0	No	0	0
225B	6.1	No	Yes	No	0	Yes	1	1
226B	4.4	No	No	No	0	No	0	0
227B	4.7	No	No	No	0	No	0	0
228B	6	No	Yes	No	0	Yes	1	1
229B	4.9	No	No	No	0	No	0	0
230B	3.7	No	No	No	0	No	0	0
231B	3.8	No	No	No	0	No	0	0
232B	2.9	No	No	No	0	No	0	0
233B	4	No	No	No	0	No	0	0
234B	4.9	No	No	No	0	No	0	0
235B	3.2	No	No	No	0	No	0	0
236B	1.8	No	No	No	0	No	0	0
237B	-0.7	No	No	No	0	No	0	0
238B	-1	No	No	No	0	No	0	0
239B	1.6	No	No	No	0	No	0	0
240B	0.8	No	No	No	0	No	0	0
241B	-0.6	No	No	No	0	No	0	0
242B	-0.8	No	No	No	0	No	0	0
243B	1.8	No	No	No	0	No	0	0
244B	0.7	No	No	No	0	No	0	0
245B	0.4	No	No	No	0	No	0	0
246B	0.3	No	No	No	0	No	0	0
247B	-0.8	No	No	No	0	No	0	0
248B	-1	No	No	No	0	No	0	0
249B	-0.8	No	No	No	0	No	0	0
250B	-0.1	No	No	No	0	No	0	0
251B	-0.1	No	No	No	0	No	0	0
252B	-0.4	No	No	No	0	No	0	0
676B	8.9	Yes	Yes	Yes	1	Yes	1	1
677B	2.6	No	No	No	0	No	0	0
743B	3.1	No	No	No	0	No	0	0

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
195B	12.1	Yes	Yes	Yes	1	Yes	1	1
196B	5.7	No	Yes	No	0	No	0	1
197B	4.3	No	No	No	0	No	0	0
198B	8.3	Yes	Yes	Yes	1	Yes	1	1
199B	7.4	Yes	Yes	No	0	No	0	1
200B	7.9	Yes	Yes	Yes	1	Yes	1	1
201B	7	Yes	Yes	No	0	No	0	1
202B	6.5	No	Yes	No	0	No	0	1
203B	7.3	Yes	Yes	No	0	No	0	1
204B	7.7	Yes	Yes	No	0	No	0	1
205B	7.9	Yes	Yes	No	0	No	0	1
206B	9.1	Yes	Yes	Yes	1	Yes	1	1
207B	8.2	Yes	Yes	Yes	1	Yes	1	1
208B	7.3	Yes	Yes	No	0	No	0	1
209B	6.6	No	Yes	No	0	No	0	1
210B	5.7	No	Yes	No	0	Yes	1	1
211B	7.5	Yes	Yes	No	0	No	0	1
212B	6.1	No	Yes	No	0	No	0	1
213B	6.1	No	Yes	No	0	No	0	1
214B	5.7	No	Yes	No	0	No	0	1
215B	5.6	No	Yes	No	0	No	0	1
216B	5.4	No	Yes	No	0	No	0	1
217B	5.5	No	Yes	No	0	No	0	1
218B	8.8	Yes	Yes	Yes	1	Yes	1	1
219B	9.7	Yes	Yes	Yes	1	Yes	1	1
220B	7.3	Yes	Yes	Yes	1	Yes	1	1
221B	8.8	Yes	Yes	Yes	1	Yes	1	1
222B	6	No	Yes	No	0	Yes	1	1
223B	6.5	No	Yes	No	0	Yes	1	1
224B	5	No	Yes	No	0	Yes	1	1
225B	7.2	Yes	Yes	Yes	1	Yes	1	1
226B	5.3	No	Yes	No	0	Yes	1	1
227B	5.3	No	Yes	No	0	Yes	1	1
228B	6.5	No	Yes	No	0	Yes	1	1
229B	5.3	No	Yes	No	0	Yes	1	1
230B	4.8	No	No	No	0	No	0	0
231B	5	No	Yes	No	0	No	0	1
232B	3.8	No	No	No	0	No	0	0
233B	4.9	No	No	No	0	No	0	0
234B	5.8	No	Yes	No	0	No	0	1
235B	3.8	No	No	No	0	No	0	0
236B	2.2	No	No	No	0	No	0	0
237B	-0.5	No	No	No	0	No	0	0
238B	-0.8	No	No	No	0	No	0	0
239B	2	No	No	No	0	No	0	0
240B	1.1	No	No	No	0	No	0	0
241B	-0.3	No	No	No	0	No	0	0
242B	-0.6	No	No	No	0	No	0	0
243B	2.4	No	No	No	0	No	0	0
244B	0.9	No	No	No	0	No	0	0
245B	0.6	No	No	No	0	No	0	0
246B	0.3	No	No	No	0	No	0	0
247B	-0.7	No	No	No	0	No	0	0
248B	-0.9	No	No	No	0	No	0	0
249B	-0.7	No	No	No	0	No	0	0
250B	-0.1	No	No	No	0	No	0	0
251B	-0.1	No	No	No	0	No	0	0
252B	-0.3	No	No	No	0	No	0	0
676B	9.7	Yes	Yes	Yes	1	Yes	1	1
677B	3.4	No	No	No	0	No	0	0
743B	3.3	No	No	No	0	No	0	0

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
195B	12.6	Yes	Yes	Yes	1	Yes	1	1
196B	5.9	No	Yes	No	0	No	0	1
197B	4.5	No	No	No	0	No	0	0
198B	9	Yes	Yes	Yes	1	Yes	1	1
199B	8	Yes	Yes	No	0	No	0	1
200B	8.5	Yes	Yes	Yes	1	Yes	1	1
201B	7.6	Yes	Yes	No	0	No	0	1
202B	7	Yes	Yes	No	0	No	0	1
203B	7.9	Yes	Yes	No	0	No	0	1
204B	8.2	Yes	Yes	No	0	No	0	1
205B	8.5	Yes	Yes	No	0	No	0	1
206B	9.8	Yes	Yes	Yes	1	Yes	1	1
207B	9	Yes	Yes	Yes	1	Yes	1	1
208B	8	Yes	Yes	No	0	No	0	1
209B	7.3	Yes	Yes	No	0	No	0	1
210B	6.3	No	Yes	No	0	Yes	1	1
211B	8.4	Yes	Yes	No	0	No	0	1
212B	6.7	No	Yes	No	0	No	0	1
213B	6.8	No	Yes	No	0	No	0	1
214B	6.3	No	Yes	No	0	No	0	1
215B	6.2	No	Yes	No	0	No	0	1
216B	6	No	Yes	No	0	No	0	1
217B	6.2	No	Yes	No	0	No	0	1
218B	9.7	Yes	Yes	Yes	1	Yes	1	1
219B	10.6	Yes	Yes	Yes	1	Yes	1	1
220B	7.9	Yes	Yes	Yes	1	Yes	1	1
221B	9.6	Yes	Yes	Yes	1	Yes	1	1
222B	6.6	No	Yes	No	0	Yes	1	1
223B	7.1	Yes	Yes	Yes	1	Yes	1	1
224B	5.5	No	Yes	No	0	Yes	1	1
225B	8	Yes	Yes	Yes	1	Yes	1	1
226B	6.1	No	Yes	No	0	Yes	1	1
227B	5.8	No	Yes	No	0	Yes	1	1
228B	6.9	No	Yes	No	0	Yes	1	1
229B	5.6	No	Yes	No	0	Yes	1	1
230B	5.5	No	Yes	No	0	No	0	1
231B	5.6	No	Yes	No	0	No	0	1
232B	4.3	No	No	No	0	No	0	0
233B	5.4	No	Yes	No	0	No	0	1
234B	6.4	No	Yes	No	0	No	0	1
235B	4.2	No	No	No	0	No	0	0
236B	2.5	No	No	No	0	No	0	0
237B	-0.2	No	No	No	0	No	0	0
238B	-0.7	No	No	No	0	No	0	0
239B	2.3	No	No	No	0	No	0	0
240B	1.4	No	No	No	0	No	0	0
241B	-0.1	No	No	No	0	No	0	0
242B	-0.6	No	No	No	0	No	0	0
243B	2.7	No	No	No	0	No	0	0
244B	1.1	No	No	No	0	No	0	0
245B	0.7	No	No	No	0	No	0	0
246B	0.4	No	No	No	0	No	0	0
247B	-0.7	No	No	No	0	No	0	0
248B	-0.8	No	No	No	0	No	0	0
249B	-0.6	No	No	No	0	No	0	0
250B	0	No	No	No	0	No	0	0
251B	-0.1	No	No	No	0	No	0	0
252B	-0.3	No	No	No	0	No	0	0
676B	10.3	Yes	Yes	Yes	1	Yes	1	1
677B	3.9	No	No	No	0	No	0	0
743B	3.5	No	No	No	0	No	0	0

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
195B	13.1	Yes	Yes	Yes	1	Yes	1	1
196B	6.2	No	Yes	No	0	No	0	1
197B	4.7	No	No	No	0	No	0	0
198B	9.3	Yes	Yes	Yes	1	Yes	1	1
199B	8.3	Yes	Yes	No	0	No	0	1
200B	8.8	Yes	Yes	Yes	1	Yes	1	1
201B	7.8	Yes	Yes	No	0	No	0	1
202B	7.3	Yes	Yes	No	0	No	0	1
203B	8.1	Yes	Yes	No	0	No	0	1
204B	8.5	Yes	Yes	No	0	No	0	1
205B	8.8	Yes	Yes	No	0	No	0	1
206B	10.1	Yes	Yes	Yes	1	Yes	1	1
207B	9.5	Yes	Yes	Yes	1	Yes	1	1
208B	8.3	Yes	Yes	No	0	No	0	1
209B	7.6	Yes	Yes	No	0	No	0	1
210B	6.7	No	Yes	No	0	Yes	1	1
211B	9.1	Yes	Yes	No	0	No	0	1
212B	7.2	Yes	Yes	No	0	No	0	1
213B	7.2	Yes	Yes	No	0	No	0	1
214B	6.5	No	Yes	No	0	No	0	1
215B	6.4	No	Yes	No	0	No	0	1
216B	6.4	No	Yes	No	0	No	0	1
217B	6.6	No	Yes	No	0	No	0	1
218B	10.4	Yes	Yes	Yes	1	Yes	1	1
219B	11.3	Yes	Yes	Yes	1	Yes	1	1
220B	8.5	Yes	Yes	Yes	1	Yes	1	1
221B	10.3	Yes	Yes	Yes	1	Yes	1	1
222B	7.2	Yes	Yes	Yes	1	Yes	1	1
223B	7.6	Yes	Yes	Yes	1	Yes	1	1
224B	6	No	Yes	No	0	Yes	1	1
225B	8.6	Yes	Yes	Yes	1	Yes	1	1
226B	6.5	No	Yes	No	0	Yes	1	1
227B	6.3	No	Yes	No	0	Yes	1	1
228B	7.2	Yes	Yes	Yes	1	Yes	1	1
229B	5.8	No	Yes	No	0	Yes	1	1
230B	5.8	No	Yes	No	0	No	0	1
231B	6	No	Yes	No	0	No	0	1
232B	4.6	No	No	No	0	No	0	0
233B	5.8	No	Yes	No	0	No	0	1
234B	6.9	No	Yes	No	0	No	0	1
235B	4.6	No	No	No	0	No	0	0
236B	2.7	No	No	No	0	No	0	0
237B	0	No	No	No	0	No	0	0
238B	-0.6	No	No	No	0	No	0	0
239B	2.6	No	No	No	0	No	0	0
240B	1.6	No	No	No	0	No	0	0
241B	0.1	No	No	No	0	No	0	0
242B	-0.4	No	No	No	0	No	0	0
243B	3	No	No	No	0	No	0	0
244B	1.3	No	No	No	0	No	0	0
245B	0.9	No	No	No	0	No	0	0
246B	0.4	No	No	No	0	No	0	0
247B	-0.6	No	No	No	0	No	0	0
248B	-0.7	No	No	No	0	No	0	0
249B	-0.5	No	No	No	0	No	0	0
250B	0	No	No	No	0	No	0	0
251B	0	No	No	No	0	No	0	0
252B	-0.2	No	No	No	0	No	0	0
676B	10.6	Yes	Yes	Yes	1	Yes	1	1
677B	4.1	No	No	No	0	No	0	0
743B	3.7	No	No	No	0	No	0	0

Feasibility Factors:

# of First-Row 5 dBA Reduction:	5	12	14	19	19
% of First-Row 5 dBA Reduction:	22.7%	54.5%	63.6%	86.4%	86.4%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**Yes**	**Yes**	**Yes**	**Yes**

Reasonableness Factors:

# of First-Row Design Goal:	1	3	8	11	12	14
% of First-Row Design Goal:	4.5%	13.6%	36.4%	50.0%	54.5%	63.6%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
# of Benefited (Category B):	5	18	25	37	39	39
Cost of Noise Wall (Length x Height x $20/sq ft):	$719,600.00	$863,520.00	$1,007,440.00	$1,151,360.00	$1,295,280.00	$1,439,200.00
Cost of any other items critical to safety (snow storage on overpass):	$89,950.00	$89,950.00	$89,950.00	$89,950.00	$89,950.00	$89,950.00
Anticipated Cost of Noise Abatement:	$809,550.00	$953,470.00	$1,097,390.00	$1,241,310.00	$1,385,230.00	$1,529,150.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$150,000.00	$540,000.00	$750,000.00	$1,110,000.00	$1,170,000.00	$1,170,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$150,000.00	$540,000.00	$750,000.00	$1,110,000.00	$1,170,000.00	$1,170,000.00
Difference between Anticipated Cost and Allowable Cost:	-$659,550.00	-$413,470.00	-$347,390.00	-$131,310.00	-$215,230.00	-$359,150.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**No**	**No**	**No**
Feasible and Reasonable:	**No**	**No**	**No**	**No**	**No**	**No**

Wall 10

Total Wall Length	4615	ft
Length of Activity Category C/E Land Use:	67	ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	18	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
259B	1	B	Yes	1	1.2	No	No	No	0	No	0	0	1.5	No	No	No	0	No	0	0	1.8	No	No	No	0	No	0	0	2.1	No	No	No	0	No	0	0	2.3	No	No	No	0	No	0	0	2.6	No	No	No	0	No	0	0
260B	1	B	Yes	1	1.4	No	No	No	0	No	0	0	1.8	No	No	No	0	No	0	0	2.4	No	No	No	0	No	0	0	3	No	No	No	0	No	0	0	3.5	No	No	No	0	No	0	0	4	No	No	No	0	No	0	0
261C	1	C	Yes	1	5.7	No	Yes	No	0	Yes	1	0	6.5	No	Yes	No	0	Yes	1	0	7.1	Yes	Yes	Yes	1	Yes	1	0	7.7	Yes	Yes	Yes	1	Yes	1	0	8.2	Yes	Yes	Yes	1	Yes	1	0	8.7	Yes	Yes	Yes	1	Yes	1	0
262B	1	B	Yes	1	3.4	No	No	No	0	No	0	0	4	No	No	No	0	No	0	0	4.7	No	No	No	0	No	0	0	5.3	No	Yes	No	0	Yes	1	1	5.8	No	Yes	No	0	Yes	1	1	6.3	No	Yes	No	0	Yes	1	1
263B	1	B		0	3	No	No	No	0	No	0	0	4.1	No	No	No	0	No	0	0	5.5	No	Yes	No	0	No	0	1	6.3	No	Yes	No	0	No	0	1	6.9	No	Yes	No	0	No	0	1	7.6	Yes	Yes	No	0	No	0	1
264B	1	B	Yes	1	3.1	No	No	No	0	No	0	0	4.4	No	No	No	0	No	0	0	5.6	No	Yes	No	0	Yes	1	1	7.3	Yes	Yes	Yes	1	Yes	1	1	8.2	Yes	Yes	Yes	1	Yes	1	1	8.9	Yes	Yes	Yes	1	Yes	1	1
265B	1	B		0	3	No	No	No	0	No	0	0	4.1	No	No	No	0	No	0	0	5.5	No	Yes	No	0	No	0	1	6.7	No	Yes	No	0	No	0	1	8.1	Yes	Yes	No	0	No	0	1	9.2	Yes	Yes	No	0	No	0	1
266B	1	B	Yes	1	3.2	No	No	No	0	No	0	0	4.2	No	No	No	0	No	0	0	5.4	No	Yes	No	0	Yes	1	1	6.7	No	Yes	No	0	Yes	1	1	7.7	Yes	Yes	Yes	1	Yes	1	1	9.1	Yes	Yes	Yes	1	Yes	1	1
267B	1	B	Yes	1	3.3	No	No	No	0	No	0	0	4.2	No	No	No	0	No	0	0	5.2	No	Yes	No	0	Yes	1	1	6.5	No	Yes	No	0	Yes	1	1	7.5	Yes	Yes	Yes	1	Yes	1	1	8.7	Yes	Yes	Yes	1	Yes	1	1
268B	1	B	Yes	1	2.8	No	No	No	0	No	0	0	3.7	No	No	No	0	No	0	0	4.5	No	No	No	0	No	0	0	5.5	No	Yes	No	0	Yes	1	1	6.5	No	Yes	No	0	Yes	1	1	7.6	Yes	Yes	Yes	1	Yes	1	1
269B	1	B		0	2.6	No	No	No	0	No	0	0	3.3	No	No	No	0	No	0	0	4.1	No	No	No	0	No	0	0	5	No	Yes	No	0	No	0	1	6	No	Yes	No	0	No	0	1	6.7	No	Yes	No	0	No	0	1
270B	1	B	Yes	1	5.2	No	Yes	No	0	Yes	1	1	5.9	No	Yes	No	0	Yes	1	1	6.6	No	Yes	No	0	Yes	1	1	7.1	Yes	Yes	Yes	1	Yes	1	1	7.7	Yes	Yes	Yes	1	Yes	1	1	8.2	Yes	Yes	Yes	1	Yes	1	1
271B	1	B		0	3.9	No	No	No	0	No	0	0	5.2	No	Yes	No	0	No	0	1	6.8	No	Yes	No	0	No	0	1	7.8	Yes	Yes	No	0	No	0	1	8.7	Yes	Yes	No	0	No	0	1	9.4	Yes	Yes	No	0	No	0	1
272B	1	B	Yes	1	3.3	No	No	No	0	No	0	0	4.6	No	No	No	0	No	0	0	6.2	No	Yes	No	0	Yes	1	1	7.2	Yes	Yes	Yes	1	Yes	1	1	8	Yes	Yes	Yes	1	Yes	1	1	8.7	Yes	Yes	Yes	1	Yes	1	1
273B	1	B	Yes	1	4.9	No	No	No	0	No	0	0	5.6	No	Yes	No	0	Yes	1	1	6.3	No	Yes	No	0	Yes	1	1	6.9	No	Yes	No	0	Yes	1	1	7.5	Yes	Yes	Yes	1	Yes	1	1	8.1	Yes	Yes	Yes	1	Yes	1	1
274B	1	B		0	4.5	No	No	No	0	No	0	0	5.7	No	Yes	No	0	No	0	1	6.7	No	Yes	No	0	No	0	1	7.6	Yes	Yes	No	0	No	0	1	8.4	Yes	Yes	No	0	No	0	1	9	Yes	Yes	No	0	No	0	1
275B	1	B		0	3	No	No	No	0	No	0	0	4.2	No	No	No	0	No	0	0	5.4	No	Yes	No	0	No	0	1	6.5	No	Yes	No	0	No	0	1	7.3	Yes	Yes	No	0	No	0	1	7.9	Yes	Yes	No	0	No	0	1
276B	1	B		0	2.8	No	No	No	0	No	0	0	3.9	No	No	No	0	No	0	0	5.4	No	Yes	No	0	No	0	1	6.5	No	Yes	No	0	No	0	1	7.3	Yes	Yes	No	0	No	0	1	7.9	Yes	Yes	No	0	No	0	1
277B	1	B	Yes	1	3.5	No	No	No	0	No	0	0	4.4	No	No	No	0	No	0	0	5.3	No	Yes	No	0	Yes	1	1	5.9	No	Yes	No	0	Yes	1	1	6.5	No	Yes	No	0	Yes	1	1	7.1	Yes	Yes	Yes	1	Yes	1	1
278B	1	B		0	2.8	No	No	No	0	No	0	0	3.6	No	No	No	0	No	0	0	5.5	No	Yes	No	0	No	0	1	6.3	No	Yes	No	0	No	0	1	7	Yes	Yes	No	0	No	0	1	7.6	Yes	Yes	No	0	No	0	1
279B	1	B	Yes	1	5.3	No	Yes	No	0	Yes	1	1	5.9	No	Yes	No	0	Yes	1	1	6.7	No	Yes	No	0	Yes	1	1	7.5	Yes	Yes	Yes	1	Yes	1	1	8.3	Yes	Yes	Yes	1	Yes	1	1	8.9	Yes	Yes	Yes	1	Yes	1	1
280B	1	B		0	4.3	No	No	No	0	No	0	0	5.2	No	Yes	No	0	No	0	1	5.9	No	Yes	No	0	No	0	1	6.6	No	Yes	No	0	No	0	1	7.3	Yes	Yes	No	0	No	0	1	7.9	Yes	Yes	No	0	No	0	1
281B	1	B	Yes	1	6	No	Yes	No	0	Yes	1	1	6.5	No	Yes	No	0	Yes	1	1	7.2	Yes	Yes	Yes	1	Yes	1	1	8	Yes	Yes	Yes	1	Yes	1	1	8.7	Yes	Yes	Yes	1	Yes	1	1	9.3	Yes	Yes	Yes	1	Yes	1	1
282B	1	B		0	4.4	No	No	No	0	No	0	0	5.4	No	Yes	No	0	No	0	1	6.1	No	Yes	No	0	No	0	1	6.8	No	Yes	No	0	No	0	1	7.4	Yes	Yes	No	0	No	0	1	8	Yes	Yes	No	0	No	0	1
283B	1	B		0	2.7	No	No	No	0	No	0	0	5	No	Yes	No	0	No	0	1	5.7	No	Yes	No	0	No	0	1	6.4	No	Yes	No	0	No	0	1	6.9	No	Yes	No	0	No	0	1	7.5	Yes	Yes	No	0	No	0	1
284B	1	B	Yes	1	7.7	Yes	Yes	Yes	1	Yes	1	1	8.8	Yes	Yes	Yes	1	Yes	1	1	9.6	Yes	Yes	Yes	1	Yes	1	1	10.2	Yes	Yes	Yes	1	Yes	1	1	10.9	Yes	Yes	Yes	1	Yes	1	1	11.5	Yes	Yes	Yes	1	Yes	1	1
285B	1	B	Yes	1	3.8	No	No	No	0	No	0	0	6	No	Yes	No	0	Yes	1	1	6.8	No	Yes	No	0	Yes	1	1	7.5	Yes	Yes	Yes	1	Yes	1	1	8.2	Yes	Yes	Yes	1	Yes	1	1	8.9	Yes	Yes	Yes	1	Yes	1	1
286B	1	B	Yes	1	2.4	No	No	No	0	No	0	0	3	No	No	No	0	No	0	0	3.6	No	No	No	0	No	0	0	3.9	No	No	No	0	No	0	0	4.3	No	No	No	0	No	0	0	4.7	No	No	No	0	No	0	0
287B	1	B	Yes	1	3.5	No	No	No	0	No	0	0	3.9	No	No	No	0	No	0	0	4.2	No	No	No	0	No	0	0	4.5	No	No	No	0	No	0	0	4.8	No	No	No	0	No	0	0	5	No	Yes	No	0	Yes	1	1
288B	1	B		0	1.9	No	No	No	0	No	0	0	2.1	No	No	No	0	No	0	0	2.3	No	No	No	0	No	0	0	2.5	No	No	No	0	No	0	0	2.7	No	No	No	0	No	0	0	2.9	No	No	No	0	No	0	0
289B	1	B		0	1.1	No	No	No	0	No	0	0	1.3	No	No	No	0	No	0	0	1.4	No	No	No	0	No	0	0	1.5	No	No	No	0	No	0	0	1.6	No	No	No	0	No	0	0	1.7	No	No	No	0	No	0	0

Feasibility Factors:

# of First-Row 5 dBA Reduction:	5	7	12	14	14	15
% of First-Row 5 dBA Reduction:	27.8%	38.9%	66.7%	77.8%	77.8%	83.3%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**No**	Yes	Yes	Yes	Yes

Reasonableness Factors:

# of First-Row Design Goal:	1	1	3	8	11	13
% of First-Row Design Goal:	5.6%	5.6%	16.7%	44.4%	61.1%	72.2%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**No**	Yes	Yes	Yes
# of Benefited (Category B):	4	11	21	24	24	25
Cost of Noise Wall (Length x Height x $20/sq ft):	$923,000.00	$1,107,600.00	$1,292,200.00	$1,476,800.00	$1,661,400.00	$1,846,000.00
Cost of any other items critical to safety (snow storage o.h. overpass):	$115,375.00	$115,375.00	$115,375.00	$115,375.00	$115,375.00	$115,375.00
Anticipated Cost of Noise Abatement:	$1,038,375.00	$1,222,975.00	$1,407,575.00	$1,592,175.00	$1,776,775.00	$1,961,375.00
Activity Category B Allowable Cost ($30,000 per benefited receptor):	$120,000.00	$330,000.00	$630,000.00	$720,000.00	$720,000.00	$750,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$24,120.00	$24,120.00
Allowable Cost:	$120,000.00	$330,000.00	$630,000.00	$720,000.00	$744,120.00	$774,120.00
Difference between Anticipated Cost and Allowable Cost:	-$918,375.00	-$892,975.00	-$777,575.00	-$872,175.00	-$1,032,655.00	-$1,187,255.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**No**	**No**	**No**
Feasible and Reasonable:	**No**	**No**	**No**	**No**	**No**	**No**

Wall 11

Total Wall Length	3000	ft
Length of Activity Category C/E Land Use:		ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	21	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
290B	1	B	Yes	1	4.7	No	No	No	0	No	0	0
291B	1	B		0	4.1	No	No	No	0	No	0	0
292B	1	B		0	4	No	No	No	0	No	0	0
293B	1	B		0	2.7	No	No	No	0	No	0	0
294B	1	B	Yes	1	11.1	Yes	Yes	Yes	1	Yes	1	1
295B	1	B		0	6.7	No	Yes	No	0	No	0	1
296B	1	B		0	5	No	Yes	No	0	No	0	1
297B	1	B		0	6.2	No	Yes	No	0	No	0	1
298B	1	B	Yes	1	10.2	Yes	Yes	Yes	1	Yes	1	1
299B	1	B	Yes	1	11.9	Yes	Yes	Yes	1	Yes	1	1
300B	1	B	Yes	1	3.8	No	No	No	0	No	0	0
301B	1	B		0	5.8	No	Yes	No	0	No	0	1
302B	1	B		0	4.9	No	No	No	0	No	0	0
303B	1	B		0	4.3	No	No	No	0	No	0	0
304B	1	B		0	3	No	No	No	0	No	0	0
305B	1	B	Yes	1	2.3	No	No	No	0	No	0	0
306B	1	B	Yes	1	6.1	No	Yes	No	0	Yes	1	1
307B	1	B	Yes	1	6.4	No	Yes	No	0	Yes	1	1
308B	1	B	Yes	1	6.7	No	Yes	No	0	Yes	1	1
309B	1	B	Yes	1	6.9	No	Yes	No	0	Yes	1	1
310B	1	B		0	6.3	No	Yes	No	0	No	0	1
311B	1	B		0	5.6	No	Yes	No	0	No	0	1
312B	1	B		0	5	No	Yes	No	0	No	0	1
313B	1	B		0	6.4	No	Yes	No	0	No	0	1
314B	1	B		0	5.1	No	Yes	No	0	No	0	1
315B	1	B		0	5.5	No	Yes	No	0	No	0	1
316B	1	B	Yes	1	7.1	Yes	Yes	Yes	1	Yes	1	1
317B	1	B		0	5.2	No	Yes	No	0	No	0	1
318B	1	B	Yes	1	8.5	Yes	Yes	Yes	1	Yes	1	1
319B	1	B	Yes	1	5.6	No	Yes	No	0	Yes	1	1
320B	1	B	Yes	1	8.6	Yes	Yes	Yes	1	Yes	1	1
321B	1	B	Yes	1	5.2	No	Yes	No	0	Yes	1	1
322B	1	B	Yes	1	5.3	No	Yes	No	0	Yes	1	1
323B	1	B	Yes	1	5.5	No	Yes	No	0	Yes	1	1
324B	1	B	Yes	1	4.5	No	No	No	0	No	0	0
325B	1	B	Yes	1	5.2	No	Yes	No	0	Yes	1	1
326B	1	B	Yes	1	5.9	No	Yes	No	0	Yes	1	1
327B	1	B	Yes	1	3.4	No	No	No	0	No	0	0
674B	1	B		0	2.8	No	No	No	0	No	0	0

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
290B	5.6	No	Yes	No	0	Yes	1	1
291B	4.8	No	No	No	0	No	0	0
292B	5.1	No	Yes	No	0	No	0	1
293B	4.1	No	No	No	0	No	0	0
294B	12.2	Yes	Yes	Yes	1	Yes	1	1
295B	7.9	Yes	Yes	No	0	No	0	1
296B	6.2	No	Yes	No	0	No	0	1
297B	7.4	Yes	Yes	No	0	No	0	1
298B	11.3	Yes	Yes	Yes	1	Yes	1	1
299B	13.1	Yes	Yes	Yes	1	Yes	1	1
300B	4.4	No	No	No	0	No	0	0
301B	6.8	No	Yes	No	0	No	0	1
302B	5.8	No	Yes	No	0	No	0	1
303B	5.6	No	Yes	No	0	No	0	1
304B	4.9	No	No	No	0	No	0	0
305B	2.8	No	No	No	0	No	0	0
306B	7.1	Yes	Yes	Yes	1	Yes	1	1
307B	7.6	Yes	Yes	Yes	1	Yes	1	1
308B	7.9	Yes	Yes	Yes	1	Yes	1	1
309B	8	Yes	Yes	Yes	1	Yes	1	1
310B	7.8	Yes	Yes	No	0	No	0	1
311B	6.7	No	Yes	No	0	No	0	1
312B	6	No	Yes	No	0	No	0	1
313B	7.8	Yes	Yes	No	0	No	0	1
314B	7.5	Yes	Yes	No	0	No	0	1
315B	7.1	Yes	Yes	No	0	No	0	1
316B	7.9	Yes	Yes	Yes	1	Yes	1	1
317B	6.1	No	Yes	No	0	No	0	1
318B	9.3	Yes	Yes	Yes	1	Yes	1	1
319B	6.4	No	Yes	No	0	Yes	1	1
320B	9.5	Yes	Yes	Yes	1	Yes	1	1
321B	6	No	Yes	No	0	Yes	1	1
322B	6.1	No	Yes	No	0	Yes	1	1
323B	6.3	No	Yes	No	0	Yes	1	1
324B	5.2	No	Yes	No	0	Yes	1	1
325B	5.9	No	Yes	No	0	Yes	1	1
326B	7.5	Yes	Yes	Yes	1	Yes	1	1
327B	4	No	No	No	0	No	0	0
674B	4.9	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
290B	6.3	No	Yes	No	0	Yes	1	1
291B	5.4	No	Yes	No	0	No	0	1
292B	5.7	No	Yes	No	0	No	0	1
293B	4.5	No	No	No	0	No	0	0
294B	13.2	Yes	Yes	Yes	1	Yes	1	1
295B	8.7	Yes	Yes	No	0	No	0	1
296B	7	Yes	Yes	No	0	No	0	1
297B	8.2	Yes	Yes	No	0	No	0	1
298B	12.3	Yes	Yes	Yes	1	Yes	1	1
299B	14.1	Yes	Yes	Yes	1	Yes	1	1
300B	5	No	Yes	No	0	No	0	0
301B	7.7	Yes	Yes	No	0	No	0	1
302B	6.5	No	Yes	No	0	No	0	1
303B	6.5	No	Yes	No	0	No	0	1
304B	5.5	No	Yes	No	0	No	0	1
305B	3.4	No	No	No	0	No	0	0
306B	7.9	Yes	Yes	Yes	1	Yes	1	1
307B	8.5	Yes	Yes	Yes	1	Yes	1	1
308B	8.9	Yes	Yes	Yes	1	Yes	1	1
309B	9	Yes	Yes	Yes	1	Yes	1	1
310B	8.9	Yes	Yes	No	0	No	0	1
311B	7.4	Yes	Yes	No	0	No	0	1
312B	6.7	No	Yes	No	0	No	0	1
313B	8.8	Yes	Yes	No	0	No	0	1
314B	8.5	Yes	Yes	No	0	No	0	1
315B	8	Yes	Yes	No	0	No	0	1
316B	8.6	Yes	Yes	Yes	1	Yes	1	1
317B	6.9	No	Yes	No	0	No	0	1
318B	10.1	Yes	Yes	Yes	1	Yes	1	1
319B	7.1	Yes	Yes	Yes	1	Yes	1	1
320B	10.2	Yes	Yes	Yes	1	Yes	1	1
321B	6.8	No	Yes	No	0	Yes	1	1
322B	6.8	No	Yes	No	0	Yes	1	1
323B	7	Yes	Yes	Yes	1	Yes	1	1
324B	5.7	No	Yes	No	0	Yes	1	1
325B	6.5	No	Yes	No	0	Yes	1	1
326B	8.7	Yes	Yes	Yes	1	Yes	1	1
327B	4.5	No	No	No	0	No	0	0
674B	5.5	No	Yes	No	0	No	0	1

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
290B	6.9	No	Yes	No	0	Yes	1	1
291B	5.8	No	Yes	No	0	No	0	1
292B	6	No	Yes	No	0	No	0	1
293B	4.9	No	No	No	0	No	0	0
294B	14.2	Yes	Yes	Yes	1	Yes	1	1
295B	9.4	Yes	Yes	No	0	No	0	1
296B	7.3	Yes	Yes	No	0	No	0	1
297B	8.9	Yes	Yes	No	0	No	0	1
298B	13	Yes	Yes	Yes	1	Yes	1	1
299B	15	Yes	Yes	Yes	1	Yes	1	1
300B	5.3	No	Yes	No	0	Yes	1	1
301B	8.3	Yes	Yes	No	0	No	0	1
302B	7	Yes	Yes	No	0	No	0	1
303B	6.8	No	Yes	No	0	No	0	1
304B	6	No	Yes	No	0	No	0	1
305B	3.7	No	No	No	0	No	0	0
306B	8.5	Yes	Yes	Yes	1	Yes	1	1
307B	9.2	Yes	Yes	Yes	1	Yes	1	1
308B	9.6	Yes	Yes	Yes	1	Yes	1	1
309B	9.6	Yes	Yes	Yes	1	Yes	1	1
310B	9.6	Yes	Yes	No	0	No	0	1
311B	8	Yes	Yes	No	0	No	0	1
312B	7.2	Yes	Yes	No	0	No	0	1
313B	9.6	Yes	Yes	No	0	No	0	1
314B	9.3	Yes	Yes	No	0	No	0	1
315B	8.8	Yes	Yes	No	0	No	0	1
316B	9.1	Yes	Yes	Yes	1	Yes	1	1
317B	7.6	Yes	Yes	No	0	No	0	1
318B	10.7	Yes	Yes	Yes	1	Yes	1	1
319B	7.7	Yes	Yes	Yes	1	Yes	1	1
320B	11.1	Yes	Yes	Yes	1	Yes	1	1
321B	7.4	Yes	Yes	Yes	1	Yes	1	1
322B	7.5	Yes	Yes	Yes	1	Yes	1	1
323B	7.6	Yes	Yes	Yes	1	Yes	1	1
324B	6.3	No	Yes	No	0	Yes	1	1
325B	7.1	Yes	Yes	Yes	1	Yes	1	1
326B	9.7	Yes	Yes	Yes	1	Yes	1	1
327B	4.9	No	No	No	0	No	0	0
674B	6	No	Yes	No	0	No	0	1

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
290B	7.5	Yes	Yes	Yes	1	Yes	1	1
291B	6.2	No	Yes	No	0	No	0	1
292B	6.5	No	Yes	No	0	No	0	1
293B	5.3	No	Yes	No	0	No	0	1
294B	14.7	Yes	Yes	Yes	1	Yes	1	1
295B	10.1	Yes	Yes	No	0	No	0	1
296B	7.8	Yes	Yes	No	0	No	0	1
297B	9.5	Yes	Yes	No	0	No	0	1
298B	13.7	Yes	Yes	Yes	1	Yes	1	1
299B	15.7	Yes	Yes	Yes	1	Yes	1	1
300B	5.8	No	Yes	No	0	Yes	1	1
301B	8.9	Yes	Yes	No	0	No	0	1
302B	7.5	Yes	Yes	No	0	No	0	1
303B	7.4	Yes	Yes	No	0	No	0	1
304B	6.5	No	Yes	No	0	No	0	1
305B	4.1	No	No	No	0	No	0	0
306B	9.1	Yes	Yes	Yes	1	Yes	1	1
307B	9.9	Yes	Yes	Yes	1	Yes	1	1
308B	10.3	Yes	Yes	Yes	1	Yes	1	1
309B	10.3	Yes	Yes	Yes	1	Yes	1	1
310B	10.4	Yes	Yes	No	0	No	0	1
311B	8.6	Yes	Yes	No	0	No	0	1
312B	7.7	Yes	Yes	No	0	No	0	1
313B	10.2	Yes	Yes	No	0	No	0	1
314B	9.9	Yes	Yes	No	0	No	0	1
315B	9.4	Yes	Yes	No	0	No	0	1
316B	9.7	Yes	Yes	Yes	1	Yes	1	1
317B	8.2	Yes	Yes	No	0	No	0	1
318B	11.2	Yes	Yes	Yes	1	Yes	1	1
319B	8.3	Yes	Yes	Yes	1	Yes	1	1
320B	11.7	Yes	Yes	Yes	1	Yes	1	1
321B	8	Yes	Yes	Yes	1	Yes	1	1
322B	8	Yes	Yes	Yes	1	Yes	1	1
323B	8.1	Yes	Yes	Yes	1	Yes	1	1
324B	6.7	No	Yes	No	0	Yes	1	1
325B	7.5	Yes	Yes	Yes	1	Yes	1	1
326B	10.5	Yes	Yes	Yes	1	Yes	1	1
327B	5.3	No	Yes	No	0	No	0	1
674B	6.5	No	Yes	No	0	No	0	1

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
290B	7.9	Yes	Yes	Yes	1	Yes	1	1
291B	6.6	No	Yes	No	0	No	0	1
292B	6.8	No	Yes	No	0	No	0	1
293B	5.5	No	Yes	No	0	No	0	1
294B	15.5	Yes	Yes	Yes	1	Yes	1	1
295B	10.5	Yes	Yes	No	0	No	0	1
296B	8.3	Yes	Yes	No	0	No	0	1
297B	10	Yes	Yes	No	0	No	0	1
298B	14.3	Yes	Yes	Yes	1	Yes	1	1
299B	16.5	Yes	Yes	Yes	1	Yes	1	1
300B	6.3	No	Yes	No	0	Yes	1	1
301B	9.6	Yes	Yes	No	0	No	0	1
302B	8	Yes	Yes	No	0	No	0	1
303B	8	Yes	Yes	No	0	No	0	1
304B	6.9	No	Yes	No	0	No	0	1
305B	4.6	No	No	No	0	No	0	0
306B	9.6	Yes	Yes	Yes	1	Yes	1	1
307B	10.4	Yes	Yes	Yes	1	Yes	1	1
308B	10.9	Yes	Yes	Yes	1	Yes	1	1
309B	10.9	Yes	Yes	Yes	1	Yes	1	1
310B	11	Yes	Yes	No	0	No	0	1
311B	9.1	Yes	Yes	No	0	No	0	1
312B	8.2	Yes	Yes	No	0	No	0	1
313B	10.9	Yes	Yes	No	0	No	0	1
314B	10.5	Yes	Yes	No	0	No	0	1
315B	10	Yes	Yes	No	0	No	0	1
316B	10.4	Yes	Yes	Yes	1	Yes	1	1
317B	8.7	Yes	Yes	No	0	No	0	1
318B	11.9	Yes	Yes	Yes	1	Yes	1	1
319B	8.8	Yes	Yes	Yes	1	Yes	1	1
320B	12.2	Yes	Yes	Yes	1	Yes	1	1
321B	8.5	Yes	Yes	Yes	1	Yes	1	1
322B	8.5	Yes	Yes	Yes	1	Yes	1	1
323B	8.6	Yes	Yes	Yes	1	Yes	1	1
324B	7.2	Yes	Yes	Yes	1	Yes	1	1
325B	8	Yes	Yes	Yes	1	Yes	1	1
326B	11.1	Yes	Yes	Yes	1	Yes	1	1
327B	5.6	No	Yes	No	0	Yes	1	1
674B	6.9	No	Yes	No	0	No	0	1

Feasibility Factors:				
# of First-Row 5 dBA Reduction:	16	18	19	19	20	20
% of First-Row 5 dBA Reduction:	76.2%	85.7%	90.5%	90.5%	95.2%	95.2%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	Yes	Yes	Yes	Yes	Yes	Yes
Reasonableness Factors:						
# of First-Row Design Goal:	6	11	13	16	17	18
% of First-Row Design Goal:	28.6%	52.4%	61.9%	76.2%	81.0%	85.7%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	No	Yes	Yes	Yes	Yes	Yes
# of Benefited (Category B):	27	32	36	36	38	38
Cost of Noise Wall (Length x Height x $20/sq ft):	$600,000.00	$720,000.00	$840,000.00	$960,000.00	$1,080,000.00	$1,200,000.00
Cost of any other items critical to safety (snow storage on overpass):	$75,000.00	$75,000.00	$75,000.00	$75,000.00	$75,000.00	$75,000.00
Anticipated Cost of Noise Abatement:	$675,000.00	$795,000.00	$915,000.00	$1,035,000.00	$1,155,000.00	$1,275,000.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$810,000.00	$960,000.00	$1,080,000.00	$1,080,000.00	$1,140,000.00	$1,140,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$810,000.00	$960,000.00	$1,080,000.00	$1,080,000.00	$1,140,000.00	$1,140,000.00
Difference between Anticipated Cost and Allowable Cost:	$135,000.00	$165,000.00	$165,000.00	$45,000.00	-$15,000.00	-$135,000.00
Cost Effective (Anticipated Cost < Allowable Cost):	Yes	Yes	Yes	Yes	No	No
Feasible and Reasonable:	**No**	**Yes**	**Yes**	**Yes**	**No**	**No**

Wall 12

Total Wall Length	2750	ft
Length of Activity Category C/E Land Use:		ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	17	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
133B	1	B	Yes	1	4.8	No	No	No	0	No	0	0
134B	1	B		0	2.7	No	No	No	0	No	0	0
135B	1	B		0	2.2	No	No	No	0	No	0	0
136B	1	B		0	1.6	No	No	No	0	No	0	0
137B	1	B		0	2.2	No	No	No	0	No	0	0
138B	1	B		0	1.1	No	No	No	0	No	0	0
139B	1	B		0	1	No	No	No	0	No	0	0
140B	1	B		0	0.6	No	No	No	0	No	0	0
141B	1	B		0	0.6	No	No	No	0	No	0	0
142B	1	B		0	0.4	No	No	No	0	No	0	0
143B	1	B	Yes	1	3.8	No	No	No	0	No	0	0
144B	1	B		0	2.5	No	No	No	0	No	0	0
145B	1	B		0	1.9	No	No	No	0	No	0	0
146B	1	B	Yes	1	5.8	No	Yes	No	0	Yes	1	1
147B	1	B		0	3.4	No	No	No	0	No	0	0
148B	1	B	Yes	1	4.5	No	No	No	0	No	0	0
149B	1	B	Yes	1	5.3	No	Yes	No	0	Yes	1	1
150B	1	B	Yes	1	5.5	No	Yes	No	0	Yes	1	1
151B	1	B	Yes	1	5.7	No	Yes	No	0	Yes	1	1
152B	1	B	Yes	1	5.6	No	Yes	No	0	Yes	1	1
153B	1	B		0	2.3	No	No	No	0	No	0	0
154B	1	B	Yes	1	4	No	No	No	0	No	0	0
155B	4	B		0	2.4	No	No	No	0	No	0	0
156B	4	B		0	2.1	No	No	No	0	No	0	0
157B	4	B		0	2.1	No	No	No	0	No	0	0
158B	4	B		0	2.7	No	No	No	0	No	0	0
159B	1	E	Yes	1	1.6	No	No	No	0	No	0	0
160B	1	B	Yes	1	2.9	No	No	No	0	No	0	0
161B	1	B	Yes	1	1.6	No	No	No	0	No	0	0
162B	1	B		0	1.3	No	No	No	0	No	0	0
163B	1	B	Yes	1	1	No	No	No	0	No	0	0
598B	1	B	Yes	1	2.7	No	No	No	0	No	0	0
599B	1	B		0	1.8	No	No	No	0	No	0	0
600B	1	B	Yes	1	2.5	No	No	No	0	No	0	0
601B	1	B		0	2.1	No	No	No	0	No	0	0
602B	1	B		0	1.9	No	No	No	0	No	0	0
605B	1	B	Yes	1	2.9	No	No	No	0	No	0	0
606B	1	B		0	2.4	No	No	No	0	No	0	0
607B	1	B		0	2.2	No	No	No	0	No	0	0
608B	1	B		0	4.3	No	No	No	0	No	0	0
609B	1	B		0	3.7	No	No	No	0	No	0	0
610B	1	B		0	3.1	No	No	No	0	No	0	0
611B	1	B		0	2.7	No	No	No	0	No	0	0
668B	1	B	Yes	1	2.9	No	No	No	0	No	0	0

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
133B	5.7	No	Yes	No	0	Yes	1	1
134B	3.6	No	No	No	0	No	0	0
135B	2.9	No	No	No	0	No	0	0
136B	2.6	No	No	No	0	No	0	0
137B	2.7	No	No	No	0	No	0	0
138B	1.9	No	No	No	0	No	0	0
139B	1.7	No	No	No	0	No	0	0
140B	1	No	No	No	0	No	0	0
141B	0.9	No	No	No	0	No	0	0
142B	0.6	No	No	No	0	No	0	0
143B	5.8	No	Yes	No	0	Yes	1	1
144B	3.7	No	No	No	0	No	0	0
145B	2.8	No	No	No	0	No	0	0
146B	7.8	Yes	Yes	Yes	1	Yes	1	1
147B	4.7	No	No	No	0	No	0	0
148B	6	No	Yes	No	0	Yes	1	1
149B	6.3	No	Yes	No	0	Yes	1	1
150B	6.4	No	Yes	No	0	Yes	1	1
151B	6.7	No	Yes	No	0	Yes	1	1
152B	6.8	No	Yes	No	0	Yes	1	1
153B	2.9	No	No	No	0	No	0	0
154B	5.2	No	Yes	No	0	Yes	1	1
155B	3.1	No	No	No	0	No	0	0
156B	2.6	No	No	No	0	No	0	0
157B	2.7	No	No	No	0	No	0	0
158B	3.4	No	No	No	0	No	0	0
159B	2.1	No	No	No	0	No	0	0
160B	3.7	No	No	No	0	No	0	0
161B	2.2	No	No	No	0	No	0	0
162B	1.6	No	No	No	0	No	0	0
163B	1.4	No	No	No	0	No	0	0
598B	3.1	No	No	No	0	No	0	0
599B	2.3	No	No	No	0	No	0	0
600B	3.2	No	No	No	0	No	0	0
601B	2.7	No	No	No	0	No	0	0
602B	2.5	No	No	No	0	No	0	0
605B	3.7	No	No	No	0	No	0	0
606B	3	No	No	No	0	No	0	0
607B	2.7	No	No	No	0	No	0	0
608B	5.4	No	Yes	No	0	No	0	1
609B	4.6	No	No	No	0	No	0	0
610B	3.9	No	No	No	0	No	0	0
611B	3.3	No	No	No	0	No	0	0
668B	3.7	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
133B	6.4	No	Yes	No	0	Yes	1	1
134B	4	No	No	No	0	No	0	0
135B	3.2	No	No	No	0	No	0	0
136B	3.4	No	No	No	0	No	0	0
137B	3.1	No	No	No	0	No	0	0
138B	2.6	No	No	No	0	No	0	0
139B	2.2	No	No	No	0	No	0	0
140B	1.5	No	No	No	0	No	0	0
141B	1.2	No	No	No	0	No	0	0
142B	0.8	No	No	No	0	No	0	0
143B	7.1	Yes	Yes	Yes	1	Yes	1	1
144B	5.3	No	Yes	No	0	No	0	1
145B	3.8	No	No	No	0	No	0	0
146B	9	Yes	Yes	Yes	1	Yes	1	1
147B	6.1	No	Yes	No	0	No	0	1
148B	6.7	No	Yes	No	0	Yes	1	1
149B	7.1	Yes	Yes	Yes	1	Yes	1	1
150B	7.3	Yes	Yes	Yes	1	Yes	1	1
151B	7.7	Yes	Yes	Yes	1	Yes	1	1
152B	8.6	Yes	Yes	Yes	1	Yes	1	1
153B	4.6	No	No	No	0	No	0	0
154B	8.5	Yes	Yes	Yes	1	Yes	1	1
155B	6.4	No	Yes	No	0	No	0	4
156B	3.7	No	No	No	0	No	0	0
157B	3.8	No	No	No	0	No	0	0
158B	5.8	No	Yes	No	0	No	0	4
159B	2.8	No	No	No	0	No	0	0
160B	4.9	No	No	No	0	No	0	0
161B	3.5	No	No	No	0	No	0	0
162B	2.1	No	No	No	0	No	0	0
163B	1.8	No	No	No	0	No	0	0
598B	5.6	No	Yes	No	0	Yes	1	1
599B	3.8	No	No	No	0	No	0	0
600B	5.7	No	Yes	No	0	Yes	1	1
601B	4.5	No	No	No	0	No	0	0
602B	4.1	No	No	No	0	No	0	0
605B	5.7	No	Yes	No	0	Yes	1	1
606B	4.9	No	No	No	0	No	0	0
607B	4.2	No	No	No	0	No	0	0
608B	7.2	Yes	Yes	No	0	No	0	1
609B	6.1	No	Yes	No	0	No	0	1
610B	5.4	No	Yes	No	0	No	0	1
611B	4.6	No	No	No	0	No	0	0
668B	6.4	No	Yes	No	0	Yes	1	1

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
133B	7	Yes	Yes	Yes	1	Yes	1	1
134B	4.4	No	No	No	0	No	0	0
135B	3.5	No	No	No	0	No	0	0
136B	3.8	No	No	No	0	No	0	0
137B	3.3	No	No	No	0	No	0	0
138B	3.2	No	No	No	0	No	0	0
139B	2.5	No	No	No	0	No	0	0
140B	1.8	No	No	No	0	No	0	0
141B	1.4	No	No	No	0	No	0	0
142B	0.9	No	No	No	0	No	0	0
143B	8	Yes	Yes	Yes	1	Yes	1	1
144B	6.2	No	Yes	No	0	No	0	1
145B	5	No	Yes	No	0	No	0	1
146B	10	Yes	Yes	Yes	1	Yes	1	1
147B	7.3	Yes	Yes	No	0	No	0	1
148B	7.6	Yes	Yes	Yes	1	Yes	1	1
149B	8	Yes	Yes	Yes	1	Yes	1	1
150B	8.2	Yes	Yes	Yes	1	Yes	1	1
151B	8.7	Yes	Yes	Yes	1	Yes	1	1
152B	9.4	Yes	Yes	Yes	1	Yes	1	1
153B	7.5	Yes	Yes	No	0	No	0	1
154B	9.8	Yes	Yes	Yes	1	Yes	1	1
155B	8	Yes	Yes	No	0	No	0	4
156B	5.6	No	Yes	No	0	No	0	4
157B	5.8	No	Yes	No	0	No	0	4
158B	8.1	Yes	Yes	No	0	No	0	4
159B	4.3	No	No	No	0	No	0	0
160B	6.8	No	Yes	No	0	Yes	1	1
161B	5.3	No	Yes	No	0	Yes	1	1
162B	3.1	No	No	No	0	No	0	0
163B	2.4	No	No	No	0	No	0	0
598B	8.1	Yes	Yes	Yes	1	Yes	1	1
599B	6.4	No	Yes	No	0	No	0	1
600B	7.6	Yes	Yes	Yes	1	Yes	1	1
601B	6.9	No	Yes	No	0	No	0	1
602B	6.5	No	Yes	No	0	No	0	1
605B	7.8	Yes	Yes	Yes	1	Yes	1	1
606B	7	Yes	Yes	No	0	No	0	1
607B	6.4	No	Yes	No	0	No	0	1
608B	8.9	Yes	Yes	No	0	No	0	1
609B	8.1	Yes	Yes	No	0	No	0	1
610B	7.2	Yes	Yes	No	0	No	0	1
611B	6.4	No	Yes	No	0	No	0	1
668B	8.4	Yes	Yes	Yes	1	Yes	1	1

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
133B	7.5	Yes	Yes	Yes	1	Yes	1	1
134B	4.7	No	No	No	0	No	0	0
135B	3.8	No	No	No	0	No	0	0
136B	4.2	No	No	No	0	No	0	0
137B	3.6	No	No	No	0	No	0	0
138B	3.5	No	No	No	0	No	0	0
139B	2.7	No	No	No	0	No	0	0
140B	1.9	No	No	No	0	No	0	0
141B	1.6	No	No	No	0	No	0	0
142B	0.9	No	No	No	0	No	0	0
143B	8.8	Yes	Yes	Yes	1	Yes	1	1
144B	6.9	No	Yes	No	0	No	0	1
145B	5.6	No	Yes	No	0	No	0	1
146B	10.8	Yes	Yes	Yes	1	Yes	1	1
147B	8	Yes	Yes	No	0	No	0	1
148B	8.3	Yes	Yes	Yes	1	Yes	1	1
149B	8.8	Yes	Yes	Yes	1	Yes	1	1
150B	9.1	Yes	Yes	Yes	1	Yes	1	1
151B	9.6	Yes	Yes	Yes	1	Yes	1	1
152B	10.1	Yes	Yes	Yes	1	Yes	1	1
153B	8.6	Yes	Yes	No	0	No	0	1
154B	10.7	Yes	Yes	Yes	1	Yes	1	1
155B	9	Yes	Yes	No	0	No	0	4
156B	8.1	Yes	Yes	No	0	No	0	4
157B	8.1	Yes	Yes	No	0	No	0	4
158B	9.2	Yes	Yes	No	0	No	0	4
159B	5.6	No	Yes	No	0	Yes	1	0
160B	8.7	Yes	Yes	Yes	1	Yes	1	1
161B	6	No	Yes	No	0	Yes	1	1
162B	3.7	No	No	No	0	No	0	0
163B	3	No	No	No	0	No	0	0
598B	9.1	Yes	Yes	Yes	1	Yes	1	1
599B	7.6	Yes	Yes	No	0	No	0	1
600B	8.5	Yes	Yes	Yes	1	Yes	1	1
601B	7.8	Yes	Yes	No	0	No	0	1
602B	7.4	Yes	Yes	No	0	No	0	1
605B	8.7	Yes	Yes	Yes	1	Yes	1	1
606B	7.8	Yes	Yes	No	0	No	0	1
607B	7.3	Yes	Yes	No	0	No	0	1
608B	9.7	Yes	Yes	No	0	No	0	1
609B	9	Yes	Yes	No	0	No	0	1
610B	8	Yes	Yes	No	0	No	0	1
611B	7.4	Yes	Yes	No	0	No	0	1
668B	9.4	Yes	Yes	Yes	1	Yes	1	1

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
133B	7.9	Yes	Yes	Yes	1	Yes	1	1
134B	5.1	No	Yes	No	0	No	0	1
135B	4.1	No	No	No	0	No	0	0
136B	4.5	No	No	No	0	No	0	0
137B	3.8	No	No	No	0	No	0	0
138B	3.8	No	No	No	0	No	0	0
139B	2.9	No	No	No	0	No	0	0
140B	2	No	No	No	0	No	0	0
141B	1.7	No	No	No	0	No	0	0
142B	1	No	No	No	0	No	0	0
143B	9.4	Yes	Yes	Yes	1	Yes	1	1
144B	7.4	Yes	Yes	No	0	No	0	1
145B	6.1	No	Yes	No	0	No	0	1
146B	11.5	Yes	Yes	Yes	1	Yes	1	1
147B	8.7	Yes	Yes	No	0	No	0	1
148B	9	Yes	Yes	Yes	1	Yes	1	1
149B	9.5	Yes	Yes	Yes	1	Yes	1	1
150B	9.8	Yes	Yes	Yes	1	Yes	1	1
151B	10.2	Yes	Yes	Yes	1	Yes	1	1
152B	10.7	Yes	Yes	Yes	1	Yes	1	1
153B	9.3	Yes	Yes	No	0	No	0	1
154B	11.5	Yes	Yes	Yes	1	Yes	1	1
155B	9.7	Yes	Yes	No	0	No	0	4
156B	8.8	Yes	Yes	No	0	No	0	4
157B	8.8	Yes	Yes	No	0	No	0	4
158B	9.8	Yes	Yes	No	0	No	0	4
159B	7.8	Yes	Yes	Yes	1	Yes	1	0
160B	9.6	Yes	Yes	Yes	1	Yes	1	1
161B	6.4	No	Yes	No	0	Yes	1	1
162B	4.9	No	No	No	0	No	0	0
163B	3.1	No	No	No	0	No	0	0
598B	9.8	Yes	Yes	Yes	1	Yes	1	1
599B	8.2	Yes	Yes	No	0	No	0	1
600B	9.1	Yes	Yes	Yes	1	Yes	1	1
601B	8.4	Yes	Yes	No	0	No	0	1
602B	8	Yes	Yes	No	0	No	0	1
605B	9.3	Yes	Yes	Yes	1	Yes	1	1
606B	8.4	Yes	Yes	No	0	No	0	1
607B	7.8	Yes	Yes	No	0	No	0	1
608B	10.4	Yes	Yes	No	0	No	0	1
609B	9.6	Yes	Yes	No	0	No	0	1
610B	8.6	Yes	Yes	No	0	No	0	1
611B	7.9	Yes	Yes	No	0	No	0	1
668B	10.1	Yes	Yes	Yes	1	Yes	1	1

Feasibility Factors:

# of First-Row 5 dBA Reduction:	5	9	13	15	16	16
% of First-Row 5 dBA Reduction:	29.4%	52.9%	76.5%	88.2%	94.1%	94.1%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Reasonableness Factors:

# of First-Row Design Goal:	0	1	7	13	14	15
% of First-Row Design Goal:	0.0%	5.9%	41.2%	76.5%	82.4%	88.2%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
# of Benefited (Category B):	5	10	26	44	44	45
Cost of Noise Wall (Length x Height x $20/sq ft):	$550,000.00	$660,000.00	$770,000.00	$880,000.00	$990,000.00	$1,100,000.00
Cost of any other items critical to safety (snow storage on overpass):	$68,750.00	$68,750.00	$68,750.00	$68,750.00	$68,750.00	$68,750.00
Anticipated Cost of Noise Abatement:	$618,750.00	$728,750.00	$838,750.00	$948,750.00	$1,058,750.00	$1,168,750.00
Activity Category B Allowable Cost ($30,000 per benefited receptor):	$150,000.00	$300,000.00	$780,000.00	$1,320,000.00	$1,320,000.00	$1,350,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$150,000.00	$300,000.00	$780,000.00	$1,320,000.00	$1,320,000.00	$1,350,000.00
Difference between Anticipated Cost and Allowable Cost:	-$468,750.00	-$428,750.00	-$58,750.00	$371,250.00	$261,250.00	$181,250.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**Yes**	**Yes**	**Yes**
Feasible and Reasonable:	**No**	**No**	**No**	**Yes**	**Yes**	**Yes**

Wall 13

Total Wall Length	4481	ft
Length of Activity Category C/E Land Use:		ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	29	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
446B	1	B	Yes	1	1.1	No	No	No	0	No	0	0	2.2	No	No	No	0	No	0	0	2.9	No	No	No	0	No	0	0
447B	1	B	Yes	1	1.2	No	No	No	0	No	0	0	2.6	No	No	No	0	No	0	0	3.9	No	No	No	0	No	0	0
448B	1	B	Yes	1	0.9	No	No	No	0	No	0	0	2.1	No	No	No	0	No	0	0	3.4	No	No	No	0	No	0	0
449B	1	B	Yes	1	0.4	No	No	No	0	No	0	0	1.4	No	No	No	0	No	0	0	2.4	No	No	No	0	No	0	0
450B	1	B	Yes	1	0.7	No	No	No	0	No	0	0	1.6	No	No	No	0	No	0	0	2.8	No	No	No	0	No	0	0
451B	1	B	Yes	1	0.2	No	No	No	0	No	0	0	1.4	No	No	No	0	No	0	0	2.1	No	No	No	0	No	0	0
452B	1	B	Yes	1	0.2	No	No	No	0	No	0	0	1.1	No	No	No	0	No	0	0	2.1	No	No	No	0	No	0	0
453B	1	B	Yes	1	0.2	No	No	No	0	No	0	0	1.5	No	No	No	0	No	0	0	2.2	No	No	No	0	No	0	0
454B	1	B	Yes	1	0.4	No	No	No	0	No	0	0	1.6	No	No	No	0	No	0	0	2.5	No	No	No	0	No	0	0
455B	1	B	Yes	1	1.6	No	No	No	0	No	0	0	2.4	No	No	No	0	No	0	0	3.6	No	No	No	0	No	0	0
456B	1	B	Yes	1	2	No	No	No	0	No	0	0	2.9	No	No	No	0	No	0	0	4.3	No	No	No	0	No	0	0
457B	1	B	Yes	1	1.4	No	No	No	0	No	0	0	2.3	No	No	No	0	No	0	0	3.3	No	No	No	0	No	0	0
458B	1	B	Yes	1	1.6	No	No	No	0	No	0	0	2.3	No	No	No	0	No	0	0	3.2	No	No	No	0	No	0	0
459B	1	B	Yes	1	0.1	No	No	No	0	No	0	0	1.4	No	No	No	0	No	0	0	4	No	No	No	0	No	0	0
460B	1	B	0	1.7	No	No	No	No	0	No	0	0	2.4	No	No	No	0	No	0	0	3.4	No	No	No	0	No	0	0
461B	1	B	Yes	1	2.5	No	No	No	0	No	0	0	3.4	No	No	No	0	No	0	0	4.1	No	No	No	0	No	0	0
462B	1	B	Yes	1	3.1	No	No	No	0	No	0	0	3.9	No	No	No	0	No	0	0	4.9	No	No	No	0	No	0	0
463B	1	B	Yes	1	2.6	No	No	No	0	No	0	0	3.6	No	No	No	0	No	0	0	4.3	No	No	No	0	No	0	0
464B	1	B	Yes	1	3.2	No	No	No	0	No	0	0	4.4	No	No	No	0	No	0	0	5.9	No	Yes	No	0	Yes	1	1
465B	1	B	Yes	1	4.2	No	No	No	0	No	0	0	7.9	Yes	Yes	Yes	1	Yes	1	1	9.5	Yes	Yes	Yes	1	Yes	1	1
466B	1	B	Yes	1	5.2	No	Yes	No	0	Yes	1	1	9.4	Yes	Yes	Yes	1	Yes	1	1	11.4	Yes	Yes	Yes	1	Yes	1	1
467B	1	B	Yes	1	3.5	No	No	No	0	No	0	0	4.7	No	No	No	0	No	0	0	6.8	No	Yes	No	0	Yes	1	1
468B	1	B	0	3.2	No	No	No	No	0	No	0	0	3.7	No	No	No	0	No	0	0	5.2	No	Yes	No	0	No	0	1
469B	1	B	0	3.3	No	No	No	No	0	No	0	0	3.6	No	No	No	0	No	0	0	5.8	No	Yes	No	0	No	0	1
470B	1	B	0	2.7	No	No	No	No	0	No	0	0	3.3	No	No	No	0	No	0	0	4.7	No	No	No	0	No	0	0
471B	1	B	Yes	1	3	No	No	No	0	No	0	0	4.3	No	Yes	No	0	No	0	0	5.6	No	Yes	No	0	Yes	1	1
472B	1	B	Yes	1	4.1	No	No	No	0	No	0	0	5	No	Yes	No	0	Yes	1	1	8.8	Yes	Yes	Yes	1	Yes	1	1
473B	1	B	Yes	1	4.2	No	No	No	0	No	0	0	4.7	No	No	No	0	No	0	0	8.8	Yes	Yes	Yes	1	Yes	1	1
474B	1	B	Yes	1	2.9	No	No	No	0	No	0	0	3.5	No	No	No	0	No	0	0	4.5	No	No	No	0	No	0	0
475B	1	B	0	1.4	No	No	No	No	0	No	0	0	1.9	No	No	No	0	No	0	0	2.5	No	No	No	0	No	0	0
476B	1	B	0	0.9	No	No	No	No	0	No	0	0	1.3	No	No	No	0	No	0	0	1.8	No	No	No	0	No	0	0
477B	1	B	0	1.4	No	No	No	No	0	No	0	0	2	No	No	No	0	No	0	0	2.4	No	No	No	0	No	0	0
478B	1	B	0	1	No	No	No	No	0	No	0	0	1.5	No	No	No	0	No	0	0	1.9	No	No	No	0	No	0	0
479B	1	B	0	1.4	No	No	No	No	0	No	0	0	1.9	No	No	No	0	No	0	0	2.4	No	No	No	0	No	0	0
480B	1	B	0	0.8	No	No	No	No	0	No	0	0	1.2	No	No	No	0	No	0	0	1.5	No	No	No	0	No	0	0
481B	1	B	0	1	No	No	No	No	0	No	0	0	1.4	No	No	No	0	No	0	0	1.8	No	No	No	0	No	0	0
482B	1	B	0	1.3	No	No	No	No	0	No	0	0	1.9	No	No	No	0	No	0	0	2.2	No	No	No	0	No	0	0
483B	1	B	0	0.6	No	No	No	No	0	No	0	0	0.9	No	No	No	0	No	0	0	1.2	No	No	No	0	No	0	0
484B	1	B	0	1	No	No	No	No	0	No	0	0	1.4	No	No	No	0	No	0	0	1.7	No	No	No	0	No	0	0
485B	1	B	0	-0.1	No	No	No	No	0	No	0	0	0.2	No	No	No	0	No	0	0	0.4	No	No	No	0	No	0	0
486B	1	B	0	0.3	No	No	No	No	0	No	0	0	0.6	No	No	No	0	No	0	0	0.9	No	No	No	0	No	0	0
487B	1	B	0	0.1	No	No	No	No	0	No	0	0	0.4	No	No	No	0	No	0	0	0.8	No	No	No	0	No	0	0
488B	1	B	0	0.1	No	No	No	No	0	No	0	0	0.2	No	No	No	0	No	0	0	0.3	No	No	No	0	No	0	0
489B	1	B	0	0	No	No	No	No	0	No	0	0	0.2	No	No	No	0	No	0	0	0.5	No	No	No	0	No	0	0
490B	1	B	0	0.2	No	No	No	No	0	No	0	0	0.4	No	No	No	0	No	0	0	0.8	No	No	No	0	No	0	0
491B	1	B	0	0.2	No	No	No	No	0	No	0	0	0.2	No	No	No	0	No	0	0	0.5	No	No	No	0	No	0	0
492B	1	B	0	0.1	No	No	No	No	0	No	0	0	0.2	No	No	No	0	No	0	0	0.5	No	No	No	0	No	0	0
493B	1	B	0	-0.2	No	No	No	No	0	No	0	0	-0.1	No	No	No	0	No	0	0	0.3	No	No	No	0	No	0	0
494B	1	B	0	0.2	No	No	No	No	0	No	0	0	0.4	No	No	No	0	No	0	0	0.8	No	No	No	0	No	0	0
495B	1	B	Yes	1	4.1	No	No	No	0	Yes	1	1	5	No	Yes	No	0	Yes	1	1	7.4	Yes	Yes	Yes	1	Yes	1	1
496B	1	B	0	3.3	No	No	No	No	0	No	0	0	3.9	No	No	No	0	No	0	0	5.5	No	Yes	No	0	No	0	1
497B	1	B	Yes	1	2.9	No	No	No	0	No	0	0	3.7	No	No	No	0	No	0	0	4.6	No	No	No	0	No	0	0
596B	1	B	0	0.2	No	No	No	No	0	No	0	0	0.2	No	No	No	0	No	0	0	0.2	No	No	No	0	No	0	0
669B	1	B	Yes	1	2.5	No	No	No	0	No	0	0	3.3	No	No	No	0	No	0	0	4.1	No	No	No	0	No	0	0
670B	1	B	Yes	1	5.2	No	Yes	No	0	Yes	1	1	9.3	Yes	Yes	Yes	1	Yes	1	1	11.5	Yes	Yes	Yes	1	Yes	1	1

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
446B	3.6	No	No	No	0	No	0	0	4.2	No	No	No	0	No	0	0	4.6	No	No	No	0	No	0	0
447B	5.2	No	Yes	No	0	Yes	1	1	6.3	No	Yes	No	0	Yes	1	1	7.2	Yes	Yes	Yes	1	Yes	1	1
448B	5	No	Yes	No	0	Yes	1	1	6.5	No	Yes	No	0	Yes	1	1	8	Yes	Yes	Yes	1	Yes	1	1
449B	3.6	No	No	No	0	No	0	0	5.2	No	Yes	No	0	Yes	1	1	6.8	No	Yes	No	0	Yes	1	1
450B	4.2	No	No	No	0	No	0	0	5.7	No	Yes	No	0	Yes	1	1	7.3	Yes	Yes	Yes	1	Yes	1	1
451B	3.4	No	No	No	0	No	0	0	4.9	No	No	No	0	No	0	0	6.6	No	Yes	No	0	Yes	1	1
452B	3.1	No	No	No	0	No	0	0	4.6	No	No	No	0	No	0	0	6.3	No	Yes	No	0	Yes	1	1
453B	3.3	No	No	No	0	No	0	0	4.7	No	No	No	0	No	0	0	6.6	No	Yes	No	0	Yes	1	1
454B	3.8	No	No	No	0	No	0	0	5.1	No	Yes	No	0	Yes	1	1	8.3	Yes	Yes	Yes	1	Yes	1	1
455B	4.9	No	No	No	0	No	0	0	7.9	Yes	Yes	Yes	1	Yes	1	1	9.4	Yes	Yes	Yes	1	Yes	1	1
456B	5.5	No	Yes	No	0	Yes	1	1	8.6	Yes	Yes	Yes	1	Yes	1	1	9.8	Yes	Yes	Yes	1	Yes	1	1
457B	4.6	No	No	No	0	No	0	0	6.2	No	Yes	No	0	Yes	1	1	8.7	Yes	Yes	Yes	1	Yes	1	1
458B	4.5	No	No	No	0	No	0	0	6.1	No	Yes	No	0	Yes	1	1	9	Yes	Yes	Yes	1	Yes	1	1
459B	8	Yes	Yes	Yes	1	Yes	1	1	10.2	Yes	Yes	Yes	1	Yes	1	1	11.8	Yes	Yes	Yes	1	Yes	1	1
460B	4.5	No	No	No	0	No	0	0	6.2	No	Yes	No	0	No	0	1	9.2	Yes	Yes	No	0	No	0	1
461B	6.5	No	Yes	No	0	Yes	1	1	9	Yes	Yes	Yes	1	Yes	1	1	10	Yes	Yes	Yes	1	Yes	1	1
462B	8.3	Yes	Yes	Yes	1	Yes	1	1	9.7	Yes	Yes	Yes	1	Yes	1	1	10.6	Yes	Yes	Yes	1	Yes	1	1
463B	5.9	No	Yes	No	0	Yes	1	1	8.8	Yes	Yes	Yes	1	Yes	1	1	9.9	Yes	Yes	Yes	1	Yes	1	1
464B	8.9	Yes	Yes	Yes	1	Yes	1	1	10.1	Yes	Yes	Yes	1	Yes	1	1	11.1	Yes	Yes	Yes	1	Yes	1	1
465B	10.8	Yes	Yes	Yes	1	Yes	1	1	11.6	Yes	Yes	Yes	1	Yes	1	1	12.2	Yes	Yes	Yes	1	Yes	1	1
466B	13.3	Yes	Yes	Yes	1	Yes	1	1	14.4	Yes	Yes	Yes	1	Yes	1	1	15.2	Yes	Yes	Yes	1	Yes	1	1
467B	9.6	Yes	Yes	Yes	1	Yes	1	1	11	Yes	Yes	Yes	1	Yes	1	1	11.8	Yes	Yes	Yes	1	Yes	1	1
468B	8.3	Yes	Yes	No	0	No	0	1	9.4	Yes	Yes	No	0	No	0	1	10.2	Yes	Yes	No	0	No	0	1
469B	8.4	Yes	Yes	No	0	No	0	1	9.4	Yes	Yes	No	0	No	0	1	10.2	Yes	Yes	No	0	No	0	1
470B	7.7	Yes	Yes	No	0	No	0	0	8.9	Yes	Yes	No	0	No	0	1	9.6	Yes	Yes	No	0	No	0	1
471B	9.2	Yes	Yes	Yes	1	Yes	1	1	10.6	Yes	Yes	Yes	1	Yes	1	1	11.5	Yes	Yes	Yes	1	Yes	1	1
472B	10.4	Yes	Yes	Yes	1	Yes	1	1	11.6	Yes	Yes	Yes	1	Yes	1	1	12.3	Yes	Yes	Yes	1	Yes	1	1
473B	10.3	Yes	Yes	Yes	1	Yes	1	1	11.4	Yes	Yes	Yes	1	Yes	1	1	12	Yes	Yes	Yes	1	Yes	1	1
474B	6.8	No	Yes	No	0	Yes	1	1	8.4	Yes	Yes	Yes	1	Yes	1	1	8.9	Yes	Yes	Yes	1	Yes	1	1
475B	3.8	No	No	No	0	No	0	0	6.2	No	Yes	No	0	No	0	1	7.1	Yes	Yes	No	0	No	0	1
476B	3.1	No	No	No	0	No	0	0	5.3	No	Yes	No	0	No	0	1	6	No	Yes	No	0	No	0	1
477B	3.7	No	No	No	0	No	0	0	5.9	No	Yes	No	0	No	0	1	6.7	No	Yes	No	0	No	0	1
478B	3.2	No	No	No	0	No	0	0	5.2	No	Yes	No	0	No	0	1	6.1	No	Yes	No	0	No	0	1
479B	3.6	No	No	No	0	No	0	0	5.4	No	Yes	No	0	No	0	1	6.5	No	Yes	No	0	No	0	1
480B	2.4	No	No	No	0	No	0	0	4	No	No	No	0	No	0	0	4.9	No	No	No	0	No	0	0
481B	3	No	No	No	0	No	0	0	4.2	No	No	No	0	No	0	0	5.6	No	Yes	No	0	No	0	1
482B	3.4	No	No	No	0	No	0	0	4.1	No	No	No	0	No	0	0	6.1	No	Yes	No	0	No	0	1
483B	2.2	No	No	No	0	No	0	0	2.9	No	No	No	0	No	0	0	4.5	No	No	No	0	No	0	0
484B	2.6	No	No	No	0	No	0	0	3.5	No	No	No	0	No	0	0	4.9	No	No	No	0	No	0	0
485B	0.9	No	No	No	0	No	0	0	1.7	No	No	No	0	No	0	0	2.7	No	No	No	0	No	0	0
486B	1.5	No	No	No	0	No	0	0	2.2	No	No	No	0	No	0	0	3.4	No	No	No	0	No	0	0
487B	1.4	No	No	No	0	No	0	0	2.3	No	No	No	0	No	0	0	3.4	No	No	No	0	No	0	0
488B	0.8	No	No	No	0	No	0	0	1.6	No	No	No	0	No	0	0	2.5	No	No	No	0	No	0	0
489B	0.9	No	No	No	0	No	0	0	1.6	No	No	No	0	No	0	0	2.6	No	No	No	0	No	0	0
490B	1.4	No	No	No	0	No	0	0	2.2	No	No	No	0	No	0	0	3.2	No	No	No	0	No	0	0
491B	0.9	No	No	No	0	No	0	0	1.5	No	No	No	0	No	0	0	2.4	No	No	No	0	No	0	0
492B	0.9	No	No	No	0	No	0	0	1.4	No	No	No	0	No	0	0	2.2	No	No	No	0	No	0	0
493B	0.6	No	No	No	0	No	0	0	1.1	No	No	No	0	No	0	0	1.7	No	No	No	0	No	0	0
494B	1.2	No	No	No	0	No	0	0	1.7	No	No	No	0	No	0	0	2.2	No	No	No	0	No	0	0
495B	8.7	Yes	Yes	Yes	1	Yes	1	1	9.5	Yes	Yes	Yes	1	Yes	1	1	10	Yes	Yes	Yes	1	Yes	1	1
496B	7.7	Yes	Yes	No	0	No	0	1	8.9	Yes	Yes	No	0	No	0	1	9.5	Yes	Yes	No	0	No	0	1
497B	6.1	No	Yes	No	0	Yes	1	1	8.1	Yes	Yes	Yes	1	Yes	1	1	9	Yes	Yes	Yes	1	Yes	1	1
596B	0.3	No	No	No	0	No	0	0	0.4	No	No	No	0	No	0	0	0.5	No	No	No	0	No	0	0
669B	5.5	No	Yes	No	0	Yes	1	1	7.9	Yes	Yes	Yes	1	Yes	1	1	8.6	Yes	Yes	Yes	1	Yes	1	1
670B	13.1	Yes	Yes	Yes	1	Yes	1	1	14.5	Yes	Yes	Yes	1	Yes	1	1	15.2	Yes	Yes	Yes	1	Yes	1	1

Feasibility Factors:						
# of First-Row 5 dBA Reduction:	2	5	9	19	25	28
% of First-Row 5 dBA Reduction:	6.9%	17.2%	31.0%	65.5%	86.2%	96.6%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**No**	**No**	**Yes**	**Yes**	**Yes**
Reasonableness Factors:						
# of First-Row Design Goal:	0	3	6	11	18	24
% of First-Row Design Goal:	0.0%	10.3%	20.7%	37.9%	62.1%	82.8%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**No**	**Yes**	**Yes**	**Yes**
# of Benefited (Category B):	2	5	12	23	35	40
Cost of Noise Wall (Length x Height x $20/sq ft):	$896,200.00	$1,075,440.00	$1,254,680.00	$1,433,920.00	$1,613,160.00	$1,792,400.00
Cost of any other items critical to safety (snow storage or overpass):	$112,025.00	$112,025.00	$112,025.00	$112,025.00	$112,025.00	$112,025.00
Anticipated Cost of Noise Abatement:	$1,008,225.00	$1,187,465.00	$1,366,705.00	$1,545,945.00	$1,725,185.00	$1,904,425.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$60,000.00	$150,000.00	$360,000.00	$690,000.00	$1,050,000.00	$1,200,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$60,000.00	$150,000.00	$360,000.00	$690,000.00	$1,050,000.00	$1,200,000.00
Difference between Anticipated Cost and Allowable Cost:	-$948,225.00	-$1,037,465.00	-$1,006,705.00	-$855,945.00	-$675,185.00	-$704,425.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**No**	**No**	**No**
Feasible and Reasonable:	**No**	**No**	**No**	**No**	**No**	**No**

Wall 14

Total Wall Length	3985	ft
Length of Activity Category C/E Land Use:		ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	25	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
364B	1	B	Yes	1	3.5	No	No	No	0	No	0	0
365B	1	B		0	2.4	No	No	No	0	No	0	0
366B	1	B		0	2.2	No	No	No	0	No	0	0
367B	1	B	Yes	1	1.2	No	No	No	0	No	0	0
368B	1	B		0	2.3	No	No	No	0	No	0	0
369B	1	B		0	2.7	No	No	No	0	No	0	0
370B	1	B		0	3.1	No	No	No	0	No	0	0
371B	1	B		0	3.5	No	No	No	0	No	0	0
372B	1	B	Yes	1	3.4	No	No	No	0	No	0	0
373B	1	B	Yes	1	4.8	No	No	No	0	No	0	0
374B	1	B		0	3.7	No	No	No	0	No	0	0
375B	1	B		0	3.4	No	No	No	0	No	0	0
376B	1	B		0	2.3	No	No	No	0	No	0	0
377B	1	B	Yes	1	5	No	Yes	No	0	Yes	1	1
378B	1	B		0	4.3	No	No	No	0	No	0	0
379B	1	B		0	4	No	No	No	0	No	0	0
380B	1	B		0	3.4	No	No	No	0	No	0	0
381B	1	B		0	3.6	No	No	No	0	No	0	0
382B	1	B		0	3.9	No	No	No	0	No	0	0
383B	1	B		0	4.1	No	No	No	0	No	0	0
384B	1	B		0	4.5	No	No	No	0	No	0	0
385B	1	B	Yes	1	4.9	No	No	No	0	No	0	0
386B	1	B	Yes	1	6.4	No	Yes	No	0	Yes	1	1
387B	1	B	Yes	1	5.5	No	Yes	No	0	Yes	1	1
388B	1	B		0	4.9	No	No	No	0	No	0	0
389B	1	B		0	4.4	No	No	No	0	No	0	0
390B	1	B		0	4.1	No	No	No	0	No	0	0
391B	1	B		0	4.3	No	No	No	0	No	0	0
392B	1	B		0	5.1	No	Yes	No	0	No	0	1
393B	1	B	Yes	1	6.7	No	Yes	No	0	Yes	1	1
394B	1	B		0	5.4	No	Yes	No	0	No	0	1
395B	1	B		0	4.7	No	No	No	0	No	0	0
396B	1	B	Yes	1	6.9	No	Yes	No	0	Yes	1	1
397B	1	B		0	4.2	No	No	No	0	No	0	0
398B	1	B	Yes	1	5.8	No	Yes	No	0	Yes	1	1
399B	1	B	Yes	1	6	No	Yes	No	0	Yes	1	1
400B	1	B		0	4.9	No	No	No	0	No	0	0
401B	1	B	Yes	1	6.5	No	Yes	No	0	Yes	1	1
402B	1	B	Yes	1	7.1	Yes	Yes	Yes	1	Yes	1	1
403B	1	B		0	6.1	No	Yes	No	0	No	0	1
404B	1	B	Yes	1	6.8	No	Yes	No	0	Yes	1	1
405B	1	B		0	5.8	No	Yes	No	0	No	0	1
406B	1	B		0	5.9	No	Yes	No	0	No	0	1
407B	1	B		0	6.1	No	Yes	No	0	No	0	1
408B	1	B		0	6.2	No	Yes	No	0	No	0	1
409B	1	B		0	6	No	Yes	No	0	No	0	1
410B	1	B		0	5.7	No	Yes	No	0	No	0	1
411B	1	B	Yes	1	4.2	No	No	No	0	No	0	0
412B	1	B	Yes	1	6.8	No	Yes	No	0	Yes	1	1
413B	1	B	Yes	1	6.5	No	Yes	No	0	Yes	1	1
414B	1	B	Yes	1	6.6	No	Yes	No	0	Yes	1	1
415B	1	B	Yes	1	6.7	No	Yes	No	0	Yes	1	1
416B	1	B	Yes	1	6.6	No	Yes	No	0	Yes	1	1
417B	1	B	Yes	1	6.7	No	Yes	No	0	Yes	1	1
418B	1	B	Yes	1	5.9	No	Yes	No	0	Yes	1	1
419B	1	B	Yes	1	6	No	Yes	No	0	Yes	1	1
420B	1	B		0	3.8	No	No	No	0	No	0	0
421B	1	B		0	3.7	No	No	No	0	No	0	0
422B	1	B		0	3.7	No	No	No	0	No	0	0
423B	1	B		0	2.8	No	No	No	0	No	0	0
424B	1	B		0	3.8	No	No	No	0	No	0	0
425B	1	B		0	4	No	No	No	0	No	0	0
426B	1	B		0	3.9	No	No	No	0	No	0	0
427B	1	B		0	4	No	No	No	0	No	0	0
428B	1	B		0	4.5	No	No	No	0	No	0	0
429B	1	B		0	3.9	No	No	No	0	No	0	0
430B	1	B		0	3.6	No	No	No	0	No	0	0
431B	1	B		0	3.5	No	No	No	0	No	0	0
432B	1	B		0	3.6	No	No	No	0	No	0	0
433B	1	B		0	3.8	No	No	No	0	No	0	0
434B	1	B		0	3.9	No	No	No	0	No	0	0
435B	1	B		0	4	No	No	No	0	No	0	0
436B	1	B		0	2.8	No	No	No	0	No	0	0
437B	1	B		0	1.9	No	No	No	0	No	0	0
438B	1	B		0	1.3	No	No	No	0	No	0	0
439B	1	B		0	1.8	No	No	No	0	No	0	0
440B	1	B		0	2	No	No	No	0	No	0	0
441B	1	B		0	3.4	No	No	No	0	No	0	0
442B	1	B	Yes	1	3.6	No	No	No	0	No	0	0
443B	1	B		0	3.3	No	No	No	0	No	0	0
444B	1	B		0	3.7	No	No	No	0	No	0	0

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
364B	4	No	No	No	0	No	0	0
365B	2.8	No	No	No	0	No	0	0
366B	2.7	No	No	No	0	No	0	0
367B	1.4	No	No	No	0	No	0	0
368B	2.9	No	No	No	0	No	0	0
369B	3.4	No	No	No	0	No	0	0
370B	3.8	No	No	No	0	No	0	0
371B	4.2	No	No	No	0	No	0	0
372B	4	No	No	No	0	No	0	0
373B	5.6	No	Yes	No	0	Yes	1	1
374B	4.4	No	No	No	0	No	0	0
375B	4.1	No	No	No	0	No	0	0
376B	2.9	No	No	No	0	No	0	0
377B	5.8	No	Yes	No	0	Yes	1	1
378B	5	No	Yes	No	0	No	0	1
379B	4.8	No	No	No	0	No	0	0
380B	4.1	No	No	No	0	No	0	0
381B	4.4	No	No	No	0	No	0	0
382B	4.7	No	No	No	0	No	0	0
383B	4.8	No	No	No	0	No	0	0
384B	5.3	No	Yes	No	0	No	0	1
385B	5.8	No	Yes	No	0	Yes	1	1
386B	7.3	Yes	Yes	Yes	1	Yes	1	1
387B	6.5	No	Yes	No	0	Yes	1	1
388B	5.9	No	Yes	No	0	No	0	1
389B	5.4	No	Yes	No	0	No	0	1
390B	5.2	No	Yes	No	0	No	0	1
391B	5.3	No	Yes	No	0	No	0	1
392B	6.2	No	Yes	No	0	No	0	1
393B	7.8	Yes	Yes	Yes	1	Yes	1	1
394B	6.7	No	Yes	No	0	No	0	1
395B	5.7	No	Yes	No	0	No	0	1
396B	7.9	Yes	Yes	Yes	1	Yes	1	1
397B	5.3	No	Yes	No	0	No	0	1
398B	7.3	Yes	Yes	Yes	1	Yes	1	1
399B	7.4	Yes	Yes	Yes	1	Yes	1	1
400B	5.8	No	Yes	No	0	No	0	1
401B	7	Yes	Yes	Yes	1	Yes	1	1
402B	8	Yes	Yes	Yes	1	Yes	1	1
403B	7.1	Yes	Yes	No	0	No	0	1
404B	9.5	Yes	Yes	Yes	1	Yes	1	1
405B	6.7	No	Yes	No	0	No	0	1
406B	6.9	No	Yes	No	0	No	0	1
407B	6.9	No	Yes	No	0	No	0	1
408B	7.1	Yes	Yes	No	0	No	0	1
409B	6.9	No	Yes	No	0	No	0	1
410B	6.7	No	Yes	No	0	No	0	1
411B	6.6	No	Yes	No	0	Yes	1	1
412B	7.8	Yes	Yes	Yes	1	Yes	1	1
413B	7.6	Yes	Yes	Yes	1	Yes	1	1
414B	7.8	Yes	Yes	Yes	1	Yes	1	1
415B	7.8	Yes	Yes	Yes	1	Yes	1	1
416B	7.7	Yes	Yes	Yes	1	Yes	1	1
417B	7.7	Yes	Yes	Yes	1	Yes	1	1
418B	6.9	No	Yes	No	0	Yes	1	1
419B	6.9	No	Yes	No	0	Yes	1	1
420B	5.8	No	Yes	No	0	No	0	1
421B	5.6	No	Yes	No	0	No	0	1
422B	4.5	No	No	No	0	No	0	0
423B	4.6	No	No	No	0	No	0	0
424B	5.1	No	Yes	No	0	No	0	1
425B	5.5	No	Yes	No	0	No	0	1
426B	5.3	No	Yes	No	0	No	0	1
427B	5.7	No	Yes	No	0	No	0	1
428B	5.7	No	Yes	No	0	No	0	1
429B	5.6	No	Yes	No	0	No	0	1
430B	4.6	No	No	No	0	No	0	0
431B	4.3	No	No	No	0	No	0	0
432B	4.1	No	No	No	0	No	0	0
433B	4.6	No	No	No	0	No	0	0
434B	5.3	No	Yes	No	0	No	0	1
435B	4.8	No	No	No	0	No	0	0
436B	3.3	No	No	No	0	No	0	0
437B	2.2	No	No	No	0	No	0	0
438B	1.7	No	No	No	0	No	0	0
439B	2.5	No	No	No	0	No	0	0
440B	4.9	No	No	No	0	No	0	0
441B	5.5	No	Yes	No	0	No	0	1
442B	3.9	No	No	No	0	No	0	0
443B	4	No	No	No	0	No	0	0
444B	4.4	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
364B	4.5	No	No	No	0	No	0	0
365B	3.2	No	No	No	0	No	0	0
366B	3	No	No	No	0	No	0	0
367B	1.6	No	No	No	0	No	0	0
368B	3.3	No	No	No	0	No	0	0
369B	3.8	No	No	No	0	No	0	0
370B	4.3	No	No	No	0	No	0	0
371B	4.8	No	No	No	0	No	0	0
372B	4.6	No	No	No	0	No	0	0
373B	6.3	No	Yes	No	0	Yes	1	1
374B	5	No	Yes	No	0	No	0	1
375B	4.6	No	No	No	0	No	0	0
376B	3.3	No	No	No	0	No	0	0
377B	6.6	No	Yes	No	0	Yes	1	1
378B	5.7	No	Yes	No	0	No	0	1
379B	5.4	No	Yes	No	0	No	0	1
380B	4.6	No	No	No	0	No	0	0
381B	4.9	No	No	No	0	No	0	0
382B	5.3	No	Yes	No	0	No	0	1
383B	5.4	No	Yes	No	0	No	0	1
384B	6	No	Yes	No	0	No	0	1
385B	6.5	No	Yes	No	0	Yes	1	1
386B	8.1	Yes	Yes	Yes	1	Yes	1	1
387B	7.2	Yes	Yes	Yes	1	Yes	1	1
388B	6.6	No	Yes	No	0	No	0	1
389B	6.1	No	Yes	No	0	No	0	1
390B	5.8	No	Yes	No	0	No	0	1
391B	5.9	No	Yes	No	0	No	0	1
392B	6.9	No	Yes	No	0	No	0	1
393B	8.6	Yes	Yes	Yes	1	Yes	1	1
394B	7.5	Yes	Yes	No	0	No	0	1
395B	6.4	No	Yes	No	0	No	0	1
396B	8.7	Yes	Yes	Yes	1	Yes	1	1
397B	5.9	No	Yes	No	0	No	0	1
398B	8.3	Yes	Yes	Yes	1	Yes	1	1
399B	8.3	Yes	Yes	Yes	1	Yes	1	1
400B	6.4	No	Yes	No	0	No	0	1
401B	7.3	Yes	Yes	Yes	1	Yes	1	1
402B	8.6	Yes	Yes	Yes	1	Yes	1	1
403B	7.6	Yes	Yes	No	0	No	0	1
404B	10.5	Yes	Yes	Yes	1	Yes	1	1
405B	7.3	Yes	Yes	No	0	No	0	1
406B	7.4	Yes	Yes	No	0	No	0	1
407B	7.4	Yes	Yes	No	0	No	0	1
408B	7.6	Yes	Yes	No	0	No	0	1
409B	7.4	Yes	Yes	No	0	No	0	1
410B	7.2	Yes	Yes	No	0	No	0	1
411B	7.2	Yes	Yes	Yes	1	Yes	1	1
412B	8.4	Yes	Yes	Yes	1	Yes	1	1
413B	8.3	Yes	Yes	Yes	1	Yes	1	1
414B	8.5	Yes	Yes	Yes	1	Yes	1	1
415B	8.5	Yes	Yes	Yes	1	Yes	1	1
416B	8.4	Yes	Yes	Yes	1	Yes	1	1
417B	8.3	Yes	Yes	Yes	1	Yes	1	1
418B	7.6	Yes	Yes	Yes	1	Yes	1	1
419B	7.5	Yes	Yes	Yes	1	Yes	1	1
420B	5.9	No	Yes	No	0	No	0	1
421B	5.3	No	Yes	No	0	No	0	1
422B	5.1	No	Yes	No	0	No	0	1
423B	5.3	No	Yes	No	0	No	0	1
424B	4.5	No	No	No	0	No	0	0
425B	4.5	No	No	No	0	No	0	0
426B	4.8	No	No	No	0	No	0	0
427B	5.2	No	Yes	No	0	No	0	1
428B	6.2	No	Yes	No	0	No	0	1
429B	5.8	No	Yes	No	0	No	0	1
430B	5.2	No	Yes	No	0	No	0	1
431B	5	No	Yes	No	0	No	0	1
432B	4.7	No	No	No	0	No	0	0
433B	5.4	No	Yes	No	0	No	0	1
434B	6	No	Yes	No	0	No	0	1
435B	5.2	No	Yes	No	0	No	0	1
436B	3.6	No	No	No	0	No	0	0
437B	2.8	No	No	No	0	No	0	0
438B	2.1	No	No	No	0	No	0	0
439B	2.9	No	No	No	0	No	0	0
440B	5.6	No	Yes	No	0	No	0	1
441B	6.2	No	Yes	No	0	No	0	1
442B	4	No	No	No	0	No	0	0
443B	4.3	No	No	No	0	No	0	0
444B	4.8	No	No	No	0	No	0	0

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
364B	4.9	No	No	No	0	No	0	0
365B	3.6	No	No	No	0	No	0	0
366B	3.3	No	No	No	0	No	0	0
367B	1.7	No	No	No	0	No	0	0
368B	3.6	No	No	No	0	No	0	0
369B	4.1	No	No	No	0	No	0	0
370B	4.7	No	No	No	0	No	0	0
371B	5.3	No	Yes	No	0	No	0	1
372B	5	No	Yes	No	0	Yes	1	1
373B	6.9	No	Yes	No	0	Yes	1	1
374B	5.5	No	Yes	No	0	No	0	1
375B	5.1	No	Yes	No	0	No	0	1
376B	3.6	No	No	No	0	No	0	0
377B	7.1	Yes	Yes	Yes	1	Yes	1	1
378B	6.2	No	Yes	No	0	No	0	1
379B	5.8	No	Yes	No	0	No	0	1
380B	5	No	Yes	No	0	No	0	1
381B	5.3	No	Yes	No	0	No	0	1
382B	5.7	No	Yes	No	0	No	0	1
383B	5.9	No	Yes	No	0	No	0	1
384B	6.5	No	Yes	No	0	No	0	1
385B	7.1	Yes	Yes	Yes	1	Yes	1	1
386B	8.6	Yes	Yes	Yes	1	Yes	1	1
387B	7.8	Yes	Yes	Yes	1	Yes	1	1
388B	7.1	Yes	Yes	No	0	No	0	1
389B	6.5	No	Yes	No	0	No	0	1
390B	6.2	No	Yes	No	0	No	0	1
391B	6.3	No	Yes	No	0	No	0	1
392B	7.4	Yes	Yes	No	0	No	0	1
393B	9.2	Yes	Yes	Yes	1	Yes	1	1
394B	8.1	Yes	Yes	No	0	No	0	1
395B	6.8	No	Yes	No	0	No	0	1
396B	9.3	Yes	Yes	Yes	1	Yes	1	1
397B	6.3	No	Yes	No	0	No	0	1
398B	9	Yes	Yes	Yes	1	Yes	1	1
399B	9.1	Yes	Yes	Yes	1	Yes	1	1
400B	6.8	No	Yes	No	0	No	0	1
401B	7.6	Yes	Yes	Yes	1	Yes	1	1
402B	9.3	Yes	Yes	Yes	1	Yes	1	1
403B	8.1	Yes	Yes	No	0	No	0	1
404B	11.3	Yes	Yes	Yes	1	Yes	1	1
405B	7.9	Yes	Yes	No	0	No	0	1
406B	7.9	Yes	Yes	No	0	No	0	1
407B	7.9	Yes	Yes	No	0	No	0	1
408B	8.1	Yes	Yes	No	0	No	0	1
409B	7.9	Yes	Yes	No	0	No	0	1
410B	7.8	Yes	Yes	No	0	No	0	1
411B	8	Yes	Yes	Yes	1	Yes	1	1
412B	9.1	Yes	Yes	Yes	1	Yes	1	1
413B	8.9	Yes	Yes	Yes	1	Yes	1	1
414B	9.2	Yes	Yes	Yes	1	Yes	1	1
415B	9.2	Yes	Yes	Yes	1	Yes	1	1
416B	9.1	Yes	Yes	Yes	1	Yes	1	1
417B	8.9	Yes	Yes	Yes	1	Yes	1	1
418B	8.1	Yes	Yes	Yes	1	Yes	1	1
419B	8	Yes	Yes	Yes	1	Yes	1	1
420B	6.3	No	Yes	No	0	No	0	1
421B	5.9	No	Yes	No	0	No	0	1
422B	5.8	No	Yes	No	0	No	0	1
423B	6.1	No	Yes	No	0	No	0	1
424B	5.2	No	Yes	No	0	No	0	1
425B	5.1	No	Yes	No	0	No	0	1
426B	5.5	No	Yes	No	0	No	0	1
427B	5.9	No	Yes	No	0	No	0	1
428B	6.5	No	Yes	No	0	No	0	1
429B	6.2	No	Yes	No	0	No	0	1
430B	5.8	No	Yes	No	0	No	0	1
431B	5.6	No	Yes	No	0	No	0	1
432B	5.4	No	Yes	No	0	No	0	1
433B	6.1	No	Yes	No	0	No	0	1
434B	6.8	No	Yes	No	0	No	0	1
435B	5.5	No	Yes	No	0	No	0	1
436B	3.9	No	No	No	0	No	0	0
437B	3	No	No	No	0	No	0	0
438B	2.3	No	No	No	0	No	0	0
439B	3	No	No	No	0	No	0	0
440B	6.2	No	Yes	No	0	No	0	1
441B	6.9	No	Yes	No	0	No	0	1
442B	4.1	No	No	No	0	No	0	0
443B	4.4	No	No	No	0	No	0	0
444B	5	No	Yes	No	0	No	0	1

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
364B	5.2	No	Yes	No	0	Yes	1	1
365B	3.8	No	No	No	0	No	0	0
366B	3.5	No	No	No	0	No	0	0
367B	1.9	No	No	No	0	No	0	0
368B	3.8	No	No	No	0	No	0	0
369B	4.4	No	No	No	0	No	0	0
370B	5	No	Yes	No	0	No	0	1
371B	5.6	No	Yes	No	0	No	0	1
372B	5.3	No	Yes	No	0	Yes	1	1
373B	7.3	Yes	Yes	Yes	1	Yes	1	1
374B	5.8	No	Yes	No	0	No	0	1
375B	5.3	No	Yes	No	0	No	0	1
376B	3.7	No	No	No	0	No	0	0
377B	7.6	Yes	Yes	Yes	1	Yes	1	1
378B	6.6	No	Yes	No	0	No	0	1
379B	6.2	No	Yes	No	0	No	0	1
380B	5.3	No	Yes	No	0	No	0	1
381B	5.6	No	Yes	No	0	No	0	1
382B	6.1	No	Yes	No	0	No	0	1
383B	6.3	No	Yes	No	0	No	0	1
384B	7	Yes	Yes	No	0	No	0	1
385B	7.6	Yes	Yes	Yes	1	Yes	1	1
386B	9.2	Yes	Yes	Yes	1	Yes	1	1
387B	8.3	Yes	Yes	Yes	1	Yes	1	1
388B	7.6	Yes	Yes	No	0	No	0	1
389B	7	Yes	Yes	No	0	No	0	1
390B	6.7	No	Yes	No	0	No	0	1
391B	6.8	No	Yes	No	0	No	0	1
392B	8	Yes	Yes	No	0	No	0	1
393B	9.8	Yes	Yes	Yes	1	Yes	1	1
394B	8.7	Yes	Yes	No	0	No	0	1
395B	7.3	Yes	Yes	No	0	No	0	1
396B	9.9	Yes	Yes	Yes	1	Yes	1	1
397B	6.8	No	Yes	No	0	No	0	1
398B	9.8	Yes	Yes	Yes	1	Yes	1	1
399B	9.8	Yes	Yes	Yes	1	Yes	1	1
400B	7.1	Yes	Yes	No	0	No	0	1
401B	7.9	Yes	Yes	Yes	1	Yes	1	1
402B	9.7	Yes	Yes	Yes	1	Yes	1	1
403B	8.5	Yes	Yes	No	0	No	0	1
404B	12	Yes	Yes	Yes	1	Yes	1	1
405B	8.2	Yes	Yes	No	0	No	0	1
406B	8.3	Yes	Yes	No	0	No	0	1
407B	8.2	Yes	Yes	No	0	No	0	1
408B	8.5	Yes	Yes	No	0	No	0	1
409B	8.3	Yes	Yes	No	0	No	0	1
410B	8.2	Yes	Yes	No	0	No	0	1
411B	8.7	Yes	Yes	Yes	1	Yes	1	1
412B	9.6	Yes	Yes	Yes	1	Yes	1	1
413B	9.4	Yes	Yes	Yes	1	Yes	1	1
414B	9.7	Yes	Yes	Yes	1	Yes	1	1
415B	9.7	Yes	Yes	Yes	1	Yes	1	1
416B	9.6	Yes	Yes	Yes	1	Yes	1	1
417B	9.4	Yes	Yes	Yes	1	Yes	1	1
418B	8.6	Yes	Yes	Yes	1	Yes	1	1
419B	8.4	Yes	Yes	Yes	1	Yes	1	1
420B	6.7	No	Yes	No	0	No	0	1
421B	6.4	No	Yes	No	0	No	0	1
422B	6.3	No	Yes	No	0	No	0	1
423B	6.6	No	Yes	No	0	No	0	1
424B	5.7	No	Yes	No	0	No	0	1
425B	5.6	No	Yes	No	0	No	0	1
426B	6.1	No	Yes	No	0	No	0	1
427B	6.4	No	Yes	No	0	No	0	1
428B	6.8	No	Yes	No	0	No	0	1
429B	6.6	No	Yes	No	0	No	0	1
430B	6.2	No	Yes	No	0	No	0	1
431B	6.1	No	Yes	No	0	No	0	1
432B	5.9	No	Yes	No	0	No	0	1
433B	6.7	No	Yes	No	0	No	0	1
434B	7.4	Yes	Yes	No	0	No	0	1
435B	5.5	No	Yes	No	0	No	0	1
436B	4.1	No	No	No	0	No	0	0
437B	3.1	No	No	No	0	No	0	0
438B	2.4	No	No	No	0	No	0	0
439B	3.2	No	No	No	0	No	0	0
440B	6.7	No	Yes	No	0	No	0	1
441B	7.4	Yes	Yes	No	0	No	0	1
442B	4.1	No	No	No	0	No	0	0
443B	4.6	No	No	No	0	No	0	0
444B	5.1	No	Yes	No	0	No	0	1

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors
364B	5.5	No	Yes	No	0	Yes	1	1
365B	4.1	No	No	No	0	No	0	0
366B	3.8	No	No	No	0	No	0	0
367B	2	No	No	No	0	No	0	0
368B	4.1	No	No	No	0	No	0	0
369B	4.6	No	No	No	0	No	0	0
370B	5.3	No	Yes	No	0	No	0	1
371B	6	No	Yes	No	0	No	0	1
372B	5.6	No	Yes	No	0	Yes	1	1
373B	7.8	Yes	Yes	Yes	1	Yes	1	1
374B	6.2	No	Yes	No	0	No	0	1
375B	5.7	No	Yes	No	0	No	0	1
376B	4	No	No	No	0	No	0	0
377B	8	Yes	Yes	Yes	1	Yes	1	1
378B	7	Yes	Yes	No	0	No	0	1
379B	6.6	No	Yes	No	0	No	0	1
380B	5.6	No	Yes	No	0	No	0	1
381B	5.9	No	Yes	No	0	No	0	1
382B	6.4	No	Yes	No	0	No	0	1
383B	6.6	No	Yes	No	0	No	0	1
384B	7.4	Yes	Yes	No	0	No	0	1
385B	8	Yes	Yes	Yes	1	Yes	1	1
386B	9.7	Yes	Yes	Yes	1	Yes	1	1
387B	8.7	Yes	Yes	Yes	1	Yes	1	1
388B	8	Yes	Yes	No	0	No	0	1
389B	7.3	Yes	Yes	No	0	No	0	1
390B	6.9	No	Yes	No	0	No	0	1
391B	7	Yes	Yes	No	0	No	0	1
392B	8.4	Yes	Yes	No	0	No	0	1
393B	10.2	Yes	Yes	Yes	1	Yes	1	1
394B	9	Yes	Yes	No	0	No	0	1
395B	7.5	Yes	Yes	No	0	No	0	1
396B	10.2	Yes	Yes	Yes	1	Yes	1	1
397B	7	Yes	Yes	No	0	No	0	1
398B	10.2	Yes	Yes	Yes	1	Yes	1	1
399B	10.1	Yes	Yes	Yes	1	Yes	1	1
400B	7.1	Yes	Yes	No	0	No	0	1
401B	8	Yes	Yes	Yes	1	Yes	1	1
402B	9.8	Yes	Yes	Yes	1	Yes	1	1
403B	8.6	Yes	Yes	No	0	No	0	1
404B	12.3	Yes	Yes	Yes	1	Yes	1	1
405B	8.2	Yes	Yes	No	0	No	0	1
406B	8.2	Yes	Yes	No	0	No	0	1
407B	8.4	Yes	Yes	No	0	No	0	1
408B	8.6	Yes	Yes	No	0	No	0	1
409B	8.3	Yes	Yes	No	0	No	0	1
410B	8.4	Yes	Yes	No	0	No	0	1
411B	8.8	Yes	Yes	Yes	1	Yes	1	1
412B	9.8	Yes	Yes	Yes	1	Yes	1	1
413B	9.6	Yes	Yes	Yes	1	Yes	1	1
414B	10	Yes	Yes	Yes	1	Yes	1	1
415B	9.9	Yes	Yes	Yes	1	Yes	1	1
416B	9.9	Yes	Yes	Yes	1	Yes	1	1
417B	9.6	Yes	Yes	Yes	1	Yes	1	1
418B	8.8	Yes	Yes	Yes	1	Yes	1	1
419B	8.6	Yes	Yes	Yes	1	Yes	1	1
420B	6.8	No	Yes	No	0	No	0	1
421B	6.5	No	Yes	No	0	No	0	1
422B	6.4	No	Yes	No	0	No	0	1
423B	6.7	No	Yes	No	0	No	0	1
424B	5.8	No	Yes	No	0	No	0	1
425B	5.7	No	Yes	No	0	No	0	1
426B	6.2	No	Yes	No	0	No	0	1
427B	6.6	No	Yes	No	0	No	0	1
428B	6.9	No	Yes	No	0	No	0	1
429B	6.7	No	Yes	No	0	No	0	1
430B	6.3	No	Yes	No	0	No	0	1
431B	6.2	No	Yes	No	0	No	0	1
432B	6	No	Yes	No	0	No	0	1
433B	6.8	No	Yes	No	0	No	0	1
434B	7.5	Yes	Yes	No	0	No	0	1
435B	5.5	No	Yes	No	0	No	0	1
436B	4.1	No	No	No	0	No	0	0
437B	3.4	No	No	No	0	No	0	0
438B	2.8	No	No	No	0	No	0	0
439B	3.4	No	No	No	0	No	0	0
440B	6.8	No	Yes	No	0	No	0	1
441B	7.6	Yes	Yes	No	0	No	0	1
442B	4	No	No	No	0	No	0	0
443B	4.5	No	No	No	0	No	0	0
444B	5	No	Yes	No	0	No	0	1

	10-ft Wall	12-ft Wall	14-ft Wall	16-ft Wall	18-ft Wall	20-ft Wall
Feasibility Factors:						
# of First-Row 5 dBA Reduction:	18	21	21	22	23	23
% of First-Row 5 dBA Reduction:	72.0%	84.0%	84.0%	88.0%	92.0%	92.0%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Reasonableness Factors:						
# of First-Row Design Goal:	1	14	18	20	21	21
% of First-Row Design Goal:	4.0%	56.0%	72.0%	80.0%	84.0%	84.0%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
# of Benefited (Category B):	27	49	57	67	69	69
Cost of Noise Wall (Length x Height x $20/sq ft):	$797,000.00	$956,400.00	$1,115,800.00	$1,275,200.00	$1,434,600.00	$1,594,000.00
Cost of any other items critical to safety (snow storage on overpass):	$99,625.00	$99,625.00	$99,625.00	$99,625.00	$99,625.00	$99,625.00
Anticipated Cost of Noise Abatement:	$896,625.00	$1,056,025.00	$1,215,425.00	$1,374,825.00	$1,534,225.00	$1,693,625.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$810,000.00	$1,470,000.00	$1,710,000.00	$2,010,000.00	$2,070,000.00	$2,070,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$810,000.00	$1,470,000.00	$1,710,000.00	$2,010,000.00	$2,070,000.00	$2,070,000.00
Difference between Anticipated Cost and Allowable Cost:	-$86,625.00	$413,975.00	$494,575.00	$635,175.00	$535,775.00	$376,375.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Feasible and Reasonable:	**No**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Wall 15

Total Wall Length	1800	ft
Length of Activity Category C/E Land Use:	414	ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	9	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
544B	1	B	Yes	1	0	No	No	No	0	No	0	0
545B	1	B		0	0	No	No	No	0	No	0	0
546B	1	B		0	0.1	No	No	No	0	No	0	0
547B	1	B		0	0.1	No	No	No	0	No	0	0
548B	1	B		0	0.3	No	No	No	0	No	0	0
549B	1	B		0	0.2	No	No	No	0	No	0	0
550B	1	B		0	0.3	No	No	No	0	No	0	0
551D	1	D		0	0.1	No	No	No	0	No	0	0
552B	1	B	Yes	1	0.2	No	No	No	0	No	0	0
553B	1	B	Yes	1	0.1	No	No	No	0	No	0	0
554B	1	B		0	0.5	No	No	No	0	No	0	0
555B	1	B		0	1.7	No	No	No	0	No	0	0
556B	1	B	Yes	1	8.2	Yes	Yes	Yes	1	Yes	1	1
557B	1	B		0	1.5	No	No	No	0	No	0	0
558B	1	B		0	0.6	No	No	No	0	No	0	0
559B	1	B		0	1.1	No	No	No	0	No	0	0
560B	1	B	Yes	1	1.3	No	No	No	0	No	0	0
561B	1	B	Yes	1	0.6	No	No	No	0	No	0	0
562B	1	B	Yes	1	0.6	No	No	No	0	No	0	0
563B	1	B	Yes	1	0.1	No	No	No	0	No	0	0
564B	1	B	Yes	1	0	No	No	No	0	No	0	0
565B	1	B		0	-0.1	No	No	No	0	No	0	0
566B	1	B		0	-0.4	No	No	No	0	No	0	0
567B	1	B		0	0.4	No	No	No	0	No	0	0
568B	1	B		0	0.9	No	No	No	0	No	0	0
569B	1	B		0	0.8	No	No	No	0	No	0	0
570B	1	B		0	0	No	No	No	0	No	0	0
571B	1	B		0	-0.2	No	No	No	0	No	0	0
572B	1	B		0	-0.4	No	No	No	0	No	0	0
573B	1	B		0	-0.1	No	No	No	0	No	0	0
574B	1	B		0	0	No	No	No	0	No	0	0
597B	1	B		0	0.1	No	No	No	0	No	0	0

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
544B	0.8	No	No	No	0	No	0	0
545B	0.1	No	No	No	0	No	0	0
546B	0.2	No	No	No	0	No	0	0
547B	0.2	No	No	No	0	No	0	0
548B	0.5	No	No	No	0	No	0	0
549B	0.3	No	No	No	0	No	0	0
550B	0.5	No	No	No	0	No	0	0
551D	0.3	No	No	No	0	No	0	0
552B	1.9	No	No	No	0	No	0	0
553B	0.2	No	No	No	0	No	0	0
554B	0.8	No	No	No	0	No	0	0
555B	2.5	No	No	No	0	No	0	0
556B	9.2	Yes	Yes	Yes	1	Yes	1	1
557B	2.4	No	No	No	0	No	0	0
558B	1.3	No	No	No	0	No	0	0
559B	2.1	No	No	No	0	No	0	0
560B	2.6	No	No	No	0	No	0	0
561B	1	No	No	No	0	No	0	0
562B	1.2	No	No	No	0	No	0	0
563B	0.6	No	No	No	0	No	0	0
564B	0.6	No	No	No	0	No	0	0
565B	0.2	No	No	No	0	No	0	0
566B	-0.1	No	No	No	0	No	0	0
567B	0.7	No	No	No	0	No	0	0
568B	1.1	No	No	No	0	No	0	0
569B	1.1	No	No	No	0	No	0	0
570B	0	No	No	No	0	No	0	0
571B	-0.1	No	No	No	0	No	0	0
572B	-0.2	No	No	No	0	No	0	0
573B	0.2	No	No	No	0	No	0	0
574B	0.4	No	No	No	0	No	0	0
597B	0	No	No	No	0	No	0	0

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
544B	3.1	No	No	No	0	No	0	0
545B	0.1	No	No	No	0	No	0	0
546B	0.3	No	No	No	0	No	0	0
547B	0.5	No	No	No	0	No	0	0
548B	0.7	No	No	No	0	No	0	0
549B	0.7	No	No	No	0	No	0	0
550B	1	No	No	No	0	No	0	0
551D	1.3	No	No	No	0	No	0	0
552B	2.9	No	No	No	0	No	0	0
553B	0.8	No	No	No	0	No	0	0
554B	1.5	No	No	No	0	No	0	0
555B	4.1	No	No	No	0	No	0	0
556B	10.1	Yes	Yes	Yes	1	Yes	1	1
557B	3.5	No	No	No	0	No	0	0
558B	2.1	No	No	No	0	No	0	0
559B	3	No	No	No	0	No	0	0
560B	4	No	No	No	0	No	0	0
561B	1.5	No	No	No	0	No	0	0
562B	1.9	No	No	No	0	No	0	0
563B	1.6	No	No	No	0	No	0	0
564B	1.4	No	No	No	0	No	0	0
565B	0.4	No	No	No	0	No	0	0
566B	0.7	No	No	No	0	No	0	0
567B	1.3	No	No	No	0	No	0	0
568B	1.3	No	No	No	0	No	0	0
569B	1.3	No	No	No	0	No	0	0
570B	0.1	No	No	No	0	No	0	0
571B	0	No	No	No	0	No	0	0
572B	-0.2	No	No	No	0	No	0	0
573B	0.6	No	No	No	0	No	0	0
574B	0.9	No	No	No	0	No	0	0
597B	0	No	No	No	0	No	0	0

Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
544B	4.7	No	No	No	0	No	0	0
545B	0.2	No	No	No	0	No	0	0
546B	0.5	No	No	No	0	No	0	0
547B	0.9	No	No	No	0	No	0	0
548B	1.2	No	No	No	0	No	0	0
549B	1.3	No	No	No	0	No	0	0
550B	1.6	No	No	No	0	No	0	0
551D	2.2	No	No	No	0	No	0	0
552B	4.1	No	No	No	0	No	0	0
553B	2.9	No	No	No	0	No	0	0
554B	2.4	No	No	No	0	No	0	0
555B	6.1	No	Yes	No	0	No	0	1
556B	10.8	Yes	Yes	Yes	1	Yes	1	1
557B	5.3	No	Yes	No	0	No	0	1
558B	3.1	No	No	No	0	No	0	0
559B	4.4	No	No	No	0	No	0	0
560B	5.8	No	Yes	No	0	Yes	1	1
561B	2	No	No	No	0	No	0	0
562B	2.7	No	No	No	0	No	0	0
563B	2.2	No	No	No	0	No	0	0
564B	2.2	No	No	No	0	No	0	0
565B	0.7	No	No	No	0	No	0	0
566B	1.4	No	No	No	0	No	0	0
567B	2	No	No	No	0	No	0	0
568B	1.4	No	No	No	0	No	0	0
569B	1.4	No	No	No	0	No	0	0
570B	0	No	No	No	0	No	0	0
571B	0	No	No	No	0	No	0	0
572B	-0.1	No	No	No	0	No	0	0
573B	1.2	No	No	No	0	No	0	0
574B	1.6	No	No	No	0	No	0	0
597B	0.1	No	No	No	0	No	0	0

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
544B	9.1	Yes	Yes	Yes	1	Yes	1	1
545B	0.2	No	No	No	0	No	0	0
546B	0.6	No	No	No	0	No	0	0
547B	1	No	No	No	0	No	0	0
548B	1.7	No	No	No	0	No	0	0
549B	2.2	No	No	No	0	No	0	0
550B	2.8	No	No	No	0	No	0	0
551D	3.5	No	No	No	0	No	0	0
552B	6.5	No	Yes	No	0	Yes	1	1
553B	4.3	No	No	No	0	No	0	0
554B	4.1	No	No	No	0	No	0	0
555B	6.8	No	Yes	No	0	No	0	1
556B	11.5	Yes	Yes	Yes	1	Yes	1	1
557B	6.3	No	Yes	No	0	No	0	1
558B	4.4	No	No	No	0	No	0	0
559B	5.8	No	Yes	No	0	No	0	1
560B	7.6	Yes	Yes	Yes	1	Yes	1	1
561B	2.4	No	No	No	0	No	0	0
562B	3.3	No	No	No	0	No	0	0
563B	3	No	No	No	0	No	0	0
564B	2.9	No	No	No	0	No	0	0
565B	1.6	No	No	No	0	No	0	0
566B	2.2	No	No	No	0	No	0	0
567B	2.6	No	No	No	0	No	0	0
568B	1.6	No	No	No	0	No	0	0
569B	1.5	No	No	No	0	No	0	0
570B	-0.1	No	No	No	0	No	0	0
571B	-0.2	No	No	No	0	No	0	0
572B	0.1	No	No	No	0	No	0	0
573B	1.8	No	No	No	0	No	0	0
574B	2.3	No	No	No	0	No	0	0
597B	0	No	No	No	0	No	0	0

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
544B	11.1	Yes	Yes	Yes	1	Yes	1	1
545B	0.2	No	No	No	0	No	0	0
546B	0.6	No	No	No	0	No	0	0
547B	1.1	No	No	No	0	No	0	0
548B	1.9	No	No	No	0	No	0	0
549B	3.4	No	No	No	0	No	0	0
550B	3.9	No	No	No	0	No	0	0
551D	6	No	Yes	No	0	No	0	0
552B	8.7	Yes	Yes	Yes	1	Yes	1	1
553B	6.9	No	Yes	No	0	Yes	1	1
554B	6	No	Yes	No	0	No	0	1
555B	7.3	Yes	Yes	No	0	No	0	1
556B	12.1	Yes	Yes	Yes	1	Yes	1	1
557B	7	Yes	Yes	No	0	No	0	1
558B	5.6	No	Yes	No	0	No	0	1
559B	7.2	Yes	Yes	No	0	No	0	1
560B	9.1	Yes	Yes	Yes	1	Yes	1	1
561B	2.8	No	No	No	0	No	0	0
562B	3.9	No	No	No	0	No	0	0
563B	3.9	No	No	No	0	No	0	0
564B	3.7	No	No	No	0	No	0	0
565B	2.5	No	No	No	0	No	0	0
566B	3	No	No	No	0	No	0	0
567B	3.2	No	No	No	0	No	0	0
568B	1.7	No	No	No	0	No	0	0
569B	1.6	No	No	No	0	No	0	0
570B	-0.2	No	No	No	0	No	0	0
571B	-0.2	No	No	No	0	No	0	0
572B	0.6	No	No	No	0	No	0	0
573B	2.5	No	No	No	0	No	0	0
574B	3.2	No	No	No	0	No	0	0
597B	-0.1	No	No	No	0	No	0	0

Feasibility Factors:					
# of First-Row 5 dBA Reduction:	1	1	1	2	4	5
% of First-Row 5 dBA Reduction:	11.1%	11.1%	11.1%	22.2%	44.4%	55.6%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**No**	**No**	**No**	**No**	**Yes**
Reasonableness Factors:						
# of First-Row Design Goal:	1	1	1	1	3	4
% of First-Row Design Goal:	11.1%	11.1%	11.1%	11.1%	33.3%	44.4%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**No**	**No**	**No**	**Yes**
# of Benefited (Category B):	1	1	1	4	7	10
Cost of Noise Wall (Length x Height x $20/sq ft):	$360,000.00	$432,000.00	$504,000.00	$576,000.00	$648,000.00	$720,000.00
Cost of any other items critical to safety (snow storage on overpass):	$45,000.00	$45,000.00	$45,000.00	$45,000.00	$45,000.00	$45,000.00
Anticipated Cost of Noise Abatement:	$405,000.00	$477,000.00	$549,000.00	$621,000.00	$693,000.00	$765,000.00
Activity Category B Allowable Cost ($30,000 per benefited receptor):	$30,000.00	$30,000.00	$30,000.00	$120,000.00	$210,000.00	$300,000.00
Activity Category C/D Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$149,040.00	$149,040.00
Allowable Cost:	$30,000.00	$30,000.00	$30,000.00	$120,000.00	$359,040.00	$449,040.00
Difference between Anticipated Cost and Allowable Cost:	-$375,000.00	-$447,000.00	-$519,000.00	-$501,000.00	-$333,960.00	-$315,960.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**No**	**No**	**No**	**No**
Feasible and Reasonable:	**No**	**No**	**No**	**No**	**No**	**No**

Wall 16

Total Wall Length	1967	ft
Length of Activity Category C/E Land Use:		ft
Wall Cost per sq ft:	$20	
Cost of items critical to safety:	$25	($25/ft for snow storage)
# of First Row Receivers:	11	

Name	# of DU	Category	1st Row	# of 1st Row	10-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
498B	1	B	Yes	1	3.1	No	No	No	0	No	0	0
499B	1	B		0	2.8	No	No	No	0	No	0	0
500B	1	B		0	1.6	No	No	No	0	No	0	0
501B	1	B		0	1.1	No	No	No	0	No	0	0
502B	1	B		0	0.9	No	No	No	0	No	0	0
503B	1	B	Yes	1	2.9	No	No	No	0	No	0	0
504B	1	B		0	2.5	No	No	No	0	No	0	0
505B	1	B		0	1.7	No	No	No	0	No	0	0
506B	1	B		0	1.2	No	No	No	0	No	0	0
507B	1	B		0	1.1	No	No	No	0	No	0	0
508B	1	B	Yes	1	1.6	No	No	No	0	No	0	0
509B	1	B	Yes	1	1.2	No	No	No	0	No	0	0
510B	1	B	Yes	1	2.3	No	No	No	0	No	0	0
511B	1	B		0	2.4	No	No	No	0	No	0	0
512B	1	B		0	1.9	No	No	No	0	No	0	0
513B	1	B		0	1.6	No	No	No	0	No	0	0
514B	1	B		0	1.2	No	No	No	0	No	0	0
515B	1	B		0	1.3	No	No	No	0	No	0	0
516B	1	B		0	1.6	No	No	No	0	No	0	0
517B	1	B		0	1.6	No	No	No	0	No	0	0
518B	1	B		0	1.4	No	No	No	0	No	0	0
519B	1	B		0	1.5	No	No	No	0	No	0	0
520B	1	B		0	1.2	No	No	No	0	No	0	0
521B	1	B		0	1	No	No	No	0	No	0	0
522B	1	B		0	1.1	No	No	No	0	No	0	0
523B	1	B		0	1.1	No	No	No	0	No	0	0
524B	1	B		0	3.5	No	No	No	0	No	0	0
525B	1	B		0	2.7	No	No	No	0	No	0	0
526B	1	B		0	3	No	No	No	0	No	0	0
527B	1	B		0	4	No	No	No	0	No	0	0
528B	1	B	Yes	1	5.4	No	Yes	No	0	Yes	1	1
529B	1	B	Yes	1	6.3	No	Yes	No	0	Yes	1	1
530B	1	B	Yes	1	6.1	No	Yes	No	0	Yes	1	1
531B	1	B	Yes	1	4.1	No	No	No	0	No	0	0
532B	1	B		0	3.9	No	No	No	0	No	0	0
533B	1	B		0	3.8	No	No	No	0	No	0	0
534B	1	B		0	1.3	No	No	No	0	No	0	0
536B	1	B		0	3.5	No	No	No	0	No	0	0
671B	1	B	Yes	1	2.6	No	No	No	0	No	0	0
672B	1	B	Yes	1	5.3	No	Yes	No	0	Yes	1	1

Name	12-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
498B	5.1	No	Yes	No	0	Yes	1	1
499B	4.8	No	No	No	0	No	0	0
500B	2.4	No	No	No	0	No	0	0
501B	1.7	No	No	No	0	No	0	0
502B	1.3	No	No	No	0	No	0	0
503B	4.2	No	No	No	0	No	0	0
504B	3.6	No	No	No	0	No	0	0
505B	2.9	No	No	No	0	No	0	0
506B	1.8	No	No	No	0	No	0	0
507B	1.5	No	No	No	0	No	0	0
508B	2.9	No	No	No	0	No	0	0
509B	2.7	No	No	No	0	No	0	0
510B	4.4	No	No	No	0	No	0	0
511B	4.4	No	No	No	0	No	0	0
512B	3.6	No	No	No	0	No	0	0
513B	3.2	No	No	No	0	No	0	0
514B	2.3	No	No	No	0	No	0	0
515B	2.7	No	No	No	0	No	0	0
516B	3.2	No	No	No	0	No	0	0
517B	3.2	No	No	No	0	No	0	0
518B	2.6	No	No	No	0	No	0	0
519B	2.4	No	No	No	0	No	0	0
520B	1.8	No	No	No	0	No	0	0
521B	1.6	No	No	No	0	No	0	0
522B	1.6	No	No	No	0	No	0	0
523B	1.5	No	No	No	0	No	0	0
524B	5.2	No	Yes	No	0	No	0	1
525B	4.2	No	No	No	0	No	0	0
526B	4.6	No	No	No	0	No	0	0
527B	5.3	No	Yes	No	0	No	0	1
528B	6.4	No	Yes	No	0	Yes	1	1
529B	7.3	Yes	Yes	Yes	1	Yes	1	1
530B	7	Yes	Yes	Yes	1	Yes	1	1
531B	4.9	No	No	No	0	No	0	0
532B	3.9	No	No	No	0	No	0	0
533B	1.5	No	No	No	0	No	0	0
534B	1.5	No	No	No	0	No	0	0
536B	4.2	No	No	No	0	No	0	0
671B	5.4	No	Yes	No	0	Yes	1	1
672B	6.4	No	Yes	No	0	Yes	1	1

Name	14-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
498B	7.3	Yes	Yes	Yes	1	Yes	1	1
499B	7	Yes	Yes	No	0	No	0	1
500B	3.8	No	No	No	0	No	0	0
501B	2.9	No	No	No	0	No	0	0
502B	2.5	No	No	No	0	No	0	0
503B	6.9	No	Yes	No	0	Yes	1	1
504B	6.2	No	Yes	No	0	No	0	1
505B	4.7	No	No	No	0	No	0	0
506B	3.5	No	No	No	0	No	0	0
507B	3.1	No	No	No	0	No	0	0
508B	4.9	No	No	No	0	No	0	0
509B	4.6	No	No	No	0	No	0	0
510B	5.3	No	Yes	No	0	Yes	1	1
511B	5.8	No	Yes	No	0	No	0	1
512B	5.1	No	Yes	No	0	No	0	1
513B	4.7	No	No	No	0	No	0	0
514B	3.9	No	No	No	0	No	0	0
515B	4.1	No	No	No	0	No	0	0
516B	5.1	No	Yes	No	0	No	0	1
517B	4.9	No	No	No	0	No	0	0
518B	4.9	No	No	No	0	No	0	0
519B	4.3	No	No	No	0	No	0	0
520B	3.5	No	No	No	0	No	0	0
521B	3.3	No	No	No	0	No	0	0
522B	3.3	No	No	No	0	No	0	0
523B	3.1	No	No	No	0	No	0	0
524B	5.9	No	Yes	No	0	No	0	1
525B	5.2	No	Yes	No	0	No	0	1
526B	5.4	No	Yes	No	0	No	0	1
527B	6	No	Yes	No	0	No	0	1
528B	7	Yes	Yes	Yes	1	Yes	1	1
529B	8	Yes	Yes	Yes	1	Yes	1	1
530B	7.7	Yes	Yes	Yes	1	Yes	1	1
531B	5.6	No	Yes	No	0	No	0	0
532B	5.3	No	Yes	No	0	No	0	0
533B	5.1	No	Yes	No	0	No	0	1
534B	1.7	No	No	No	0	No	0	0
536B	4.7	No	No	No	0	No	0	0
671B	6.6	No	Yes	No	0	Yes	1	1
672B	7.2	Yes	Yes	Yes	1	Yes	1	1

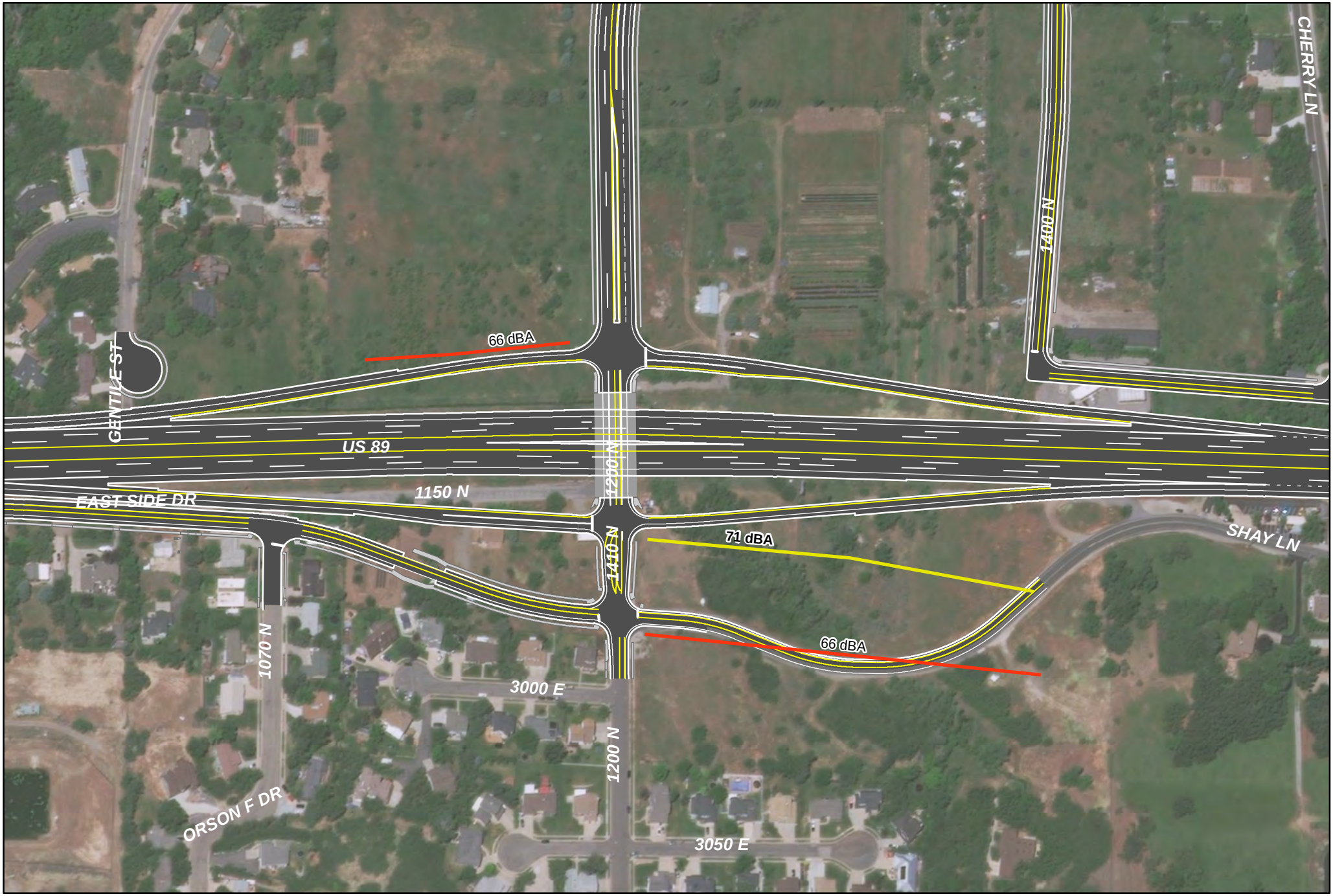
Name	16-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
498B	8.2	Yes	Yes	Yes	1	Yes	1	1
499B	7.9	Yes	Yes	No	0	No	0	1
500B	6.1	No	Yes	No	0	No	0	1
501B	5	No	Yes	No	0	No	0	1
502B	4.4	No	No	No	0	No	0	0
503B	8.1	Yes	Yes	Yes	1	Yes	1	1
504B	7.4	Yes	Yes	No	0	No	0	1
505B	6.8	No	Yes	No	0	No	0	1
506B	5.9	No	Yes	No	0	No	0	1
507B	5.4	No	Yes	No	0	No	0	1
508B	5.8	No	Yes	No	0	Yes	1	1
509B	5.3	No	Yes	No	0	Yes	1	1
510B	5.8	No	Yes	No	0	Yes	1	1
511B	6.5	No	Yes	No	0	No	0	1
512B	5.9	No	Yes	No	0	No	0	1
513B	5.6	No	Yes	No	0	No	0	1
514B	5.3	No	Yes	No	0	No	0	1
515B	5.5	No	Yes	No	0	No	0	1
516B	5.9	No	Yes	No	0	No	0	1
517B	5.9	No	Yes	No	0	No	0	1
518B	6.1	No	Yes	No	0	No	0	1
519B	5.7	No	Yes	No	0	No	0	1
520B	5.3	No	Yes	No	0	No	0	1
521B	5.4	No	Yes	No	0	No	0	1
522B	5.4	No	Yes	No	0	No	0	1
523B	6.4	No	Yes	No	0	No	0	1
524B	5.8	No	Yes	No	0	No	0	1
525B	5.9	No	Yes	No	0	No	0	1
526B	6.5	No	Yes	No	0	No	0	1
527B	7.6	Yes	Yes	Yes	1	Yes	1	1
528B	8.6	Yes	Yes	Yes	1	Yes	1	1
529B	8.2	Yes	Yes	Yes	1	Yes	1	1
530B	7	Yes	Yes	Yes	1	Yes	1	1
531B	6	No	Yes	No	0	Yes	1	1
532B	5.6	No	Yes	No	0	No	0	1
533B	5.4	No	Yes	No	0	No	0	1
534B	1.9	No	No	No	0	No	0	0
536B	4.9	No	No	No	0	No	0	0
671B	7.3	Yes	Yes	Yes	1	Yes	1	1
672B	7.8	Yes	Yes	Yes	1	Yes	1	1

Name	18-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
498B	8.7	Yes	Yes	Yes	1	Yes	1	1
499B	8.3	Yes	Yes	No	0	No	0	1
500B	6.7	No	Yes	No	0	No	0	1
501B	5.5	No	Yes	No	0	No	0	1
502B	5	No	Yes	No	0	No	0	1
503B	8.8	Yes	Yes	Yes	1	Yes	1	1
504B	8.1	Yes	Yes	No	0	No	0	1
505B	7.5	Yes	Yes	No	0	No	0	1
506B	6.7	No	Yes	No	0	No	0	1
507B	6.2	No	Yes	No	0	No	0	1
508B	6.4	No	Yes	No	0	Yes	1	1
509B	5.7	No	Yes	No	0	Yes	1	1
510B	6.3	No	Yes	No	0	Yes	1	1
511B	7.2	Yes	Yes	No	0	No	0	1
512B	6.5	No	Yes	No	0	No	0	1
513B	6.1	No	Yes	No	0	No	0	1
514B	6	No	Yes	No	0	No	0	1
515B	6.1	No	Yes	No	0	No	0	1
516B	6.4	No	Yes	No	0	No	0	1
517B	6.5	No	Yes	No	0	No	0	1
518B	6.9	No	Yes	No	0	No	0	1
519B	7.1	Yes	Yes	No	0	No	0	1
520B	6.5	No	Yes	No	0	No	0	1
521B	6	No	Yes	No	0	No	0	1
522B	6.2	No	Yes	No	0	No	0	1
523B	6.2	No	Yes	No	0	No	0	1
524B	6.9	No	Yes	No	0	No	0	1
525B	6.3	No	Yes	No	0	No	0	1
526B	6.4	No	Yes	No	0	No	0	1
527B	7	Yes	Yes	No	0	No	0	1
528B	8.2	Yes	Yes	Yes	1	Yes	1	1
529B	9.1	Yes	Yes	Yes	1	Yes	1	1
530B	8.7	Yes	Yes	Yes	1	Yes	1	1
531B	6.6	No	Yes	No	0	Yes	1	1
532B	6.1	No	Yes	No	0	No	0	1
533B	5.7	No	Yes	No	0	No	0	1
534B	2	No	No	No	0	No	0	0
536B	5.2	No	Yes	No	0	No	0	1
671B	8	Yes	Yes	Yes	1	Yes	1	1
672B	8.5	Yes	Yes	Yes	1	Yes	1	1

Name	20-ft Wall	Design Goal	Benefited	1st Row Design Goal	# 1st Row Design Goal	1st Row 5 dBA Reduction	# 1st Row 5 dBA Reduction	# Benefited Receptors (Category B)
498B	9.2	Yes	Yes	Yes	1	Yes	1	1
499B	8.7	Yes	Yes	No	0	No	0	1
500B	7.1	Yes	Yes	No	0	No	0	1
501B	5.9	No	Yes	No	0	No	0	1
502B	5.4	No	Yes	No	0	No	0	1
503B	9.4	Yes	Yes	Yes	1	Yes	1	1
504B	8.7	Yes	Yes	No	0	No	0	1
505B	8.1	Yes	Yes	No	0	No	0	1
506B	7.2	Yes	Yes	No	0	No	0	1
507B	6.7	No	Yes	No	0	No	0	1
508B	7	Yes	Yes	Yes	1	Yes	1	1
509B	6.2	No	Yes	No	0	Yes	1	1
510B	6.6	No	Yes	No	0	Yes	1	1
511B	7.5	Yes	Yes	No	0	No	0	1
512B	6.8	No	Yes	No	0	No	0	1
513B	6.4	No	Yes	No	0	No	0	1
514B	6.3	No	Yes	No	0	No	0	1
515B	6.5	No	Yes	No	0	No	0	1
516B	6.8	No	Yes	No	0	No	0	1
517B	6.9	No	Yes	No	0	No	0	1
518B	7.4	Yes	Yes	No	0	No	0	1
519B	7.7	Yes	Yes	No	0	No	0	1
520B	7	Yes	Yes	No	0	No	0	1
521B	6.5	No	Yes	No	0	No	0	1
522B	6.7	No	Yes	No	0	No	0	1
523B	6.7	No	Yes	No	0	No	0	1
524B	7.2	Yes	Yes	No	0	No	0	1
525B	6.5	No	Yes	No	0	No	0	1
526B	6.6	No	Yes	No	0	No	0	1
527B	7.2	Yes	Yes	No	0	No	0	1
528B	8.5	Yes	Yes	Yes	1	Yes	1	1
529B	9.6	Yes	Yes	Yes	1	Yes	1	1
530B	9.2	Yes	Yes	Yes	1	Yes	1	1
531B	7	Yes	Yes	Yes	1	Yes	1	1
532B	6.4	No	Yes	No	0	No	0	1
533B	5.9	No	Yes	No	0	No	0	1
534B	2	No	No	No	0	No	0	0
536B	5.3	No	Yes	No	0	No	0	1
671B	8.3	Yes	Yes	Yes	1	Yes	1	1
672B	8.8	Yes	Yes	Yes	1	Yes	1	1

Feasibility Factors:				
# of First-Row 5 dBA Reduction:	4	6	9	11	11	11
% of First-Row 5 dBA Reduction:	36.4%	54.5%	81.8%	100.0%	100.0%	100.0%
Acoustic Feasibility (5 dBA reduction for 50% of front-row):	**No**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Reasonableness Factors:						
# of First-Row Design Goal:	0	2	5	7	7	9
% of First-Row Design Goal:	0.0%	18.2%	45.5%	63.6%	63.6%	81.8%
Noise Abatement Design Goal (7 dBA reduction for 35% of front-row):	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
# of Benefited (Category B):	4	8	20	37	39	39
Cost of Noise Wall (Length x Height x $20/sq ft):	$393,400.00	$472,080.00	$550,760.00	$629,440.00	$708,120.00	$786,800.00
Cost of any other items critical to safety (snow storage on overpass):	$49,175.00	$49,175.00	$49,175.00	$49,175.00	$49,175.00	$49,175.00
Anticipated Cost of Noise Abatement:	$442,575.00	$521,255.00	$599,935.00	$678,615.00	$757,295.00	$835,975.00
Activity Category B Allowable Cost ($30,000 per benefitted receptor):	$120,000.00	$240,000.00	$600,000.00	$1,110,000.00	$1,170,000.00	$1,170,000.00
Activity Category C Allowable Cost ($360/linear ft):	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Allowable Cost:	$120,000.00	$240,000.00	$600,000.00	$1,110,000.00	$1,170,000.00	$1,170,000.00
Difference between Anticipated Cost and Allowable Cost:	-$322,575.00	-$281,255.00	$65.00	$431,385.00	$412,705.00	$334,025.00
Cost Effective (Anticipated Cost < Allowable Cost):	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
Feasible and Reasonable:	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**

APPENDIX E: NOISE LEVELS ON UNDEVELOPED LAND



US-89: Shepard Lane to SR-193

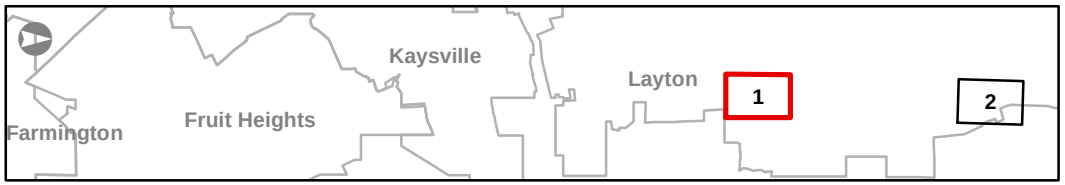
Undeveloped Land

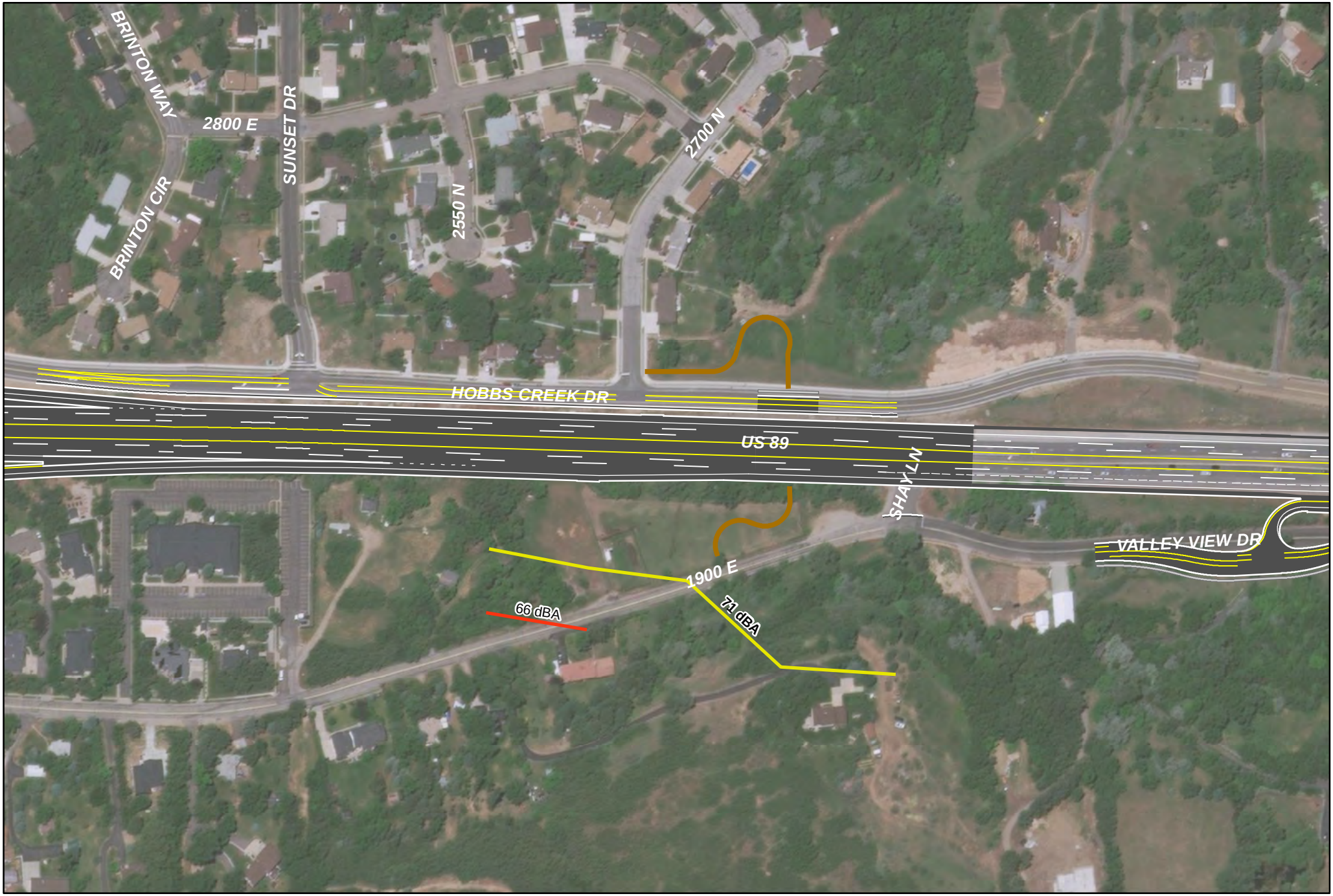
Map 1 of 2

0 175 350 Feet

66 dBA Contour

71 dBA Contour





US-89: Shepard Lane to SR-193

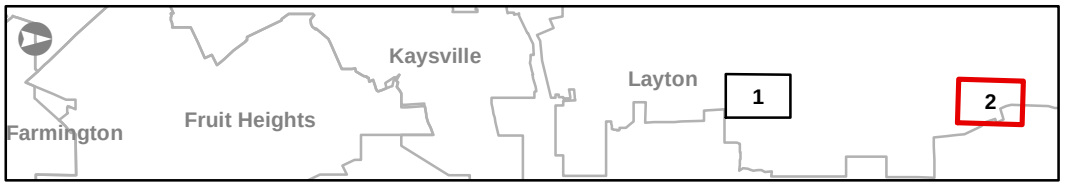
Undeveloped Land

Map 2 of 2

0 175 350 Feet

66 dBA Contour

71 dBA Contour



APPENDIX F: EXISTING AND PROPOSED ACTION TRAFFIC VOLUMES

US-89 Mainline

From	To	2021 AADT	2040 AADT
Main St.	Nicholls Rd.	53,400	65,500
Nicholls Rd.	400 North	51,800	63,900
400 North	Oak Hills Dr.	51,400	63,800
Oak Hills Dr.	Antelope Dr.	55,200	68,800
Antelope Dr.	SR-193	54,500	67,300
SR-193	South Weber Dr.	67,200	80,200
South Weber Dr.	I-84	72,600	86,200
		58,014	70,814

Vehicle Classification

Vehicle Types	US-89 Mainline	Cross Streets	Ramps
Class 1-3	86.7%	97.5%	97.5%
Class 4	0.3%	0.1%	0.1%
Class 5-7	9.3%	1.7%	1.7%
Class 8-10	2.6%	0.5%	0.5%
Class 11-13	1.1%	0.2%	0.2%

Cross Streets

Location		2021 AADT	2040 AADT
SR-273	South Ramps	16,000	15,300
	North Ramps	6,900	8,600
	SR-273	22,700	22,500
Nicholls Road		1,300	2,000
200 North Kaysville	South Ramps	3,000	3,500
	North Ramps	7,900	8,400
	200 North Kaysville	11,100	11,800
Crestwood Road		3,100	3,200
Oak Hills Dr.	South Ramps	7,700	4,700
	North Ramps	7,700	7,700
	Oak Hills Dr.	15,200	11,900
1200 North	South Ramps	NA	4,500
	North Ramps	NA	5,600
	1200 North	NA	8,600
Antelope Dr.	South Ramps	3,300	3,700
	North Ramps	7,500	5,900
	Antelope Dr.	11,500	9,900
SR-193	South Ramps	9,700	10,400
	North Ramps	21,500	18,200
	SR-193	31,100	28,700
South Weber Dr.	South Ramps	10,300	9,500
	North Ramps	7,900	8,900
	South Weber Dr.	16,600	16,900
I-84	NB to EB Ramp	6,300	7,900
	I-84 EB Off Ramp	8,600	9,200
	SB to EB Loop	2,500	2,900
	WB to SB Loop	3,400	5,700
	I-84 WB Off Ramp	1,900	2,600
	I-84 WB On Ramp	10,900	9,300

Note: "South Ramps" include the sum of the NB Off-Ramp and SB On-Ramp
"North Ramps" include the sum of the NB On-Ramp and SB Off-Ramp

Location	2021 AADT	2040 AADT
SR-273	22,700	22500
NB Off Ramp	8,000	7700
NB On Ramp	3,500	4300
SB Off Ramp	3500	4300
SB On Ramp	8,000	7700

Valley View Dr NB Ramp

2021 AADT	2040 AADT
300	300

Frontage Roads - Preliminary
10/9/2018

Location	2021 AADT	2040 AADT
Lloyd Road (South of Nicholls Rd.)	1,500	1,800
Lloyd Road (North of Nicholls Rd.)	1,300	1,500
Mountain Road (North of 200 N)	2,700	3,000
Frontage East of US-89 and South of Crestwood Rd	2,400	2,700
Frontage East of US-89 and North of Crestwood Rd	1,500	1,800
Frontage West of US-89 and North of Crestwood Rd	900	900
Frontage West of US-89 and South of Crestwood Rd	700	800
Frontage East of US-89 and South of Oak Hills Dr	1,900	2,000
Frontage East of US-89 and North of Oak Hills Dr	2,200	1,500
Frontage East of US-89 and South of 1200 North (Future)	N/A	1,700
Hobbs Creek Dr North of Antelope Dr	2,000	2,200
Hobbs Creek Dr South of Antelope Dr	3,200	2,000

Vehicle Classification

Vehicle Types	Frontage Roads
Class 1-3	97.5%
Class 4	0.1%
Class 5-7	1.7%
Class 8-10	0.5%
Class 11-13	0.2%

APPENDIX G: RECEPTOR COMPARISON TABLE

Table G-1: Receptor Comparison Chart

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
1B	NR B10
2B	NR B12
3B	NR B13
4C	NR C01
5C	NR C02
6C	NR C03
7C	NR C04
8C	NR C05
9C	NR C06
10C	NR C07
11C	NR C08
12C	NR C09
13B	NR B01
14B	NR B02
15B	NR B03
16B	NR B04
17B	NR B05
18B	NR B06
19B	NR B07
20B	NR B150
21B	NR B151
22B	NR B152
23B	NR B155
24B	NR B161
25B	NR B162
26B	NR B164
27B	NR B165
28B	NR B166
29B	NR B167
30B	NR B168
31B	NR B169
32B	NR B170
33B	NR B171
34B	NR B172
35B	B649

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
36B	B650
37B	B652
38B	B653
39B	B655
40B	B661
41B	B662
42B	B663
43B	B664
44B	B665
45B	B666
46B	B667
47B	B668
48B	B669
49B	B670
50B	B671
51B	B672
52B	B673
53B	B674
54B	B675
55B	B676
56B	B677
57B	B678
58B	B679
59B	B680
60B	B681
61B	B682
62B	B683
63B	B684
64B	B685
65B	B699
66B	B700
67B	B701
68B	B702
69B	B703
70B	B704
71B	NR B100

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
72B	NR B101
73B	NR B102
74B	NR B103
75B	NR B104
76B	NR B105
77B	NR B106
78B	NR B107
79B	NR B108
80B	NR B109
81B	NR B110
82B	NR B111
83B	NR B112
84B	NR B113
85B	NR B114
86B	NR B115
87B	NR B116
88B	NR B117
89B	NR B118
90B	NR B119
91B	NR B120
92B	NR B121
93B	NR B122
94B	NR B123
95B	NR B124
96B	NR B125
97B	NR B126
98B	NR B127
99B	NR B128
100B	NR B129
101B	NR B130
102B	NR B131
103B	NR B132
104B	NR B133
105B	NR B134
106B	NR B135
107B	NR B136

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
108B	NR B137
109B	NR B138
110B	NR B139
111B	NR B140
112B	NR B141
113B	NR B142
114B	NR B143
115B	NR B144
116B	NR B145
117B	NR B74
118B	NR B75
119B	NR B76
120B	NR B77
121B	NR B78
122B	NR B79
123B	NR B80
124B	NR B81
125B	NR B82
126B	NR B83
127B	NR B84
128B	NR B85
129B	NR B86
130B	NR B87
131B	NR B88
132B	NR B89
133B	NR B90
134B	NR B91
135B	NR B92
136B	NR B93
137B	NR B94
138B	NR B95
139B	NR B96
140B	NR B97
141B	NR B98
142B	NR B99
143C	NR C24

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
144C	NR C25
145C	NR C26
146C	NR C29
147C	NR C30
148D	NR C31
149B	NR B146
150B	NR B147
151B	NR B148
152B	NR B149
153B	NR B153
154B	NR B154
155B	NR B156
156B	NR B157
157B	NR B158
158B	NR B159
159B	NR B160
160B	B686
161B	B687
162B	B688
163B	B689
164B	B690
165B	B691
166B	B692
167B	B693
168B	B694
169B	B695
170B	B696
171B	B697
172B	B698
173B	B605
174B	B606
175B	B629
176B	B630
177B	B631
178B	B632
179B	B633

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
180B	B637
181B	B638
182B	B639
183B	B596
184B	B597
185B	B609
186B	B610
187B	B611
188B	B604
189B	B607
190B	B608
191B	B612
192B	B823
193B	B824
194B	B505
195B	B506
196B	B507
197B	B509
198B	B540
199B	B541
200B	B542
201B	B543
202B	B544
203B	B545
204B	B546
205B	B547
206B	B548
207B	B549
208B	B550
209B	B551
210B	B552
211B	B553
212B	B554
213B	B555
214B	B556
215B	B557

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
216B	B558
217B	B559
218B	B560
219B	B561
220B	B562
221B	B563
222B	B564
223B	B565
224B	B566
225B	B567
226B	B568
227B	B569
228B	B570
229B	B571
230B	B572
231B	B573
232B	B574
233B	B575
234B	B576
235B	B578
236B	B579
237B	B580
238B	B581
239B	B582
240B	B583
241B	B584
242B	B585
243B	B586
244B	B587
245B	B588
246B	B589
247B	B590
248B	B591
249B	B592
250B	B593
251B	B594

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
252B	B595
253B	B817
254B	B818
255B	B819
256B	B820
257B	B821
258B	B822
259B	B503
260B	B504
261C	B511
262B	B514
263B	B515
264B	B516
265B	B517
266B	B518
267B	B519
268B	B520
269B	B521
270B	B525
271B	B526
272B	B527
273B	B529
274B	B530
275B	B531
276B	B532
277B	B533
278B	B534
279B	B535
280B	B536
281B	B537
282B	B538
283B	B539
284B	B598
285B	B599
286B	B600
287B	B601

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
288B	B602
289B	B603
290B	B403
291B	B404
292B	B405
293B	B406
294B	B444
295B	B445
296B	B446
297B	B447
298B	B448
299B	B449
300B	B450
301B	B451
302B	B452
303B	B453
304B	B454
305B	B455
306B	B456
307B	B457
308B	B458
309B	B459
310B	B460
311B	B461
312B	B462
313B	B463
314B	B464
315B	B468
316B	B469
317B	B470
318B	B471
319B	B472
320B	B473
321B	B474
322B	B476
323B	B478

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
324B	B479
325B	B480
326B	B487
327B	B488
328B	B408
329B	B409
330B	B410
331B	B411
332B	B412
333B	B414
334B	B415
335B	B416
336B	B417
337B	B418
338B	B419
339B	B420
340B	B421
341B	B422
342B	B423
343B	B425
344B	B426
345B	B427
346B	B428
347B	B429
348B	B430
349B	B431
350B	B432
351B	B433
352B	B465
353B	B467
354B	B489
355B	B490
356B	B491
357B	B492
358B	B493
359E	B494

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
360B	B496
361B	B497
362B	B498
363B	B499
364B	B278
365B	B279
366B	B280
367B	B281
368B	B282
369B	B283
370B	B284
371B	B285
372B	B286
373B	B287
374B	B288
375B	B289
376B	B290
377B	B291
378B	B292
379B	B293
380B	B294
381B	B295
382B	B296
383B	B297
384B	B298
385B	B299
386B	G98
387B	B300
388B	B301
389B	B302
390B	B303
391B	B304
392B	B305
393B	B306
394B	B307
395B	B308

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
396B	B309
397B	B310
398B	B311
399B	B312
400B	B313
401B	B314
402B	B315
403B	B316
404B	B317
405B	B318
406B	B319
407B	B320
408B	B321
409B	B322
410B	B323
411B	B324
412B	B325
413B	B326
414B	B327
415B	B328
416B	B329
417B	B330
418B	B331
419B	B332
420B	B333
421B	B334
422B	B335
423B	B336
424B	B337
425B	B338
426B	B339
427B	B340
428B	B341
429B	B342
430B	B343
431B	B344

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
432B	B345
433B	B346
434B	B347
435B	B348
436B	B349
437B	B350
438B	B351
439B	B352
440B	B353
441B	B354
442B	B356
443B	B357
444B	B358
445B	B212
446B	B214
447B	B215
448B	B216
449B	B219
450B	B220
451B	B221
452B	B223
453B	B224
454B	B225
455B	B226
456B	B227
457B	B231
458B	B232
459B	B233
460B	B234
461B	B235
462B	B236
463B	B237
464B	B239
465B	B240
466B	B241
467B	B242

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
468B	B243
469B	B244
470B	B245
471B	B246
472B	B247
473B	B248
474B	B250
475B	B251
476B	B252
477B	B253
478B	B254
479B	B255
480B	B256
481B	B257
482B	B258
483B	B259
484B	B260
485B	B261
486B	B262
487B	B263
488B	B264
489B	B265
490B	B266
491B	B267
492B	B268
493B	B269
494B	B270
495B	B400
496B	B401
497B	B402
498B	B131
499B	B132
500B	B133
501B	B134
502B	B78
503B	B135

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
504B	B136
505B	B137
506B	B138
507B	B139
508B	B140
509B	B141
510B	B142
511B	B143
512B	B144
513B	B145
514B	B146
515B	B147
516B	B148
517B	B149
518B	B150
519B	B151
520B	B152
521B	B153
522B	B154
523B	B155
524B	B169
525B	B170
526B	B171
527B	B172
528B	B173
529B	B174
530B	B175
531B	B176
532B	B177
533B	B178
534B	B179
535B	B180
536B	B183
537B	B205
538B	B206
539B	B207

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
540B	B208
541B	B209
542B	B210
543B	B211
544B	B156
545B	B158
546B	B159
547B	B160
548B	B161
549B	B162
550B	B163
551D	C2
552B	B164
553B	B165
554B	B166
555B	B167
556B	B168
557B	B184
558B	B185
559B	B186
560B	B187
561B	B195
562B	B196
563B	B197
564B	B198
565B	B199
566B	B200
567B	B201
568B	B202
569B	B203
570B	B273
571B	B274
572B	B275
573B	B276
574B	B277
575B	B613

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
576B	B614
577B	B616
578B	B617
579B	B618
580B	B619
581B	B620
582B	B621
583B	B622
584B	B623
585B	B624
586B	B625
587B	B626
588B	B627
589B	B628
590B	B641
591B	B642
592B	B643
593B	B644
594B	B645
595B	B648
596B	B271
597B	B272
598B	N/A
599B	N/A
600B	N/A
601B	N/A
602B	N/A
603B	N/A
604B	N/A
605B	N/A
606B	N/A
607B	N/A
608B	N/A
609B	N/A
610B	N/A
611B	N/A

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
612B	NR B72
613B	NR B62
614B	NR B60
615B	NR B61
616B	NR B59
617B	NR B58
618B	NR B57
619B	NR B2
620B	NR B51
621B	NR B50
622B	NR B49
623B	NR B750
624D	NR D02
625C	NR C32
626B	NR B751
627B	NR B752
628B	NR B73
629B	NR B753
630B	NR B754
631B	NR B755
632B	NR B756
633B	NR B67
634B	NR B68
635B	NR B66
636B	NR B69
637B	NR B63
638B	NR B71
639B	NR B70
640B	NR B64
641B	NR B65
642B	NR B56
643B	NR B55
644B	NR B757
645B	NR B758
646B	NR B53
647B	NR B54

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
648B	NR B761
649B	NR B760
650B	NR B759
651C	NR C21
652C	NR C22
653C	NR C23
654B	N/A
655B	N/A
656B	N/A
657B	N/A
658B	N/A
659B	N/A
660B	N/A
661B	N/A
662B	N/A
663B	N/A
664B	N/A
665B	B660
666B	B659
667B	B657
668B	N/A
669B	N/A
670B	B249
671B	G79
672B	G80
673B	G81
674B	N/A
675B	N/A
676B	N/A
677B	B577
678B	NR B13
679B	NR B14
680B	NR B15
681B	NR B16
682B	NR B17
683B	N/A

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
684B	NR B18
685B	NR B19
686B	NR B23
687B	NR B24
688B	NR B25
689B	NR B26
690B	NR B29
691B	NR B30
692B	N/A
693B	NR B22
694B	NR B21
695B	NR B20
696B	NR B27
697B	NR B28
698B	NR B31
699B	N/A
700B	N/A
702B	NR B37
703B	NR B35
704B	NR B36
705B	NR B35
706B	NR B33
707B	NR B32
708B	NR B34
709B	NR B38
710B	N/A
711B	N/A
712B	NR B43
713B	NR B42
714B	NR B41
715B	NR B40
716C	NR C16
717C	NR C16
718C	NR C17
719B	N/A
720B	N/A

Receptor Number: Updated Noise Study	Receptor Number: State Environmental Study
721B	N/A
722B	N/A
723B	NR B44
724B	NR B44
725B	NR B44
726B	NR B44
727B	NR B45
728B	NR B45
729B	NR B45
730B	NR B45
731B	NR B46
732B	NR B46
733B	NR B46
734B	NR B46
735B	NR B47
736B	NR B47
737B	NR B47
738B	NR B47
739B	NR B48
740B	NR B48
741B	NR B48
742B	NR B48
743B	N/A
744B	N/A
745B	N/A
746B	N/A
747B	N/A
748B	N/A
749B	N/A
750B	N/A
751B	N/A