

Table 4-3. Potential Noise Abatement by Location

Receptors Analyzed	Barrier ID	7dBA Design Goal?	Dwelling Units	Total Leq Reduction (dBA)	Barrier Height (ft)	Barrier Length (ft)	Barrier Unit Cost	Cost Benefit Index	CBI Criteria Met?
Mitigation Common to Build Alternatives									
R52, R55, R56, C57, R58, R118, R119	MIT 1a-c	Yes	11	54.2	14	626	\$45	\$7,276	No
R318, R320, R322, R323, R62, R67	MIT 1c	Yes	11	28.4	13	490	\$45	\$10,093	No
R52, R55, R56, C57, R58, R118, R119, R318, R320, R322, R323, R62, R67	MIT 1d	Yes	18	56.7	18	1020	\$45	\$14,571	No
R324, R68, R69, R74, C75, R75a-d	MIT 3a	No	9		12	900	\$45		NA
R70, R71, R72, R73	MIT 3b	Yes	15	57.6	12	900	\$45	\$8,438	No
R83, R84, R86	MIT 4a	Yes	3	23.9	12	1110	\$45	\$25,079	No
R81, R81a-b, R82, C116	MIT 4b1	No	5		12	585	\$45		NA
R85, R87, R88, R92	MIT 4b2-4	Yes	6	7.3	12	475	\$45	\$35,137	No
R102, R103, R104, R108	MIT 5a	Yes	5	36.5	12	1200	\$45	\$17,753	No
R105, R106, R107, R107b	MIT 5b	Yes	8	57.1	10	230	\$45	\$1,813	Yes
Mitigation Revised F Modified Alternative									
R304, R305, R306, R307	MIT 2n	No	4				\$45		NA
R309, R310, R311, R312, R315	MIT 2s	No	5				\$45		NA
R300, R301, R302	MIT 2c	No	3		20	900	\$45		NA
Mitigation East Alignment Alternative									
R13 E R18 E	MIT6	Yes	6	7.1	12	460	\$45	\$58,310	No

2011 Guidelines

2011 Guidelines

MIT1c Mitigation analysis for Walls at RS2 to R66

Receptor	14ft x 626ft	13ft x 626ft	13ft x 490ft
66	<3	<3	<3
67	9.4	8.5	8.4
320	5.4	4.7	4.5
322	1	<3	<3
323	4	5.8	20
DBA		54.2	28.5

Wall Ht	Wall Len	Unit Cos	Decibel	CBI
12	626	45	*	
13	626	45	28.5	\$12,849
14	626	45	54.2	\$7,276
Wall Ht	Wall Len	Unit Cos	Decibel	CBI
13	490	45	28.4	\$10,093

* No 7 dBA reduction at minimum 1 front row receptor

unreasonable

MITIC Mitigation analysis for Walls at R52 to R66

Receptor	14ft x 626ft	13ft x 626ft	13ft x 490ft
66	1	<3	<3
67	1	9.4	8.5
67	1	9.4	8.4
320	4	5.4	4.7
320	4	5.4	18.8
322	1	3.8	4.5
322	1	3.8	18
323	4	5.8	4.5
323	4	5.8	20
DBA		58	47.3

Wall Ht	Wall Len	Unit Co	Decibel	CBI
12	626	30	46.4	\$4,119
13	626	30	46.4	\$4,119
14	626	30	46.4	\$4,119

* No 5dBA reduction at minimum 1 front row receptor

Wall Ht	Wall Len	Unit Co	Decibel	CBI
12	626	30	46.4	\$4,119
13	626	30	46.4	\$4,119
14	626	30	46.4	\$4,119

unreasonable
marginal

2002 Guidelines

Wall 13 & 490 along frontage rd
 Feasible
 CBI

Requires County ROW

< See MITID >

RESULTS: SOUND LEVELS

Supplemental EIS US160/550 Grandview

Root filename: SEISModG
jts 110506 walls southside frontage rd

6 May 2011
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Supplemental EIS US160/550 Grandview

RUN: MIT1 walls c shorter wall 13ft

BARRIER DESIGN: INPUT HEIGHTS

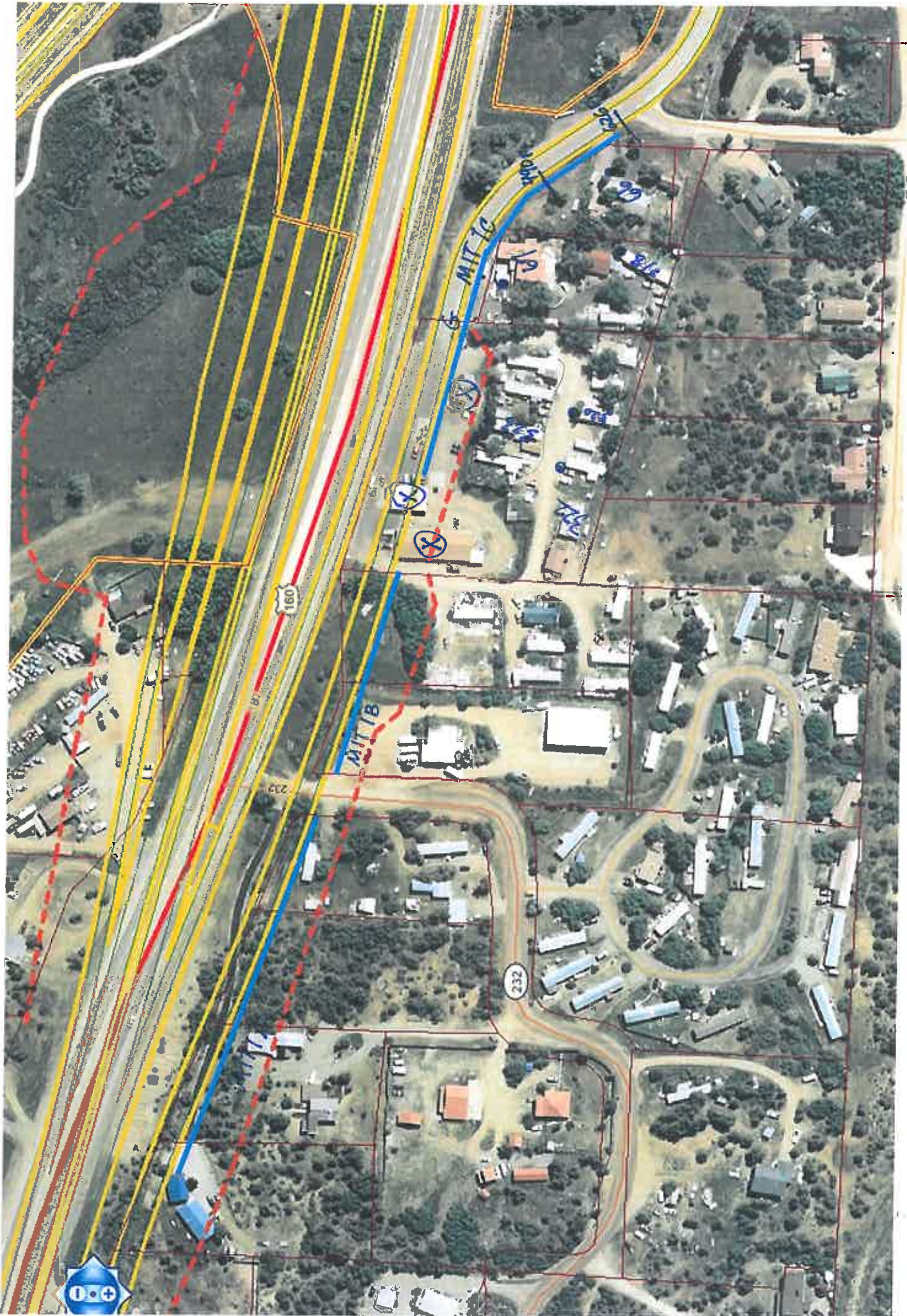
Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver		No.	#DUs	Existing		No Barrier		Increase over existing		Type		With Barrier		Calculated	Goal	Calculated	Goal	Calculated	Goal	Calculated	Goal
Name				LAeq1h	dBA	LAeq1h	Calculated	Crit'n	dBA	dBA	dB	Crit'n	Sub'l Inc								
52		56	1	62.9	61.8	66	66	-1.1	10	---	10	---	57.9	3.9	5	-1.1					
55		60	1	61.4	60.9	66	66	-0.5	10	---	10	---	60.1	0.8	5	-4.2					
56		61	3	62.3	62.2	66	66	-0.1	10	---	10	---	61.5	0.7	5	-4.3					
C57		90	1	67.0	67.0	71	71	0.0	10	---	10	---	62.7	4.3	5	-0.7					
58		91	3	65.9	65.8	66	66	-0.1	10	---	10	---	64.9	0.9	5	-4.1					
63		92	1	66.3	66.3	66	66	0.0	10	Snd Lvl	10	Snd Lvl	65.9	0.4	5	-4.6					
65		93	1	65.2	65.1	66	66	-0.1	10	---	10	---	64.8	0.3	5	-4.7					
66		94	1	69.6	69.2	66	66	-0.4	10	Snd Lvl	10	Snd Lvl	68.3	0.9	5	-4.1					
67		95	1	71.5	70.8	66	66	-0.7	10	Snd Lvl	10	Snd Lvl	62.4	8.4	5	3.4					
118		142	3	67.7	67.7	66	66	0.0	10	Snd Lvl	10	Snd Lvl	65.1	2.6	5	-2.4					
119		143	2	65.6	65.6	66	66	0.0	10	---	10	---	64.3	1.3	5	-3.7					
304		155	1	54.1	53.7	66	66	-0.4	10	---	10	---	53.7	0.0	5	-5.0					
305		156	1	53.5	53.1	66	66	-0.4	10	---	10	---	53.0	0.1	5	-4.9					
306		157	1	55.5	55.2	66	66	-0.3	10	---	10	---	55.2	0.0	5	-5.0					
307		158	1	54.3	54.0	66	66	-0.3	10	---	10	---	53.9	0.1	5	-4.9					
309		159	1	59.2	59.2	66	66	0.0	10	---	10	---	59.1	0.1	5	-4.9					
310		160	1	60.7	60.7	66	66	0.0	10	---	10	---	60.7	0.0	5	-5.0					
312		161	1	61.7	61.7	66	66	0.0	10	---	10	---	61.6	0.1	5	-4.9					
315		162	1	63.1	63.2	66	66	0.1	10	---	10	---	63.3	-0.1	5	-5.1					
318		163	1	68.3	68.3	66	66	0.0	10	Snd Lvl	10	Snd Lvl	67.5	0.8	5	-4.2					
320		164	4	67.6	67.5	66	66	-0.1	10	Snd Lvl	10	Snd Lvl	63.0	4.5	5	-0.5					
322		165	1	67.3	67.3	66	66	0.0	10	Snd Lvl	10	Snd Lvl	64.5	2.8	5	-2.2					
323		167	4	70.3	70.4	66	66	0.1	10	Snd Lvl	10	Snd Lvl	65.4	5.0	5	0.0					

RESULTS: SOUND LEVELS

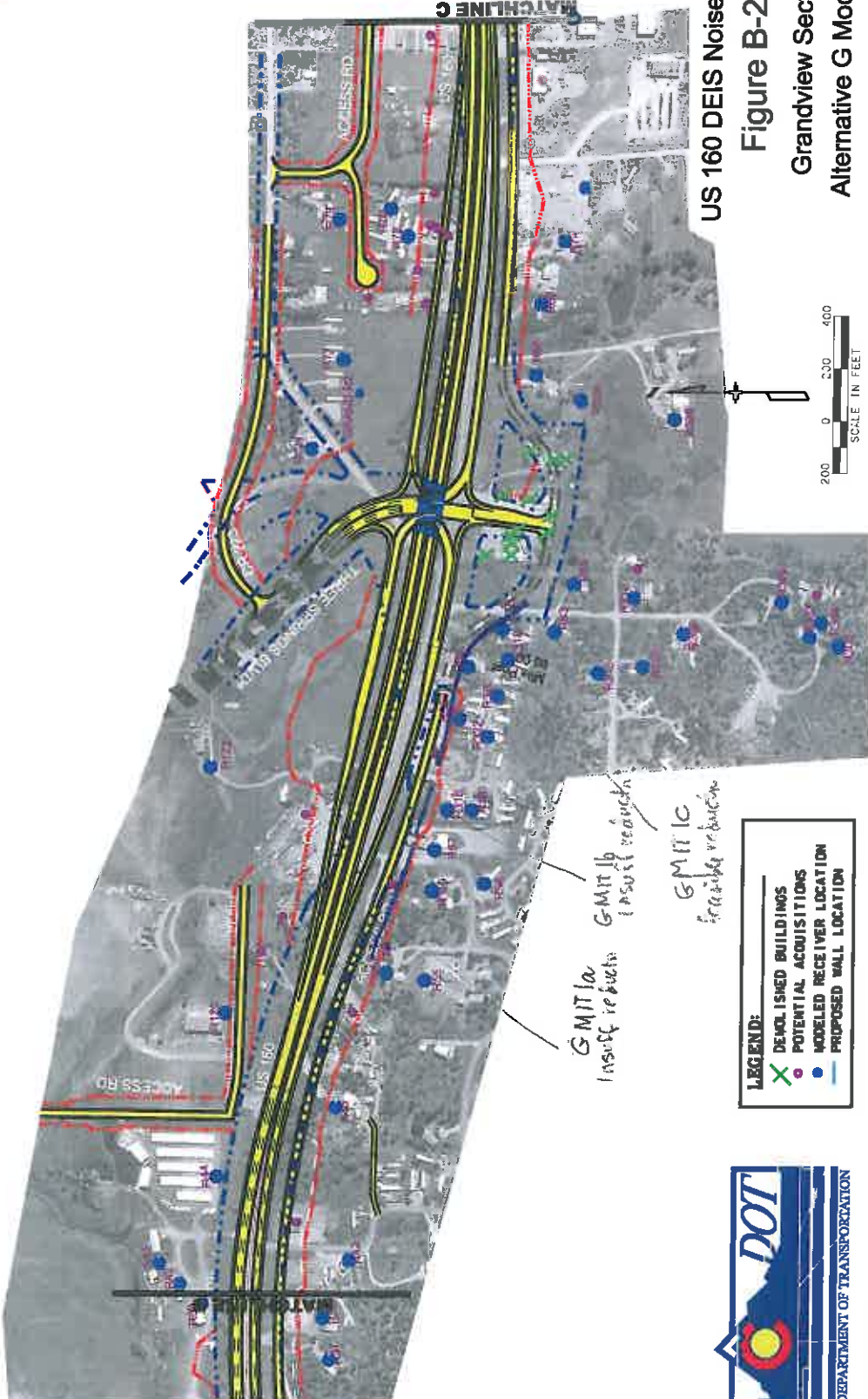
										Supplemental EIS US160/550 Grandview				
C326	169	1	61.1	60.9	66	-0.2	10	---	60.9	0.0	5	-5.0		
Grand4	171	1	57.1	56.7	66	-0.4	10	---	56.6	0.1	5	-4.9		
56a	173	1	61.4	61.2	66	-0.2	10	---	60.4	0.8	5	-4.2		
58a	174	1	65.7	65.6	66	-0.1	10	---	64.8	0.8	5	-4.2		
58b	175	1	67.0	67.0	66	0.0	10	Snd Lvl	66.8	0.2	5	-4.8		
311	176	1	60.2	60.3	66	0.1	10	---	60.3	0.0	5	-5.0		
312a	177	1	61.6	61.5	66	-0.1	10	---	61.4	0.1	5	-4.9		
C325	178	1	62.5	62.3	66	-0.2	10	---	62.2	0.1	5	-4.9		
Dwelling Units														
		# DUs	Noise Reduction											
			Min	Avg	Max									
			dB	dB	dB									
All Selected		44	-0.1	1.3	8.4									
All Impacted		17	0.2	2.8	8.4									
All that meet NRR Goal		5	5.0	6.7	8.4									



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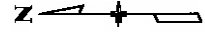
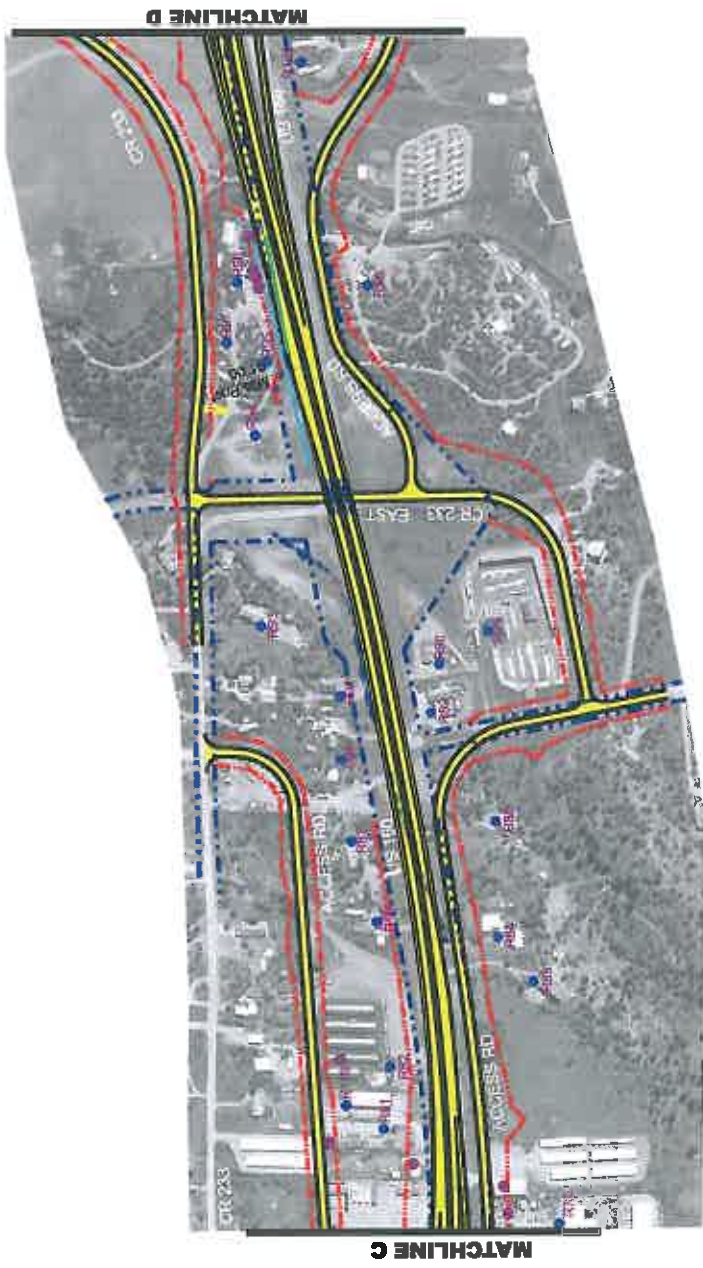


US 160 DEIS Noise Analysis
 Figure B-20
 Grandview Section
 Alternative G Modified

LEGEND:

- X DEMOLISHED BUILDINGS
- POTENTIAL ACQUISITIONS
- MODELED RECEIVER LOCATION
- PROPOSED WALL LOCATION





LEGEND:

	DEMOLISHED BUILDINGS
	POTENTIAL ACQUISITIONS
	MODELED RECEIVER LOCATION
	PROPOSED WALL LOCATION

US 160 DEIS Noise Analysis
 Figure B-21
 Grandview Section
 Alternative G Modified



RESULTS: SOUND LEVELS

Supplemental EIS US160/550 Grandview

Root filename: SEISModG
jts 110506 walls southside frontage rd

6 May 2011
TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Supplemental EIS US160/550 Grandview
RUN: MIT1 walls a13-14,b15, c13
BARRIER DESIGN: INPUT HEIGHTS

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

ATMOSPHERICS: 68 deg F, 50% RH

Receiver	No.	#DJs	Existing		No Barrier		Increase over existing		Type Impact	With Barrier		Noise Reduction	
			LAeq1h	dBA	LAeq1h	dBA	Calculated	Crit'n		Calculated	Crit'n	Calculated	Goal
	52	1	62.9	61.8	66	66	-1.1	10	---	57.9	3.9	5	-1.1
	55	1	61.4	60.9	66	66	-0.5	10	---	60.1	0.8	5	-4.2
	56	3	62.3	62.2	66	66	-0.1	10	---	61.5	0.7	5	-4.3
	C57	1	67.0	67.0	71	71	0.0	10	---	62.7	4.3	5	-0.7
	58	3	65.9	65.8	66	66	-0.1	10	---	64.9	0.9	5	-4.1
	63	1	66.3	66.3	66	66	0.0	10	Snd Lvl	66.0	0.3	5	-4.7
	65	1	65.2	65.2	66	66	0.0	10	---	64.8	0.4	5	-4.6
	66	1	69.6	69.2	66	66	-0.4	10	Snd Lvl	68.1	1.1	5	-3.9
	67	1	71.5	70.8	66	66	-0.7	10	Snd Lvl	62.3	6.5	5	3.5
	142	3	67.7	67.7	66	66	0.0	10	Snd Lvl	65.1	2.6	5	-2.4
	143	2	65.6	65.6	66	66	0.0	10	---	64.3	1.3	5	-3.7
	155	1	54.1	53.7	66	66	-0.4	10	---	53.7	0.0	5	-5.0
	156	1	53.5	53.1	66	66	-0.4	10	---	53.1	0.0	5	-5.0
	157	1	55.5	55.2	66	66	-0.3	10	---	55.2	0.0	5	-5.0
	158	1	54.3	54.0	66	66	-0.3	10	---	54.0	0.0	5	-5.0
	159	1	59.2	59.2	66	66	0.0	10	---	59.2	0.0	5	-5.0
	160	1	60.7	60.8	66	66	0.1	10	---	60.8	0.0	5	-5.0
	161	1	61.7	61.7	66	66	0.0	10	---	61.7	0.0	5	-5.0
	162	1	63.1	63.3	66	66	0.2	10	---	63.4	-0.1	5	-5.1
	163	1	68.3	68.3	66	66	0.0	10	Snd Lvl	67.4	0.9	5	-4.1
	164	4	67.6	67.5	66	66	-0.1	10	Snd Lvl	62.8	4.7	5	-0.3
	165	1	67.3	67.3	66	66	0.0	10	Snd Lvl	64.5	2.8	5	-2.2
	167	4	70.3	70.4	66	66	0.1	10	Snd Lvl	65.4	5.0	5	0.0

Handwritten mark

RESULTS: SOUND LEVELS

						Supplemental EIS US160/550 Grandview						
C326	169	1	61.1	60.9	66	-0.2	10	60.9	0.0	5	-5.0	
Grand4	171	1	57.1	56.7	66	-0.4	10	56.6	0.1	5	-4.9	
56a	173	1	61.4	61.2	66	-0.2	10	60.4	0.8	5	-4.2	
58a	174	1	65.7	65.6	66	-0.1	10	64.8	0.8	5	-4.2	
58b	175	1	67.0	67.0	66	0.0	10	66.8	0.2	5	-4.8	
311	176	1	60.2	60.4	66	0.2	10	60.4	0.0	5	-5.0	
312a	177	1	61.6	61.5	66	-0.1	10	61.4	0.1	5	-4.9	
C325	178	1	62.5	62.3	66	-0.2	10	62.2	0.1	5	-4.9	
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		44	-0.1	1.3	8.5							
All Impacted		17	0.2	2.9	8.5							
All that meet NR Goal		5	5.0	6.8	8.5							

RESULTS: SOUND LEVELS

Supplemental EIS US160/550 Grandview

Root filename: SEISModG
 jts 110506 walls southside frontage rd

6 May 2011
 TNM 2.5
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Supplemental EIS US160/550 Grandview

RUN: MIT1 walls a,b,c 14ft

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

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

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier		Increase over existing		Type Impact	With Barrier		Noise Reduction	
				LAeq1h	Calculated	Crit'n	Calculated		Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dBA	dB		dBA	dB	dB	dB
52		56	1	62.9	61.8	66	-1.1	10	58.1	3.7	5	-1.3
55		60	1	61.4	60.9	66	-0.5	10	60.2	0.7	5	-4.3
56		61	3	62.3	62.2	66	-0.1	10	61.7	0.5	5	-4.5
C57		90	1	67.0	67.0	71	0.0	10	63.1	3.9	5	-1.1
58		91	3	65.9	65.8	66	-0.1	10	65.0	0.8	5	-4.2
63		92	1	66.3	66.3	66	0.0	10	65.7	0.6	5	-4.4
65		93	1	65.2	65.2	66	0.0	10	64.8	0.4	5	-4.6
66		94	1	69.6	69.2	66	-0.4	10	67.8	1.8	5	-3.6
67		95	1	71.5	70.8	66	-0.7	10	61.4	9.4	5	4.4
118		142	3	67.7	67.7	66	0.0	10	65.2	2.5	5	-2.5
119		143	2	65.6	65.6	66	0.0	10	64.5	1.1	5	-3.9
304		155	1	54.1	53.7	66	-0.4	10	53.7	0.0	5	-5.0
305		156	1	53.5	53.1	66	-0.4	10	53.1	0.0	5	-5.0
306		157	1	55.5	55.2	66	-0.3	10	55.2	0.0	5	-5.0
307		158	1	54.3	54.0	66	-0.3	10	54.0	0.0	5	-5.0
309		159	1	59.2	59.2	66	0.0	10	59.2	0.0	5	-5.0
310		160	1	60.7	60.8	66	0.1	10	60.8	0.0	5	-5.0
312		161	1	61.7	61.7	66	0.0	10	61.6	0.1	5	-4.9
315		162	1	63.1	63.3	66	0.2	10	63.4	-0.1	5	-5.1
318		163	1	68.3	68.3	66	0.0	10	66.7	1.6	5	-3.4
320		164	4	67.6	67.6	66	0.0	10	62.2	5.4	5	0.4
322		165	1	67.3	67.3	66	0.0	10	63.5	3.8	5	-1.2
323		167	4	70.3	70.4	66	0.1	10	64.6	5.8	5	0.8

ditm

RESULTS: SOUND LEVELS

										Supplemental EIS US160/550 Grandview									
										# DUs	Noise Reduction			Snd Lvl					
											Min dB	Avg dB	Max dB						
C326	169	1	61.1	60.9	66	-0.2	10	---	60.9	0.0	5	-5.0							
Grand4	171	1	57.1	56.7	66	-0.4	10	---	56.7	0.0	5	-5.0							
56a	173	1	61.4	61.2	66	-0.2	10	---	60.6	0.6	5	-4.4							
58a	174	1	65.7	65.6	66	-0.1	10	---	64.9	0.7	5	-4.3							
58b	175	1	67.0	67.0	66	0.0	10	Snd Lvl	66.7	0.3	5	-4.7							
311	176	1	60.2	60.4	66	0.2	10	---	60.4	0.0	5	-5.0							
312a	177	1	61.6	61.5	66	-0.1	10	---	61.4	0.1	5	-4.9							
C325	178	1	62.5	62.3	66	-0.2	10	---	62.2	0.1	5	-4.9							
Dwelling Units																			
All Selected		44	-0.1	1.4	9.4														
All Impacted		17	0.3	3.4	9.4														
All that meet NR Goal		9	5.4	6.9	9.4														

INPUT: BARRIERS

Supplemental EIS US160/550 Grandview

6 May 2011
TNM 2.5

Root filename: SEISModG
Its 110606 walls southside frontage rd

INPUT: BARRIERS

PROJECT/CONTRACT:
Supplemental EIS US160/550 Grandview
MIT1 walls a,b,c 14ft

RUN:

Barrier Name	Type		Height		Max ft	If Wall \$ per Unit Area	If Berm \$ per Unit Vol.	Top Width ft	Run: Rise ft:ft	Add'l \$ per Unit Length	Points Name	No.	Coordinates (bottom)			Height at Point ft	Segment			Important Reflec-tions?
	Min ft	Max ft	X ft	Y ft									Z ft	Incre- ment ft	#Up		#Dn	Struct?	On	
Barrier3	W		0.00	99.99	99.99	0.00				0.00	point12	12	2,322,680.0	1,213,531.0	6,708.00	20.00	0.00	0	0	
											point13	13	2,322,878.8	1,213,497.0	6,710.00	20.00	0.00	0	0	
											point14	14	2,323,017.8	1,213,469.6	6,719.00	20.00	0.00	0	0	
											point15	15	2,323,148.0	1,213,436.0	6,722.00	15.00	0.00	0	0	
											point16	16	2,323,280.5	1,213,397.9	6,725.00	15.00	0.00	0	0	
											point17	17	2,323,429.8	1,213,348.9	6,755.00	10.00	0.00	0	0	
											point18	18	2,323,575.0	1,213,296.2	6,755.00	10.00				
MIT 1a	W		8.00	99.99	99.99	0.00				0.00	point23	23	2,323,337.2	1,213,302.6	6,788.00	12.00	2.00	0	0	
											point26	26	2,323,481.0	1,213,256.1	6,785.00	12.00	2.00	0	0	
											point25	25	2,323,601.8	1,213,222.0	6,782.00	14.00	2.00	0	0	
											point27	27	2,323,727.0	1,213,173.5	6,774.00	14.00	2.00	0	0	
											point24	24	2,323,860.2	1,213,120.8	6,772.00	14.00				
MIT 1c	W		0.00	99.99	99.99	0.00				0.00	point28	28	2,324,399.5	1,212,955.4	6,761.00	14.00	2.00	0	0	
											point29	29	2,324,686.8	1,212,885.1	6,770.00	14.00	2.00	0	0	
											point30	30	2,324,769.8	1,212,847.9	6,773.00	14.00	2.00	0	0	
											point31	31	2,324,850.2	1,212,761.0	6,773.00	14.00	2.00	0	0	
											point32	32	2,324,916.2	1,212,672.2	6,775.00	14.00				
MIT 1b	W		0.00	99.99	99.99	0.00				0.00	point33	33	2,323,969.8	1,213,083.5	6,767.00	14.00	2.00	0	0	
											point34	34	2,324,078.8	1,213,046.4	6,765.00	14.00	2.00	0	0	
											point35	35	2,324,286.0	1,212,992.5	6,761.00	14.00				

RESULTS: SOUND LEVELS

Supplemental EIS US160/550 Grandview

Root filename: SEISModG
jts 110506 walls southside frontage rd

6 May 2011
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Supplemental EIS US160/550 Grandview

RUN: MIT1 walls a,b,c

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

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

Receiver	Name	No.	#DUs	Existing LAeq1h	No Barrier		Increase over existing		Type Impact	With Barrier		Noise Reduction	Calculated minus Goal
					LAeq1h	Calculated	Crit'n	Calculated		Sub'l Inc	LAeq1h		
				dBA	dBA	dBA	dB	dB		dB	dB	dB	dB
52		56	1	62.9	61.8	66	-1.1	10	---	58.8	3.0	5	-2.0
55		60	1	61.4	60.9	66	-0.5	10	---	60.4	0.5	5	-4.5
56		61	3	62.3	62.2	66	-0.1	10	---	62.0	0.2	5	-4.8
C57		90	1	67.0	67.0	71	0.0	10	---	64.2	2.8	5	-2.2
58		91	3	65.9	65.8	66	-0.1	10	---	65.2	0.6	5	-4.4
63		92	1	66.3	66.2	66	-0.1	10	Snd Lvl	66.2	0.0	5	-5.0
65		93	1	65.2	65.1	66	-0.1	10	---	64.9	0.2	5	-4.8
66		94	1	69.6	69.5	66	-0.1	10	Snd Lvl	69.4	0.1	5	-4.9
67		95	1	71.5	71.4	66	-0.1	10	Snd Lvl	71.3	0.1	5	-4.9
118		142	3	67.7	67.7	66	0.0	10	Snd Lvl	65.5	2.2	5	-2.8
119		143	2	65.6	65.6	66	0.0	10	---	65.0	0.6	5	-4.4
304		155	1	54.1	53.7	66	-0.4	10	---	53.8	-0.1	5	-5.1
305		156	1	53.5	53.1	66	-0.4	10	---	53.1	0.0	5	-5.0
306		157	1	55.5	55.2	66	-0.3	10	---	55.2	0.0	5	-5.0
307		158	1	54.3	54.0	66	-0.3	10	---	54.0	0.0	5	-5.0
309		159	1	59.2	59.2	66	0.0	10	---	59.2	0.0	5	-5.0
310		160	1	60.7	60.8	66	0.1	10	---	60.9	-0.1	5	-5.1
312		161	1	61.7	61.7	66	0.0	10	---	61.7	0.0	5	-5.0
315		162	1	63.1	63.3	66	0.2	10	---	63.4	-0.1	5	-5.1
318		163	1	68.3	68.3	66	0.0	10	Snd Lvl	68.2	0.1	5	-4.9
320		164	4	67.6	67.5	66	-0.1	10	Snd Lvl	64.2	3.3	5	-1.7
322		165	1	67.3	67.3	66	0.0	10	Snd Lvl	64.9	2.4	5	-2.6
323		167	4	70.3	70.3	66	0.0	10	Snd Lvl	67.2	3.1	5	-1.9

Handwritten notes:
No barrier
10/12 Ft

Handwritten initials: WMC

RESULTS: SOUND LEVELS

						Supplemental EIS US160/550 Grandview					
C326	169	1	61.1	60.9	66	-0.2	10	60.9	0.0	5	-5.0
Grand4	171	1	57.1	56.7	66	-0.4	10	56.8	-0.1	5	-5.1
56a	173	1	61.4	61.2	66	-0.2	10	60.9	0.3	5	-4.7
58a	174	1	65.7	65.6	66	-0.1	10	65.3	0.3	5	-4.7
58b	175	1	67.0	67.0	66	0.0	10	66.8	0.2	5	-4.8
311	176	1	60.2	60.4	66	0.2	10	60.4	0.0	5	-5.0
312a	177	1	61.6	61.5	66	-0.1	10	61.4	0.1	5	-4.9
C325	178	1	62.5	62.3	66	-0.2	10	62.2	0.1	5	-4.9
Dwelling Units		# DUs	Noise Reduction								
			Min	Avg	Max						
			dB	dB	dB						
All Selected		44	-0.1	0.6	3.3						
All Impacted		17	0.0	1.3	3.3						
All that meet NR Goal		0	0.0	0.0	0.0						

INPUT: BARRIERS

Supplemental EIS US160/550 Grandview

Root filename: SEISModG
 Its 110506 walls southside frontage rd
 6 May 2011
 TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: Supplemental EIS US160/550 Grandview
RUN: MIT1 walls a,b,c

Barrier Name	Type	Height		Max	ft	If Wall \$ per Unit Area	If Berm \$ per Unit Vol.	Top Width	Run:Rise	Add'l Unit Length	Points Name	No.	Coordinates (bottom)			Height at Point	Segment Incre- ment	Seg Ht Perturbs #Up #Dn	On Struct?	Important Reflec- tions?
		Min	ft										X	Y	Z					
		ft	ft										ft	ft	ft					
Barrier3	W	0.00	99.99	0.00						0.00	point12	12	2,322,880.0	1,213,531.0	6,706.00	20.00	0.00	0	0	
											point13	13	2,322,879.8	1,213,497.0	6,710.00	20.00	0.00	0	0	
											point14	14	2,323,017.8	1,213,489.6	6,718.00	20.00	0.00	0	0	
											point15	15	2,323,148.0	1,213,436.0	6,722.00	15.00	0.00	0	0	
											point16	16	2,323,280.5	1,213,397.9	6,725.00	15.00	0.00	0	0	
											point17	17	2,323,429.8	1,213,348.9	6,755.00	10.00	0.00	0	0	
											point18	18	2,323,575.0	1,213,296.2	6,755.00	10.00				
MIT 1a	W	8.00	99.99	0.00						0.00	point23	23	2,323,337.2	1,213,302.6	6,788.00	8.00	2.00	0	0	
											point26	26	2,323,481.0	1,213,256.1	6,785.00	8.00	2.00	0	0	
											point25	25	2,323,601.8	1,213,222.0	6,782.00	10.00	2.00	0	0	
											point27	27	2,323,727.0	1,213,173.5	6,774.00	12.00	2.00	0	0	
MIT 1c	W	0.00	99.99	0.00						0.00	point24	24	2,323,880.2	1,213,120.8	6,772.00	12.00				
											point28	28	2,324,399.5	1,212,955.4	6,761.00	12.00	2.00	0	0	
											point29	29	2,324,686.8	1,212,885.1	6,770.00	12.00	2.00	0	0	
											point30	30	2,324,769.8	1,212,847.9	6,773.00	12.00	2.00	0	0	
											point31	31	2,324,850.2	1,212,761.0	6,773.00	12.00	2.00	0	0	
											point32	32	2,324,916.2	1,212,672.2	6,775.00	12.00				
MIT 1b	W	0.00	99.99	0.00						0.00	point33	33	2,323,969.8	1,213,083.5	6,767.00	12.00	2.00	0	0	
											point34	34	2,324,078.8	1,213,046.4	6,765.00	12.00	2.00	0	0	
											point35	35	2,324,236.0	1,212,992.5	6,761.00	12.00	2.00	0	0	

